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KINDER MORGAN
ENERGY PARTNERS, L.P.

SFPP, L.P.
Operating Partnership

November 12, 2020

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

Re: Effluent Monitoring Report
July through September 2020
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 Third Quarter 2020 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 12th day of November 2020.
at 10:00 AM

_____ (signature)

Ryan Koch (printed name)

P.G. Specialist - Remediation (title)

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November 13, 2020

Attention: Mr. Ryan Koch
Kinder Morgan, Inc.
1001 Louisiana Street
Houston, Texas 77002

Subject: Effluent Monitoring Report, July 1 to September 30, 2020 (Third Quarter 2020)
SFPP Norwalk Pump Station, 15306 Norwalk Boulevard, Norwalk, California
(NPDES No. CA0063509, CI No. 7497, Order No. R4-2016-0309)

Dear Mr. Koch,

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 July 1 to September 30, 2020. Kinder Morgan performed operation, maintenance, and monitoring tasks on the product recovery and GWE systems. 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 will soon 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
   - 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)
   - 1 GWE well (GMW-SF-10)
   - 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

The groundwater treatment system (GWTS) handles free product and groundwater recovered from the south-central and southeastern parts of the site. 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.

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 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 natural source zone depletion (NSZD) pilot study. In May 2020, Kinder Morgan implemented an 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 regenerative thermal oxidizer 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 expected to be turned on in early-2021 after it is connected to the treatment system.

Horizontal Biosparge System

Biosparging involves introducing air into the groundwater in situ to enhance biodegradation of VOCs present in product and groundwater. Horizontal biosparge wells are installed in three locations at the site as described below.

South-Central Area. 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).

Southeastern Area. 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. 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 expected to be turned on in early-2021 after it is connected to the treatment system.

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 181,728 gallons of groundwater was extracted from the offsite/south-central area and southeastern area, treated, and discharged to Coyote Creek during the third quarter 2020. Wells that were in operation included GMW-O-11, GMW-O-20, and GMW-O-21 in the offsite/south-central area, and GMW-O-15 and GMW-36 in the southeastern area. Table 1 summarizes the average daily flow rate during the reporting period. The GWTS operated during part of the quarter, due to the following activities:

- The GWTS operated in recirculation mode from April 1 to May 14, 2020. The GWTS operated briefly on April 1, 16, and 17, 2020, for maintenance.
- On August 5, 2020, the GWTS shut down due to a high-level alarm in the equalization tank. On August 11, 2020, the system was restarted after Bioreactor Pump A was replaced.
- On August 18, 2020, the GWTS was shut down for quarterly groundwater monitoring on August 20, 2020. The GWTS system was restarted on September 15, 2020. The extended downtime was due to clogged influent water lines and restricted flow. The restricted influent flow was resolved through extensive flushing, cleaning, and maintenance. The GWTS discharged a combined total of 512 gallons of treated water during this time for maintenance.

- On September 17, 2020, the GWTS shut down due to an electrical fault associated with the bioreactor control panel. The system operated intermittently from September 19 to 23, 2020. The system was restarted on September 24, 2020.

No free product accumulated in the product holding tank of the GWTS during the third quarter of 2020. Hand bailing of free product (from wells not equipped for TFE) was not performed during this reporting period.

Routine Effluent Monitoring

During the third quarter 2020, effluent water samples were collected pursuant to the Waste Discharge Requirements 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 the July, August, and September 2020 effluent sampling events are summarized in Table 2. 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 third quarter 2020 sampling events (with maximum daily flows of 151 cfs) occurred during dry weather conditions, and are therefore compared to the dry weather discharge limits.

Waste Handling

On July 17, 2020, approximately 1,500 gallons of hazardous waste, flammable liquids, and 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 North 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 March 13, 2020 (wet weather event). A second water chemistry (wet weather event) was conducted on April 7, 2020. A third water chemistry sampling event (dry weather) was completed on September 30, 2020. The Harbor Toxics TMDL summary for 2020 will be included in the fourth quarter 2020 NPDES report.

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.

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 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.

Should you require any further information, please contact Nils Orliczky/Jacobs at (949) 224-7959.

Yours sincerely

Nils Orliczky
Environmental Engineer

Attachments:

Table 1 – Effluent Flow Rate Measurements, Third Quarter 2020
Table 2 – NPDES Effluent Monitoring, Third Quarter 2020
Table 3 – Maximum Daily Flow in Coyote Creek, Third Quarter 2020

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, Third Quarter 2020

SFPP Norwalk Pump Station, Norwalk, California

Date	Daily Flow Rate (gpd) (Maximum Daily Discharge Limit = 150,000 gpd[a])
07/01/20	5,232
07/02/20	5,360
07/03/20	4,876
07/04/20	4,272
07/05/20	3,748
07/06/20	3,852
07/07/20	3,976
07/08/20	3,440
07/09/20	3,592
07/10/20	3,408
07/11/20	3,484
07/12/20	3,428
07/13/20	3,420
07/14/20	3,316
07/15/20	3,588
07/16/20	3,972
07/17/20	4,588
07/18/20	4,944
07/19/20	5,596
07/20/20	4,224
07/21/20	2,740
07/22/20	476
07/23/20	4,476
07/24/20	3,568
07/25/20	3,988
07/26/20	3,896
07/27/20	3,860
07/28/20	3,528
07/29/20	3,936
07/30/20	3,804
07/31/20	3,584
08/01/20	3,584
08/02/20	3,744
08/03/20	3,548
08/04/20	3,520
08/05/20	372
08/06/20	0
08/07/20	0
08/08/20	0
08/09/20	0
08/10/20	0
08/11/20	112
08/12/20	4,472
08/13/20	1,648
08/14/20	1,636
08/15/20	1,896
08/16/20	1,688

Table 1. Effluent Flow Rate Measurements, Third Quarter 2020

SFPP Norwalk Pump Station, Norwalk, California

Date	Daily Flow Rate (gpd) (Maximum Daily Discharge Limit = 150,000 gpd[a])
08/17/20	1,564
08/18/20	1,680
08/19/20	0
08/20/20	248
08/21/20	56
08/22/20	0
08/23/20	0
08/24/20	0
08/25/20	0
08/26/20	52
08/27/20	0
08/28/20	0
08/29/20	0
08/30/20	0
08/31/20	0
09/01/20	108
09/02/20	48
09/03/20	0
09/04/20	0
09/05/20	0
09/06/20	0
09/07/20	0
09/08/20	0
09/09/20	0
09/10/20	0
09/11/20	0
09/12/20	0
09/13/20	0
09/14/20	0
09/15/20	328
09/16/20	3,880
09/17/20	1,288
09/18/20	0
09/19/20	328
09/20/20	28
09/21/20	0
09/22/20	2,456
09/23/20	40
09/24/20	5,532
09/25/20	1,004
09/26/20	4,448
09/27/20	3,876
09/28/20	3,788
09/29/20	3,904
09/30/20	680

Notes:

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

gpd = gallons per day

Table 2. NPDES Effluent Monitoring, Third Quarter 2020

SFPP Norwalk Pump Station, Norwalk, California

Analyte	Sampling Frequency	Analytical Method	Units	MDL[a]	RL[a]	ML[b]	7/23/2020	8/14/2020	9/29/2020	Discharge Limits[c]	
										Monthly Average	Daily Maximum
Flow	Daily	--	gpd	--	--	--	**4,476**	**1,636**	**3,904**	--	**150,000**
TPH as Gasoline (C4-C12)	Monthly	EPA 8015B	µg/L	21	50	NE	<42[d]	<49[d]	<41[d]	--	--
TPH as Diesel (C13-C22)	Monthly	EPA 8015B	µg/L	15	25	NE	<15	<15	<15	--	--
TPH as Oil (C23+)	Monthly	EPA 8015B	µg/L	14	25	NE	<22[d]	<40	<18[d]	--	--
Total TPH	Monthly	EPA 8015B	µg/L	21	100	NE	<64[d]	<89[d]	<59[d]	--	**100**
Total TPH	Monthly	Calculated	lb/day	--	--	--	**0.001195**	**0.000607**	**0.000961**	--	**0.13**
Benzene	Monthly	EPA 8260B	µg/L	0.11	1.0	2.0	<0.11	<0.11	<0.11	--	--
1,1-Dichloroethane	Monthly	EPA 8260B	µg/L	0.22	0.5	1.0	<0.22	<0.22	<0.22	--	--
1,2-Dichloroethane	Monthly	EPA 8260B	µg/L	0.16	0.5	2.0	<0.16	<0.16	<0.16	--	--
Ethylbenzene	Monthly	EPA 8260B	µg/L	0.11	1.0	2.0	<0.11	<0.11	<0.11	--	--
Phenol	Monthly	EPA 8270C	µg/L	0.33	1	1	<0.33	<0.33	<0.33	--	--
Toluene	Monthly	EPA 8260B	µg/L	0.13	2.0	2.0	<0.13	<0.13	<0.13	--	--
Methyl Tertiary Butyl Ether	Monthly	EPA 8260B	µg/L	0.44	1.0	NE	<0.44	<0.44	<0.44	--	--
Tertiary Butyl Alcohol	Monthly	EPA 8260B	µg/L	2.8	5.0	NE	<2.8	<2.8	<2.8	--	--
Total Xylenes	Monthly	EPA 8260B	µg/L	1.5	2.0	NE	<1.5	<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	**0.49 J**	**9.7**	**32**
Copper (total recoverable) (dry weather)	Monthly	Calculated	lb/day	0.26	0.5	--	**0.000005**	**0.000002**	**0.000016**	**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	**0.49 J**	**8.3**	**27**
Copper (total recoverable) (wet weather)	Monthly	Calculated	lb/day	0.26	0.5	--	**0.000005**	**0.000002**	**0.000016**	**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	<0.13	**33**	**106**
Lead (total recoverable) (wet weather)	Monthly	Calculated	lb/day	0.13	0.5	--	**0.000002**	**0.000001**	**0.000002**	**0.041**	**0.13**
Mercury (total recoverable)	Monthly	EPA 245.1	µg/L	0.018	0.05	0.2	<0.018	<0.018	<0.018	**0.051**	**0.10**
Mercury (total recoverable)	Monthly	Calculated	lb/day	0.018	0.05	--	0	0	0	**0.000064**	**0.00013**
Zinc (total recoverable) (dry weather)	Monthly	EPA 200.8	µg/L	0.27	1.0	1.0	**3.8**	**3.5**	**1.1**	**64**	**220**
Zinc (total recoverable) (dry weather)	Monthly	Calculated	lb/day	0.27	1	1.0	**0.000142**	**0.000048**	**0.000036**	**0.080**	**0.28**
Zinc (total recoverable) (wet weather)	Monthly	EPA 200.8	µg/L	0.27	1.0	1.0	**3.8**	**3.5**	**1.1**	**46**	**158**
Zinc (total recoverable) (wet weather)	Monthly	Calculated	lb/day	0.27	1	--	**0.000142**	**0.000048**	**0.000036**	**0.058**	**0.2**
Biochemical Oxygen Demand	Quarterly	SM 5210B	mg/L	1.5	1.5	NE	--	--	<1.5	**20**	**30**
Biochemical Oxygen Demand	Quarterly	Calculated	lb/day	--	--	--	--	--	**0.02442**	**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	--	--	--	--	**0.034111**	--	**63**	**94**
pH	Quarterly	Field Measurement	s.u.	0.1	0.1	NE	--	**6.77**	--	--	**6.5/8.5**
Oil and Grease	Quarterly	EPA 1664A	mg/L	0.61	4.1	NE	--	**0.62 J**	--	**10**	**15**
Oil and Grease	Quarterly	Calculated	lb/day	0.61	4.1	--	--	**0.008459**	--	**13**	**19**
Ammonia Nitrogen (as N)	Quarterly	EPA 350.1	mg/L	0.067	0.2	NE	--	--	**0.096 J**	--	--
Settleable Solids	Quarterly	SM 2540F	mL/L/hr	0.1	0.1	NE	--	<0.1	--	**0.1**	**0.3**
Temperature	Quarterly	Temperature	°F	0.1	0.1	NE	--	**78.3**	--	--	**86**
Turbidity	Quarterly	SM 2130B	NTU	0.1	0.1	NE	--	<0.1	--	**50**	**75**
Salinity	2x/year	Field Measurement	ppt	--	--	NE	--	--	--	--	--
Chronic Toxicity	2x/year	--	--	--	--	NE	--	--	--	**Pass**	**Pass and % Effect <50**

Table 2. NPDES Effluent Monitoring, Third Quarter 2020

SFPP Norwalk Pump Station, Norwalk, California

Analyte	Sampling Frequency	Analytical Method	Units	MDL[a]	RL[a]	ML[b]	7/23/2020	8/14/2020	9/29/2020	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] TPH data were qualified as nondetect due to associated blank contamination.

-- = 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

MDL = laboratory method detection limit

mg/L = milligrams per liter

ML = minimum level (see note b)

mL/L/hr = milliliters per liter per hour

NE = not established

NPDES = National Pollutant Discharge Elimination System

NS = not sampled. GWTS was down since November 11, 2019. On May 15, 2020, the GWTS was restarted after the baseline NSZD sampling and semiannual groundwater monitoring event were completed.

NSZD = natural source zone depletion

NTU = nephelometric turbidity unit(s)

pg/L = picograms per liter

ppt = parts per thousand

RL = laboratory reporting limit

s.u. = standard unit(s)

TCDD = tetrachlorodibenzodioxin

TPH = total petroleum hydrocarbons

Table 3. Maximum Daily Flow in Coyote Creek, Third Quarter 2020

SFPP Norwalk Pump Station, Norwalk, California

Date	Maximum Daily Flow Rate (cfs)[a]	Comments
07/01/20	90.2	
07/02/20	44.8	
07/03/20	26.5	
07/04/20	29.3	
07/05/20	16.5	
07/06/20	46.4	
07/07/20	32.3	
07/08/20	90.2	
07/09/20	106	
07/10/20	114	
07/11/20	90.2	
07/12/20	81.4	
07/13/20	109	
07/14/20	148	
07/15/20	151	
07/16/20	90.2	
07/17/20	127	
07/18/20	122	
07/19/20	111	
07/20/20	92.9	
07/21/20	115	
07/22/20	73.8	
07/23/20	90.2	Monthly effluent sample
07/24/20	71.2	
07/25/20	76.3	
07/26/20	76.3	
07/27/20	32.3	
07/28/20	64.3	
07/29/20	64.3	
07/30/20	64.3	
07/31/20	8.35	
08/01/20	6.01	
08/02/20	4.48	
08/03/20	9.02	
08/04/20	13.0	
08/05/20	19.1	
08/06/20	7.72	
08/07/20	10.4	
08/08/20	7.12	
08/09/20	16.5	
08/10/20	7.12	
08/11/20	7.12	
08/12/20	6.55	
08/13/20	6.01	
08/14/20	7.72	Quarterly effluent sample
08/15/20	6.01	
08/16/20	6.55	
08/17/20	6.55	
08/18/20	7.72	
08/19/20	7.72	
08/20/20	8.35	

Table 3. Maximum Daily Flow in Coyote Creek, Third Quarter 2020

SFPP Norwalk Pump Station, Norwalk, California

Date	Maximum Daily Flow Rate (cfs)[a]	Comments
08/21/20	3.86	
08/22/20	3.28	
08/23/20	3.01	
08/24/20	5.15	
08/25/20	6.01	
08/26/20	9.71	
08/27/20	3.86	
08/28/20	3.01	
08/29/20	3.28	
08/30/20	3.28	
08/31/20	3.56	
09/01/20	3.86	
09/02/20	3.28	
09/03/20	3.56	
09/04/20	4.81	
09/05/20	3.28	
09/06/20	3.86	
09/07/20	3.01	
09/08/20	4.48	
09/09/20	4.81	
09/10/20	3.28	
09/11/20	3.28	
09/12/20	2.50	
09/13/20	2.75	
09/14/20	2.50	
09/15/20	3.01	
09/16/20	2.50	
09/17/20	3.28	
09/18/20	2.75	
09/19/20	3.01	
09/20/20	3.01	
09/21/20	2.75	
09/22/20	2.50	
09/23/20	3.01	
09/24/20	3.01	
09/25/20	3.01	
09/26/20	2.25	
09/27/20	2.50	
09/28/20	10.4	
09/29/20	10.4	Monthly effluent sample
09/30/20	15.3	

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

Figures

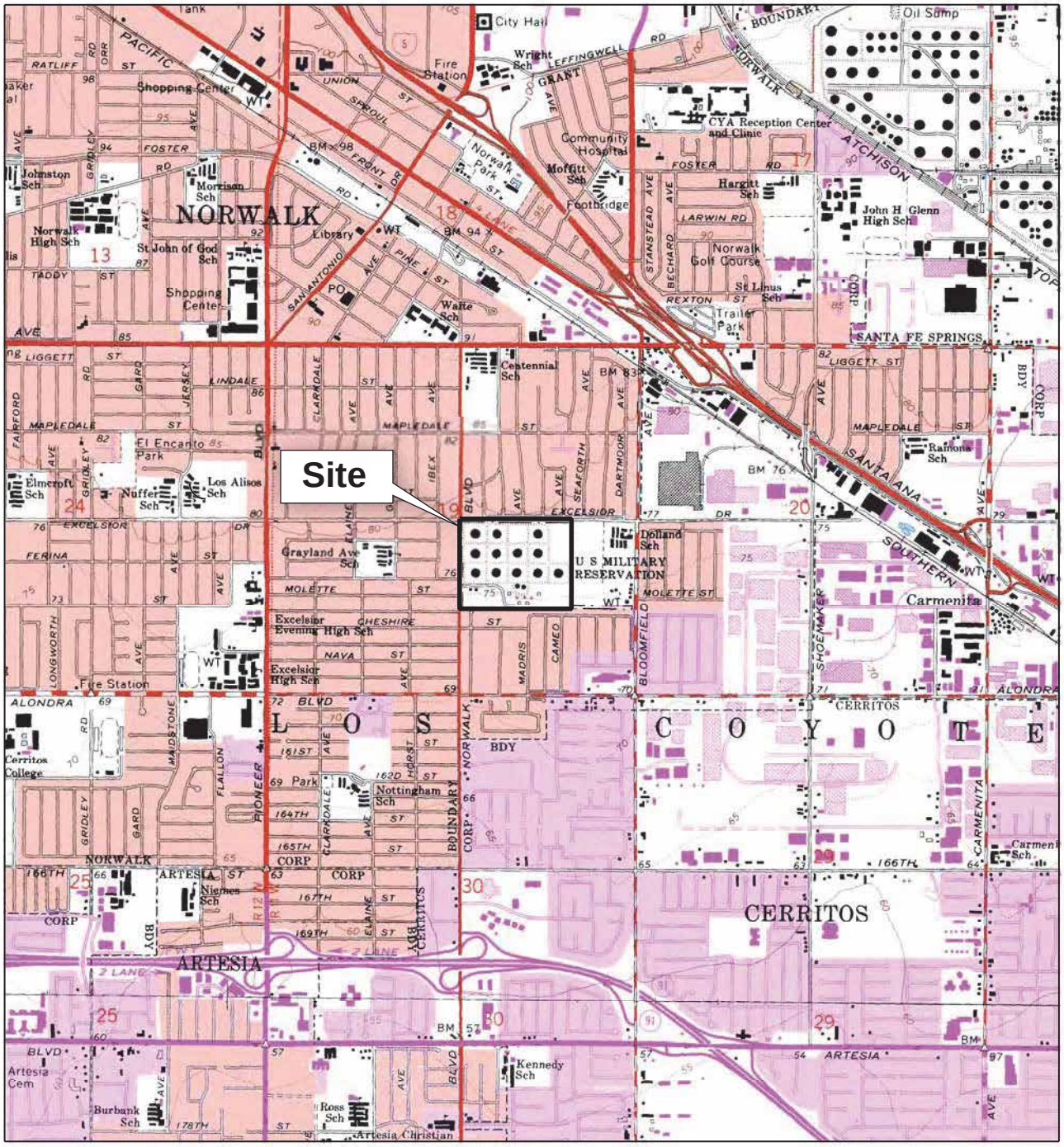
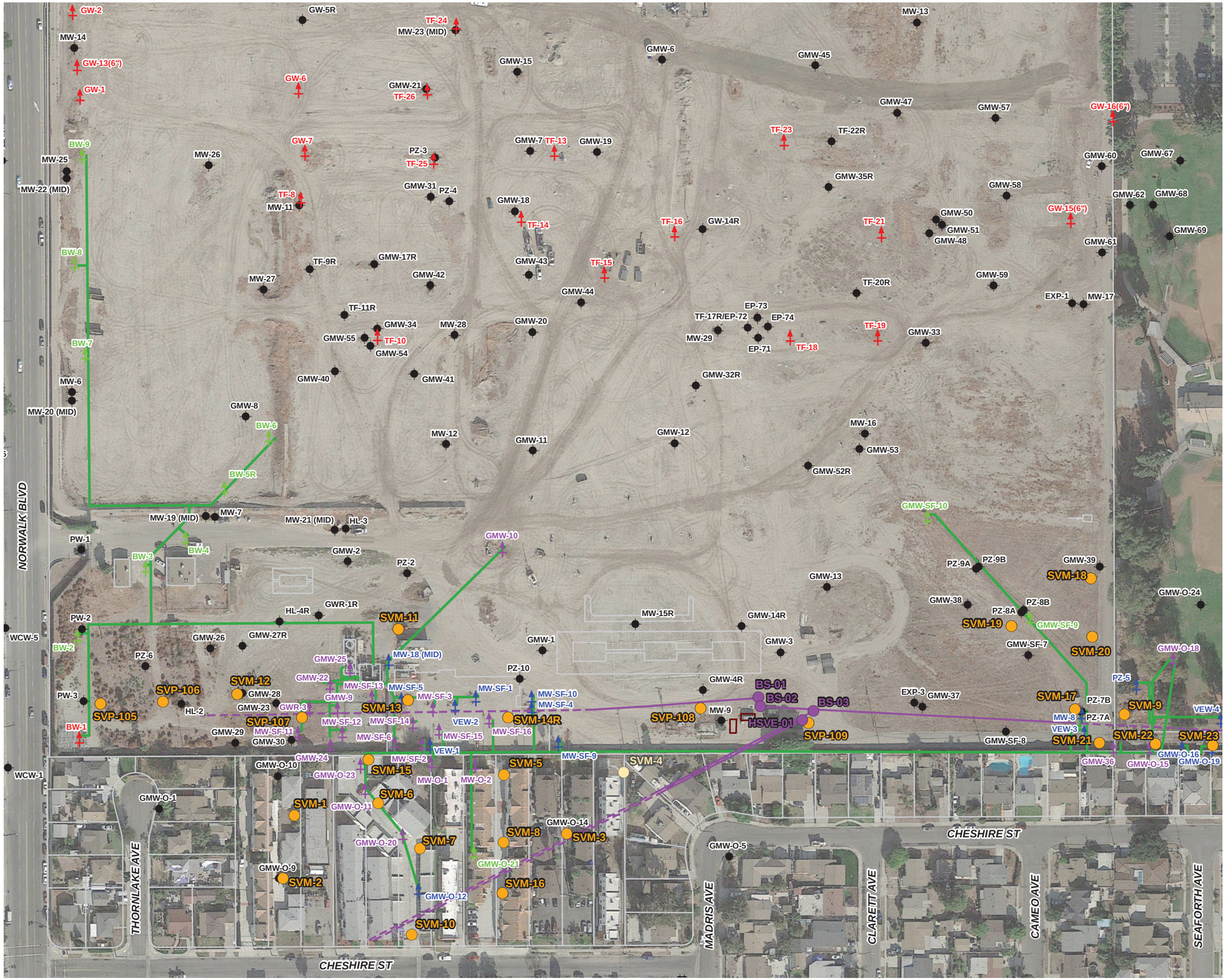


Figure 1. Site Location Map
SFPP Norwalk Pump Station
Norwalk, California

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.

Jacobs



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

July 31, 2020

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

TEL:
FAX:

Workorder No.: N041547

RE: SFPP Norwalk

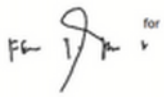
Attention: Eric Davis

Enclosed are the results for sample(s) received on July 23, 2020 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: N041547

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.

CLIENT: CH2MHill
Project: SFPP Norwalk
Lab Order: N041547
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N041547-001A	EFF-07-23	Wastewater	7/23/2020 11:50:00 AM	7/23/2020	7/31/2020
N041547-001B	EFF-07-23	Wastewater	7/23/2020 11:50:00 AM	7/23/2020	7/31/2020
N041547-001C	EFF-07-23	Wastewater	7/23/2020 11:50:00 AM	7/23/2020	7/31/2020
N041547-001D	EFF-07-23	Wastewater	7/23/2020 11:50:00 AM	7/23/2020	7/31/2020
N041547-001E	EFF-07-23	Wastewater	7/23/2020 11:50:00 AM	7/23/2020	7/31/2020

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *31-Jul-20*

CLIENT: CH2MHill
Lab Order: N041547
Project: SFPP Norwalk
Lab ID: N041547-001

Client Sample ID: EFF-07-23
Collection Date: 7/23/2020 11:50:00 AM
Matrix: WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS							
EPA 3510C			**EPA 8270C**				
RunID: **NV00922-MS9_200730A** QC Batch: **80369**				PrepDate:	**7/30/2020**		Analyst: **PL**
Phenol	ND	0.33	1.0		µg/L	1	7/30/2020 07:11 PM
Surr: Phenol-d5	28.0	0	25-108		%REC	1	7/30/2020 07:11 PM
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **CA01638-MS10_200730A** QC Batch: **CA20VW100**				PrepDate:			Analyst: **AG**
1,1-Dichloroethane	ND	0.22	0.50		ug/L	1	7/30/2020 12:58 PM
1,2-Dichloroethane	ND	0.16	0.50		ug/L	1	7/30/2020 12:58 PM
Benzene	ND	0.11	1.0		ug/L	1	7/30/2020 12:58 PM
Ethylbenzene	ND	0.11	1.0		ug/L	1	7/30/2020 12:58 PM
m,p-Xylene	ND	0.23	1.0		ug/L	1	7/30/2020 12:58 PM
MTBE	ND	0.44	1.0		ug/L	1	7/30/2020 12:58 PM
o-Xylene	ND	0.087	1.0		ug/L	1	7/30/2020 12:58 PM
Tert-Butanol	ND	2.8	5.0		ug/L	1	7/30/2020 12:58 PM
Toluene	ND	0.13	2.0		ug/L	1	7/30/2020 12:58 PM
Xylenes, Total	ND	1.5	2.0		ug/L	1	7/30/2020 12:58 PM
Surr: 1,2-Dichloroethane-d4	112	0	72-119		%REC	1	7/30/2020 12:58 PM
Surr: 4-Bromofluorobenzene	95.8	0	76-119		%REC	1	7/30/2020 12:58 PM
Surr: Dibromofluoromethane	100	0	85-115		%REC	1	7/30/2020 12:58 PM
Surr: Toluene-d8	99.0	0	81-120		%REC	1	7/30/2020 12:58 PM
TPH EXTRACTABLE BY GC/FID							
EPA 3510C			**EPA 8015B**				
RunID: **NV00922-GC1_200729A** QC Batch: **80356**				PrepDate:	**7/29/2020**		Analyst: **PL**
TPH-Diesel (C13-C22)	ND	15	25		ug/L	1	7/29/2020 07:35 PM
TPH-Oil (C23-C36)	22	14	25	J	ug/L	1	7/29/2020 07:35 PM
Surr: Octacosane	82.0	0	26-152		%REC	1	7/29/2020 07:35 PM
Surr: p-Terphenyl	78.3	0	57-132		%REC	1	7/29/2020 07:35 PM
GASOLINE RANGE ORGANICS BY GC/FID							
			EPA 8015B				
RunID: **NV00922-GC4_200730B** QC Batch: **E20VW069**				PrepDate:			Analyst: **BH**
TPH-Gasoline (C4-C12)	42	21	50	J	ug/L	1	7/30/2020 04:18 PM
Surr: Chlorobenzene - d5	84.0	0	74-138		%REC	1	7/30/2020 04:18 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: *31-Jul-20*

CLIENT:	CH2MHill	**Client Sample ID:**	EFF-07-23
Lab Order:	N041547	**Collection Date:**	7/23/2020 11:50:00 AM
Project:	SFPP Norwalk	**Matrix:**	WASTEWATER
Lab ID:	N041547-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
MERCURY BY COLD VAPOR TECHNIQUE							
EPA 245.1							
RunID: **NV00922-AA2_200730A** QC Batch: **80353**				PrepDate:		**7/29/2020**	Analyst: **DJ**
Mercury	ND	0.018	0.050		µg/L	1	7/30/2020 11:55 AM
TOTAL METALS BY ICPMS							
EPA 200.8							
RunID: **NV00922-ICP8_200730A** QC Batch: **80354**				PrepDate:		**7/29/2020**	Analyst: **CEI**
Copper	ND	0.26	0.50		µg/L	1	7/30/2020 12:15 PM
Lead	ND	0.13	0.50		µg/L	1	7/30/2020 12:15 PM
Zinc	3.8	0.27	1.0		µg/L	1	7/30/2020 12:15 PM
TOTAL TPH							
EPA 8015B							
RunID: **NV00922-GC1_200729A** QC Batch: **R146202**				PrepDate:			Analyst: **PL**
Total TPH	64	21	100	J	ug/L	1	7/30/2020

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: N041547
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_W_SFPP

Sample ID: **MB-80354** SampType: **MBLK** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **7/29/2020** RunNo: **146219**
Client ID: **PBW** Batch ID: **80354** TestNo: **EPA 200.8** Analysis Date: **7/30/2020** SeqNo: **3873521**

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-80354** SampType: **LCS** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **7/29/2020** RunNo: **146219**
Client ID: **LCSW** Batch ID: **80354** TestNo: **EPA 200.8** Analysis Date: **7/30/2020** SeqNo: **3873522**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	10.061	0.50	10.00	0	101	85	115				
Lead	10.237	0.50	10.00	0	102	85	115				
Zinc	9.867	1.0	10.00	0	98.7	85	115				

Sample ID: **N041547-001D-DUP** SampType: **DUP** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **7/29/2020** RunNo: **146219**
Client ID: **ZZZZZZ** Batch ID: **80354** TestNo: **EPA 200.8** Analysis Date: **7/30/2020** SeqNo: **3873525**

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	4.169	1.0						3.806	9.10	20	

Sample ID: **N041547-001D-MS** SampType: **MS** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **7/29/2020** RunNo: **146219**
Client ID: **ZZZZZZ** Batch ID: **80354** TestNo: **EPA 200.8** Analysis Date: **7/30/2020** SeqNo: **3873527**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	8.863	0.50	10.00	0	88.6	75	125				
Lead	10.478	0.50	10.00	0	105	75	125				
Zinc	13.077	1.0	10.00	3.806	92.7	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: N041547
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_W_SFPP

Sample ID: **N041547-001D-MSD** SampType: **MSD** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **7/29/2020** RunNo: **146219**
Client ID: **ZZZZZZ** Batch ID: **80354** TestNo: **EPA 200.8** Analysis Date: **7/30/2020** SeqNo: **3873528**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	8.802	0.50	10.00	0	88.0	75	125	8.863	0.695	20	
Lead	10.450	0.50	10.00	0	104	75	125	10.48	0.271	20	
Zinc	12.827	1.0	10.00	3.806	90.2	75	125	13.08	1.93	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: N041547
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 245.1_W_LL

Sample ID: **MB-80353**	SampType: **MBLK**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **7/29/2020**	RunNo: **146217**
Client ID: **PBW**	Batch ID: **80353**	TestNo: **EPA 245.1**		Analysis Date: **7/30/2020**	SeqNo: **3873537**

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

Sample ID: **LCS-80353**	SampType: **LCS**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **7/29/2020**	RunNo: **146217**
Client ID: **LCSW**	Batch ID: **80353**	TestNo: **EPA 245.1**		Analysis Date: **7/30/2020**	SeqNo: **3873538**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.540	0.050	2.500	0	102	85	115				

Sample ID: **N041547-001D-DUP**	SampType: **DUP**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **7/29/2020**	RunNo: **146217**
Client ID: **ZZZZZZ**	Batch ID: **80353**	TestNo: **EPA 245.1**		Analysis Date: **7/30/2020**	SeqNo: **3873541**

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

Sample ID: **N041547-001D-MS**	SampType: **MS**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **7/29/2020**	RunNo: **146217**
Client ID: **ZZZZZZ**	Batch ID: **80353**	TestNo: **EPA 245.1**		Analysis Date: **7/30/2020**	SeqNo: **3873543**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.110	0.050	2.500	0	84.4	75	125				

Sample ID: **N041547-001D-MSD**	SampType: **MSD**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **7/29/2020**	RunNo: **146217**
Client ID: **ZZZZZZ**	Batch ID: **80353**	TestNo: **EPA 245.1**		Analysis Date: **7/30/2020**	SeqNo: **3873544**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.130	0.050	2.500	0	85.2	75	125	2.110	0.943	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: N041547
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_FP_SFPP

Sample ID: **MB-80356**	SampType: **MBLK**	TestCode: **8015_W_FP_**	Units: **ug/L**	Prep Date: **7/29/2020**	RunNo: **146202**
Client ID: **PBW**	Batch ID: **80356**	TestNo: **EPA 8015B**	**EPA 3510C**	Analysis Date: **7/29/2020**	SeqNo: **3872897**

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)	24.857	25									J
Surr: Octacosane	67.627		80.00		84.5	26	152				
Surr: p-Terphenyl	64.604		80.00		80.8	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: N041547
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_SFPPTOT

Sample ID: **MB-R146202** SampType: **MBLK** TestCode: **8015_W_SFP** Units: **ug/L** Prep Date: RunNo: **146202**
Client ID: **PBW** Batch ID: **R146202** TestNo: **EPA 8015B** Analysis Date: **7/30/2020** SeqNo: **3874688**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total TPH	65.857	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: N041547
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GAS_WSFPP

Sample ID: **E200730LCS**	SampType: **LCS**	TestCode: **8015GAS_WS**	Units: **ug/L**	Prep Date:	RunNo: **146233**
Client ID: **LCSW**	Batch ID: **E20VW069**	TestNo: **EPA 8015B**		Analysis Date: **7/30/2020**	SeqNo: **3873814**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	935.000	50	1000	0	93.5	67	136				
Surr: Chlorobenzene - d5	44542.000		50000		89.1	74	138				

Sample ID: **E200730MB**	SampType: **MBLK**	TestCode: **8015GAS_WS**	Units: **ug/L**	Prep Date:	RunNo: **146233**
Client ID: **PBW**	Batch ID: **E20VW069**	TestNo: **EPA 8015B**		Analysis Date: **7/30/2020**	SeqNo: **3873815**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	41.000	50									J
Surr: Chlorobenzene - d5	47611.000		50000		95.2	74	138				

Sample ID: **N041547-001BMS**	SampType: **MS**	TestCode: **8015GAS_WS**	Units: **ug/L**	Prep Date:	RunNo: **146233**
Client ID: **ZZZZZZ**	Batch ID: **E20VW069**	TestNo: **EPA 8015B**		Analysis Date: **7/30/2020**	SeqNo: **3873817**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	950.000	50	1000	42.00	90.8	67	136				
Surr: Chlorobenzene - d5	43911.000		50000		87.8	74	138				

Sample ID: **N041547-001BMSD**	SampType: **MSD**	TestCode: **8015GAS_WS**	Units: **ug/L**	Prep Date:	RunNo: **146233**
Client ID: **ZZZZZZ**	Batch ID: **E20VW069**	TestNo: **EPA 8015B**		Analysis Date: **7/30/2020**	SeqNo: **3873818**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	932.000	50	1000	42.00	89.0	67	136	950.0	1.91	30	
Surr: Chlorobenzene - d5	42745.000		50000		85.5	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: N041547
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **CA200730-LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **146240**
Client ID: **LCSW** Batch ID: **CA20VW100** TestNo: **EPA 8260B** Analysis Date: **7/30/2020** SeqNo: **3874019**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	21.840	0.50	20.00	0	109	69	133				
1,2-Dichloroethane	21.720	0.50	20.00	0	109	69	132				
Benzene	18.710	1.0	20.00	0	93.6	81	122				
Ethylbenzene	19.830	1.0	20.00	0	99.2	73	127				
m,p-Xylene	40.820	1.0	40.00	0	102	76	128				
MTBE	18.160	1.0	20.00	0	90.8	65	123				
o-Xylene	19.160	1.0	20.00	0	95.8	80	121				
Tert-Butanol	96.040	5.0	100.0	0	96.0	70	130				
Toluene	20.110	2.0	20.00	0	101	77	122				
Xylenes, Total	59.980	2.0	60.00	0	100	75	125				
Surr: 1,2-Dichloroethane-d4	27.470		25.00		110	72	119				
Surr: 4-Bromofluorobenzene	25.090		25.00		100	76	119				
Surr: Dibromofluoromethane	24.090		25.00		96.4	85	115				
Surr: Toluene-d8	26.570		25.00		106	81	120				

Sample ID: **CA200730-MB2** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **146240**
Client ID: **PBW** Batch ID: **CA20VW100** TestNo: **EPA 8260B** Analysis Date: **7/30/2020** SeqNo: **3874020**

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									
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	27.220		25.00		109	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: N041547
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **CA200730-MB2** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **146240**
Client ID: **PBW** Batch ID: **CA20VW100** TestNo: **EPA 8260B** Analysis Date: **7/30/2020** SeqNo: **3874020**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	23.500		25.00		94.0	76	119				
Surr: Dibromofluoromethane	24.780		25.00		99.1	85	115				
Surr: Toluene-d8	26.600		25.00		106	81	120				

Sample ID: **N041547-001A-DUP** SampType: **DUP** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **146240**
Client ID: **ZZZZZZ** Batch ID: **CA20VW100** TestNo: **EPA 8260B** Analysis Date: **7/30/2020** SeqNo: **3874022**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	ND	0.50						0	0	20	
1,2-Dichloroethane	ND	0.50						0	0	20	
Benzene	ND	1.0						0	0	20	
Ethylbenzene	ND	1.0						0	0	20	
m,p-Xylene	ND	1.0						0	0	20	
MTBE	ND	1.0						0	0	20	
o-Xylene	ND	1.0						0	0	20	
Tert-Butanol	ND	5.0						0	0	20	
Toluene	ND	2.0						0	0	20	
Xylenes, Total	ND	2.0						0	0	20	
Surr: 1,2-Dichloroethane-d4	24.430		25.00		97.7	72	119		0		
Surr: 4-Bromofluorobenzene	22.990		25.00		92.0	76	119		0		
Surr: Dibromofluoromethane	21.630		25.00		86.5	85	115		0		
Surr: Toluene-d8	25.240		25.00		101	81	120		0		

Sample ID: **N041547-001A-MS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **146240**
Client ID: **ZZZZZZ** Batch ID: **CA20VW100** TestNo: **EPA 8260B** Analysis Date: **7/30/2020** SeqNo: **3874023**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	20.100	0.50	20.00	0	101	69	133				
1,2-Dichloroethane	24.440	0.50	20.00	0	122	69	132				
Benzene	18.060	1.0	20.00	0	90.3	81	122				

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: N041547
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N041547-001A-MS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **146240**
Client ID: **ZZZZZZ** Batch ID: **CA20VW100** TestNo: **EPA 8260B** Analysis Date: **7/30/2020** SeqNo: **3874023**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	20.570	1.0	20.00	0	103	73	127				
m,p-Xylene	43.570	1.0	40.00	0	109	76	128				
MTBE	18.960	1.0	20.00	0	94.8	65	123				
o-Xylene	19.960	1.0	20.00	0	99.8	80	121				
Tert-Butanol	113.900	5.0	100.0	0	114	70	130				
Toluene	19.780	2.0	20.00	0	98.9	77	122				
Xylenes, Total	63.530	2.0	60.00	0	106	75	125				
Surr: 1,2-Dichloroethane-d4	27.470		25.00		110	72	119				
Surr: 4-Bromofluorobenzene	26.590		25.00		106	76	119				
Surr: Dibromofluoromethane	22.860		25.00		91.4	85	115				
Surr: Toluene-d8	26.460		25.00		106	81	120				

Sample ID: **N041547-001A-MSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **146240**
Client ID: **ZZZZZZ** Batch ID: **CA20VW100** TestNo: **EPA 8260B** Analysis Date: **7/30/2020** SeqNo: **3874024**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	18.890	0.50	20.00	0	94.4	69	133	20.10	6.21	20	
1,2-Dichloroethane	21.900	0.50	20.00	0	110	69	132	24.44	11.0	20	
Benzene	18.800	1.0	20.00	0	94.0	81	122	18.06	4.02	20	
Ethylbenzene	18.790	1.0	20.00	0	94.0	73	127	20.57	9.04	20	
m,p-Xylene	40.040	1.0	40.00	0	100	76	128	43.57	8.44	20	
MTBE	17.440	1.0	20.00	0	87.2	65	123	18.96	8.35	20	
o-Xylene	18.950	1.0	20.00	0	94.8	80	121	19.96	5.19	20	
Tert-Butanol	94.420	5.0	100.0	0	94.4	70	130	113.9	18.7	20	
Toluene	19.030	2.0	20.00	0	95.2	77	122	19.78	3.86	20	
Xylenes, Total	58.990	2.0	60.00	0	98.3	75	125	63.53	7.41	20	
Surr: 1,2-Dichloroethane-d4	26.970		25.00		108	72	119		0		
Surr: 4-Bromofluorobenzene	24.850		25.00		99.4	76	119		0		
Surr: Dibromofluoromethane	21.870		25.00		87.5	85	115		0		
Surr: Toluene-d8	25.360		25.00		101	81	120		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: N041547
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270WATER_SIMEXT

Sample ID: **LCS-80369** SampType: **LCS** TestCode: **8270WATER_** Units: **µg/L** Prep Date: **7/30/2020** RunNo: **146231**
Client ID: **LCSW** Batch ID: **80369** TestNo: **EPA 8270C** **EPA 3510C** Analysis Date: **7/30/2020** SeqNo: **3873938**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	1.780	1.0	6.000	0	29.7	24	120				
Surr: Phenol-d5	0.330		1.000		33.0	25	108				

Sample ID: **LCSD-80369** SampType: **LCSD** TestCode: **8270WATER_** Units: **µg/L** Prep Date: **7/30/2020** RunNo: **146231**
Client ID: **LCSS02** Batch ID: **80369** TestNo: **EPA 8270C** **EPA 3510C** Analysis Date: **7/30/2020** SeqNo: **3873939**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	1.810	1.0	6.000	0	30.2	24	120	1.780	1.67	20	
Surr: Phenol-d5	0.330		1.000		33.0	25	108		0		

Sample ID: **MB-80369** SampType: **MBLK** TestCode: **8270WATER_** Units: **µg/L** Prep Date: **7/30/2020** RunNo: **146231**
Client ID: **PBW** Batch ID: **80369** TestNo: **EPA 8270C** **EPA 3510C** Analysis Date: **7/30/2020** SeqNo: **3873940**

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

CH2HI03 C: 7/27/2020 12:00 AM
FOLDER R: 7/23/2020
N041547-002A 1 of 1

3.6°C IR#1

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: 7/23/20
PAGE: 1 of 1

Section A Required Client Information:

Company: Kinder Morgan Energy Partners Attention: Ryan Koch	
Address: 1001 Louisiana St., Houston, TX 77002	
Email To: Ryan_Koch@kindermorgan.com eric.davis@jacobs.com; nils.orlitzky@jacobs.com	
Phone 713-420-6730	Fax 714-560-4801

Section B Required Project Information:

Report To: Eric Davis	
Copy To: Ryan Koch	
Purchase Order No.:	
Project Name: SFPP Norwalk	

Invoice Information:

Attention:	Ryan Koch - Ref. AFE# 81195
Company Name:	Kinder Morgan Energy Partners
Address:	1001 Louisiana St., Houston, TX 77002
ATL Project Manager:	Marlon Cartin

Section D Sampler Information:

Sampler Name:	James Dye
Sampler Signature:	
Sample Date:	7/23/20

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)	Comments
	CONTAINER TYPE							V	V	A	P	A	
	# OF CONTAINERS							3	3	3	1	2	
	PRESERVATIVE							H	H	--	N	--	
	VOLUME (mL)							40	40	1000	500	1000	
1	EFF-07-23	EFFLUENT	W	G	7/23/20	1150	12	X	X	X	X	X	N041547-01
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
	7/23/20 1800	A.DASILVA	7/23/20 1545
A.DASILVA 7/23/20	1558	EMIL R	7/23/20 1558
EMIL R	7/23/20 1800	Belkys Hernandez BHz	7/24/20 0840

Las dega 4.8/1.6°C Ice #2
GSO# 3097/3098

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: HOLD UNTIL INSTRUCTED BY JACOBS TO SAMPLE

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:	7/23/2020	Workorder:	N041547
Rep sample Temp (Deg C):	3.6	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: Recevied at Las Vegas Lab on 7/24/20 (GSO#3097/3098) at 4.8°C/1.6°C, IR#2.

Checklist Completed By: EAR 7/28/20

Reviewed By: MBC 7/30/2020

Sample Control

From: Marlon Cartin <marlon@assetlaboratories.com>
Sent: Wednesday, July 29, 2020 9:11 AM
To: 'Orliczky, Nils/SCO'
Cc: 'Hill, Danny/SDO'; emilangelo@assetlaboratories.com; 'Davis, Eric/LAC'; 'Koch, Ryan'; James_Dye@kindermorgan.com; 'Sample Control'; 'Yoandra Rodriguez'
Subject: RE: [EXTERNAL] Re: SFPP Norwalk (Asset Labs No. N041545)
Attachments: N041547.pdf

Flag Status: Flagged

Will do Nils.

SamCon – Please off-hold N041547.

Thanks,

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

From: Orliczky, Nils/SCO <Nils.Orliczky@jacobs.com>
Sent: Tuesday, July 28, 2020 9:03 PM
To: 'Marlon Cartin' <marlon@assetlaboratories.com>
Cc: Hill, Danny/SDO <Danny.Hill@jacobs.com>; emilangelo@assetlaboratories.com; Davis, Eric/LAC <Eric.Davis@jacobs.com>; Koch, Ryan <ryan_koch@kindermorgan.com>; James_Dye@kindermorgan.com
Subject: RE: [EXTERNAL] Re: SFPP Norwalk (Asset Labs No. N041545)

Marlon, the midpoints were within our permit. Please run EFF-0723 attached COC

Thanks,
Nils Orliczky | Jacobs | Environmental Engineer | Global Environmental Solutions | 562.882.9676 mobile | nils.orliczky@jacobs.com | www.jacobs.com

---

From: Reports LV <reports.lv@assetlaboratories.com>
Sent: Tuesday, July 28, 2020 8:38 PM
To: Davis, Eric/LAC <Eric.Davis@jacobs.com>; Koch, Ryan <ryan_koch@kindermorgan.com>; James_Dye@kindermorgan.com
Cc: Anderson, Padrick/BAO <Padrick.Anderson@jacobs.com>; Pataray, Benny/SLC <Benny.Pataray@jacobs.com>; Orliczky, Nils/SCO <Nils.Orliczky@jacobs.com>; Van Antwerp, Alan <Alan_Vanantwerp@kindermorgan.com>; Hill, Danny/SDO <Danny.Hill@jacobs.com>; 'Marlon Cartin' <marlon@assetlaboratories.com>; emilangelo@assetlaboratories.com
Subject: [EXTERNAL] Re: SFPP Norwalk (Asset Labs No. N041545)

Enclosed is the final report for the above project.

ASSET Laboratories

WORK ORDER Summary

29-Jul-20

WorkOrder: N041547

Client ID: CH2HI03

Project: SFPP Norwalk **QC Level:** RTNE **Date Received:** 7/23/2020

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N041547-001A	EFF-07-03	7/23/2020 11:50:00 AM	7/30/2020	Wastewater	EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	V-CA
N041547-001B			7/30/2020		EPA 8015B	GASOLINE RANGE ORGANICS BY GC/FID	☐	☐	☐	VW
N041547-001C			7/30/2020		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: EXTRACTABLE FUELS	☐	☐	☐	WW
			7/30/2020		EPA 8015B	TPH EXTRACTABLE BY GC/FID	☐	☐	☐	WW
			7/30/2020		EPA 8015B	Total TPH	☐	☐	☐	WW
N041547-001D			7/30/2020			AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			7/30/2020		EPA 200.8	TOTAL METALS BY ICPMS	☐	☐	☐	WW
			7/30/2020		EPA 245.1	MERCURY BY COLD VAPOR TECHNIQUE	☐	☐	☐	WW
			7/30/2020			MERCURY PREP	☐	☐	☐	WW
N041547-001E			8/4/2020		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: 8270C - SIM	☐	☐	☐	WW
			8/4/2020		EPA 8270C	SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	WW
N041547-002A	FOLDER	7/30/2020	7/30/2020		Folder	Folder	☐	☐	☐	LAB
			7/30/2020		Folder	Folder	☐	☐	☐	LAB

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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 PICK UP
Signature Type: STANDARD

Tracking #: 549823097

CPS

LAS VEGAS

C89102A

24135688

LVS NV891-A 1

Print Date: 7/23/2020 5:22 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.

GLS

1.6°C
Ice #2

800-322-5555
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Signature Type: STANDARD

Tracking #: 549823098

CPS

LAS VEGAS

C89102A

24135689

LVS NV891-A 1

Print Date: 7/23/2020 5:22 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.
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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.

August 31, 2020

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

TEL:
FAX:

Workorder No.: N041853

RE: SFFP Norwalk

Attention: Eric Davis

Enclosed are the results for sample(s) received on August 14, 2020 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: SFFP Norwalk
Lab Order: N041853

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 Michelson.

Analytical comments for EPA 8260B:

RPD for Matrix Spike (MS)/Matrix Spike Duplicate (MSD) is outside criteria for Tert-Butanol possibly due to non-homogeneity of sample; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

CLIENT: CH2MHill
Project: SFFP Norwalk
Lab Order: N041853
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N041853-001A	EFF-08-14	Wastewater	8/14/2020 11:00:00 AM	8/14/2020	8/31/2020
N041853-001B	EFF-08-14	Wastewater	8/14/2020 11:00:00 AM	8/14/2020	8/31/2020
N041853-001C	EFF-08-14	Wastewater	8/14/2020 11:00:00 AM	8/14/2020	8/31/2020
N041853-001D	EFF-08-14	Wastewater	8/14/2020 11:00:00 AM	8/14/2020	8/31/2020
N041853-001E	EFF-08-14	Wastewater	8/14/2020 11:00:00 AM	8/14/2020	8/31/2020
N041853-001F	EFF-08-14	Wastewater	8/14/2020 11:00:00 AM	8/14/2020	8/31/2020
N041853-001G	EFF-08-14	Wastewater	8/14/2020 11:00:00 AM	8/14/2020	8/31/2020
N041853-001H	EFF-08-14	Wastewater	8/14/2020 11:00:00 AM	8/14/2020	8/31/2020
N041853-001I	EFF-08-14	Wastewater	8/14/2020 11:00:00 AM	8/14/2020	8/31/2020
N041853-001J	EFF-08-14	Wastewater	8/14/2020 11:00:00 AM	8/14/2020	8/31/2020

CLIENT: CH2MHill
Lab Order: N041853
Project: SFFP Norwalk
Lab ID: N041853-001

Client Sample ID: EFF-08-14
Collection Date: 8/14/2020 11:00:00 AM
Matrix: WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL NON-FILTERABLE RESIDUE							
			SM2540D				
RunID: **CA01638-WC01_200817A** QC Batch: **82003**				PrepDate:		**8/17/2020**	Analyst: **AG**
Suspended Solids (Residue, Non-Filterable)	ND	5.0	5.0		mg/L	1	8/17/2020 09:00 AM
SETTLEABLE MATTER							
			SM2540F				
RunID: **CA01638-WC01_200815A** QC Batch: **82004**				PrepDate:		**8/15/2020**	Analyst: **AG**
Settleable Matter	ND	0.10	0.10		ml/L	1	8/15/2020 02:35 PM
TURBIDITY							
			SM 2130B				
RunID: **NV00922-WC_200815B** QC Batch: **R146691**				PrepDate:			Analyst: **LR**
Turbidity	ND	0.10	0.10		NTU	1	8/15/2020 02:05 PM
HEXANE EXTRACTABLE MATERIAL (HEM)							
			EPA 1664 _HEM REV B				
RunID: **NV00922-WC_200815A** QC Batch: **81710**				PrepDate:		**8/15/2020**	Analyst: **LR**
Oil & Grease	0.62	0.61	4.1	J	mg/L	1	8/15/2020 11:25 AM
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 3510C		**EPA 8270C**		
RunID: **NV00922-MS9_200829A** QC Batch: **81818**				PrepDate:		**8/20/2020**	Analyst: **PL**
Phenol	ND	0.33	1.0		µg/L	1	8/29/2020 09:23 PM
Surr: Phenol-d5	27.0	0	25-108		%REC	1	8/29/2020 09:23 PM
1,4-DIOXANE BY GCMS-SIM ISOTOPE DILUTION TECHNIQUE							
			EPA 3510C		**EPA 8270C(M)**		
RunID: **NV00922-MS9_200829B** QC Batch: **81819**				PrepDate:		**8/20/2020**	Analyst: **PL**
1,4-Dioxane	0.17	0.11	1.0	J	µg/L	1	8/29/2020 07:11 PM
Surr: 1,2-Dichlorobenzene-d4	88.6	0	24-101		%REC	1	8/29/2020 07:11 PM
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **CA01638-MS10_200814B** QC Batch: **CA20VW106**				PrepDate:			Analyst: **AW**
1,1-Dichloroethane	ND	0.22	0.50		ug/L	1	8/14/2020 02:13 PM
1,2-Dichloroethane	ND	0.16	0.50		ug/L	1	8/14/2020 02:13 PM
Benzene	ND	0.11	1.0		ug/L	1	8/14/2020 02:13 PM
Ethylbenzene	ND	0.11	1.0		ug/L	1	8/14/2020 02:13 PM

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: N041853
Project: SFFP Norwalk
Lab ID: N041853-001

Client Sample ID: EFF-08-14
Collection Date: 8/14/2020 11:00:00 AM
Matrix: WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **CA01638-MS10_200814B** QC Batch: **CA20VW106**				PrepDate:			Analyst: **AW**
m,p-Xylene	ND	0.23	1.0		ug/L	1	8/14/2020 02:13 PM
MTBE	ND	0.44	1.0		ug/L	1	8/14/2020 02:13 PM
o-Xylene	ND	0.087	1.0		ug/L	1	8/14/2020 02:13 PM
Tert-Butanol	ND	2.8	5.0		ug/L	1	8/14/2020 02:13 PM
Toluene	ND	0.13	2.0		ug/L	1	8/14/2020 02:13 PM
Xylenes, Total	ND	1.5	2.0		ug/L	1	8/14/2020 02:13 PM
Surr: 1,2-Dichloroethane-d4	89.0	0	72-119		%REC	1	8/14/2020 02:13 PM
Surr: 4-Bromofluorobenzene	94.0	0	76-119		%REC	1	8/14/2020 02:13 PM
Surr: Dibromofluoromethane	95.5	0	85-115		%REC	1	8/14/2020 02:13 PM
Surr: Toluene-d8	97.2	0	81-120		%REC	1	8/14/2020 02:13 PM
TPH EXTRACTABLE BY GC/FID							
EPA 3510C			**EPA 8015B**				
RunID: **NV00922-GC1_200820B** QC Batch: **81820**				PrepDate:	**8/20/2020**		Analyst: **PL**
TPH-Diesel (C13-C22)	ND	15	25		ug/L	1	8/20/2020 10:40 PM
TPH-Oil (C23-C36)	40	14	25		ug/L	1	8/20/2020 10:40 PM
Surr: Octacosane	84.6	0	26-152		%REC	1	8/20/2020 10:40 PM
Surr: p-Terphenyl	84.1	0	57-132		%REC	1	8/20/2020 10:40 PM
GASOLINE RANGE ORGANICS BY GC/FID							
			EPA 8015B				
RunID: **NV00922-GC4_200816A** QC Batch: **E20VW077**				PrepDate:			Analyst: **BH**
TPH-Gasoline (C4-C12)	49	21	50	J	ug/L	1	8/16/2020 11:56 AM
Surr: Chlorobenzene - d5	97.1	0	74-138		%REC	1	8/16/2020 11:56 AM
MERCURY BY COLD VAPOR TECHNIQUE							
			EPA 245.1				
RunID: **NV00922-AA2_200817A** QC Batch: **81734**				PrepDate:	**8/17/2020**		Analyst: **DJ**
Mercury	ND	0.018	0.050		µg/L	1	8/17/2020 12:13 PM
TOTAL METALS BY ICPMS							
			EPA 200.8				
RunID: **NV00922-ICP8_200815A** QC Batch: **81711**				PrepDate:	**8/15/2020**		Analyst: **CEI**
Copper	ND	0.26	0.50		µg/L	1	8/15/2020 06:16 PM
Lead	ND	0.13	0.50		µg/L	1	8/15/2020 06:16 PM
Zinc	3.5	0.27	1.0		µg/L	1	8/15/2020 06:16 PM

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	**Client Sample ID:**	EFF-08-14
Lab Order:	N041853	**Collection Date:**	8/14/2020 11:00:00 AM
Project:	SFFP Norwalk	**Matrix:**	WASTEWATER
Lab ID:	N041853-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL TPH							
EPA 8015B							
RunID: **NV00922-GC1_200820B** QC Batch: **R146787** PrepDate: Analyst: **PL**							
Total TPH	89	21	100	J	ug/L	1	8/20/2020

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: N041853
Project: SFFP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 160.2_2540D_W

Sample ID: **MB-82003**	SampType: **MBLK**	TestCode: **160.2_2540D_**	Units: **mg/L**	Prep Date: **8/17/2020**	RunNo: **147053**
Client ID: **PBW**	Batch ID: **82003**	TestNo: **SM2540D**		Analysis Date: **8/17/2020**	SeqNo: **3921805**

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-82003**	SampType: **LCS**	TestCode: **160.2_2540D_**	Units: **mg/L**	Prep Date: **8/17/2020**	RunNo: **147053**
Client ID: **LCSW**	Batch ID: **82003**	TestNo: **SM2540D**		Analysis Date: **8/17/2020**	SeqNo: **3921806**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filterab	925.000	10	1000	0	92.5	80	120				

Sample ID: **N041778-001CDUP**	SampType: **DUP**	TestCode: **160.2_2540D_**	Units: **mg/L**	Prep Date: **8/17/2020**	RunNo: **147053**
Client ID: **ZZZZZZ**	Batch ID: **82003**	TestNo: **SM2540D**		Analysis Date: **8/17/2020**	SeqNo: **3921808**

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: N041853
Project: SFFP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 160.5_2540F_W

Sample ID: **MB-82004**	SampType: **MBLK**	TestCode: **160.5_2540F_**	Units: **ml/L**		Prep Date: **8/15/2020**		RunNo: **147051**					
Client ID: **PBW**	Batch ID: **82004**	TestNo: **SM2540F**			Analysis Date: **8/15/2020**		SeqNo: **3921777**					
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: N041853
Project: SFFP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 1664_HEM_W

Sample ID: **MB-81710**	SampType: **MBLK**	TestCode: **1664_HEM_W**	Units: **mg/L**	Prep Date: **8/15/2020**	RunNo: **146644**
Client ID: **PBW**	Batch ID: **81710**	TestNo: **EPA 1664 _HE**		Analysis Date: **8/15/2020**	SeqNo: **3899480**

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-81710**	SampType: **LCS**	TestCode: **1664_HEM_W**	Units: **mg/L**	Prep Date: **8/15/2020**	RunNo: **146644**
Client ID: **LCSW**	Batch ID: **81710**	TestNo: **EPA 1664 _HE**		Analysis Date: **8/15/2020**	SeqNo: **3899481**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Oil & Grease	34.900	4.0	40.00	0	87.2	78	114				

Sample ID: **LCSD-81710**	SampType: **LCSD**	TestCode: **1664_HEM_W**	Units: **mg/L**	Prep Date: **8/15/2020**	RunNo: **146644**
Client ID: **LCSS02**	Batch ID: **81710**	TestNo: **EPA 1664 _HE**		Analysis Date: **8/15/2020**	SeqNo: **3899482**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Oil & Grease	33.800	4.0	40.00	0	84.5	78	114	34.90	3.20	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: N041853
Project: SFFP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_W_SFPP

Sample ID: **MB-81711** SampType: **MBLK** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **8/15/2020** RunNo: **146745**
Client ID: **PBW** Batch ID: **81711** TestNo: **EPA 200.8** Analysis Date: **8/15/2020** SeqNo: **3905322**

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-81711** SampType: **LCS** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **8/15/2020** RunNo: **146745**
Client ID: **LCSW** Batch ID: **81711** TestNo: **EPA 200.8** Analysis Date: **8/15/2020** SeqNo: **3905323**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	10.631	0.50	10.00	0	106	85	115				
Lead	10.367	0.50	10.00	0	104	85	115				
Zinc	10.700	1.0	10.00	0	107	85	115				

Sample ID: **N041853-001D-DUP** SampType: **DUP** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **8/15/2020** RunNo: **146745**
Client ID: **ZZZZZZ** Batch ID: **81711** TestNo: **EPA 200.8** Analysis Date: **8/15/2020** SeqNo: **3905326**

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	3.304	1.0						3.492	5.54	20	

Sample ID: **N041853-001D-MS** SampType: **MS** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **8/15/2020** RunNo: **146745**
Client ID: **ZZZZZZ** Batch ID: **81711** TestNo: **EPA 200.8** Analysis Date: **8/15/2020** SeqNo: **3905328**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	9.177	0.50	10.00	0	91.8	75	125				
Lead	10.637	0.50	10.00	0	106	75	125				
Zinc	11.590	1.0	10.00	3.492	81.0	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: N041853
Project: SFFP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_W_SFPP

Sample ID: **N041853-001D-MSD** SampType: **MSD** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **8/15/2020** RunNo: **146745**
Client ID: **ZZZZZZ** Batch ID: **81711** TestNo: **EPA 200.8** Analysis Date: **8/15/2020** SeqNo: **3905329**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	9.009	0.50	10.00	0	90.1	75	125	9.177	1.85	20	
Lead	10.669	0.50	10.00	0	107	75	125	10.64	0.303	20	
Zinc	11.368	1.0	10.00	3.492	78.8	75	125	11.59	1.93	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: N041853
Project: SFFP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 2130_W

Sample ID: **MB-R146691**	SampType: **MBLK**	TestCode: **2130_W**	Units: **NTU**	Prep Date:	RunNo: **146691**
Client ID: **PBW**	Batch ID: **R146691**	TestNo: **SM 2130B**		Analysis Date: **8/15/2020**	SeqNo: **3902618**

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

Sample ID: **N041853-001GDUP**	SampType: **DUP**	TestCode: **2130_W**	Units: **NTU**	Prep Date:	RunNo: **146691**
Client ID: **ZZZZZZ**	Batch ID: **R146691**	TestNo: **SM 2130B**		Analysis Date: **8/15/2020**	SeqNo: **3902620**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Turbidity	ND	0.10						0	0	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: N041853
Project: SFFP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 245.1_W_LL

Sample ID: **MB-81734**	SampType: **MBLK**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **8/17/2020**	RunNo: **146690**
Client ID: **PBW**	Batch ID: **81734**	TestNo: **EPA 245.1**		Analysis Date: **8/17/2020**	SeqNo: **3902600**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.027	0.050									J

Sample ID: **LCS-81734**	SampType: **LCS**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **8/17/2020**	RunNo: **146690**
Client ID: **LCSW**	Batch ID: **81734**	TestNo: **EPA 245.1**		Analysis Date: **8/17/2020**	SeqNo: **3902601**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.430	0.050	2.500	0	97.2	85	115				

Sample ID: **N041853-001D-DUP**	SampType: **DUP**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **8/17/2020**	RunNo: **146690**
Client ID: **ZZZZZZ**	Batch ID: **81734**	TestNo: **EPA 245.1**		Analysis Date: **8/17/2020**	SeqNo: **3902604**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.024	0.050						0	0	20	J

Sample ID: **N041853-001D-MS**	SampType: **MS**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **8/17/2020**	RunNo: **146690**
Client ID: **ZZZZZZ**	Batch ID: **81734**	TestNo: **EPA 245.1**		Analysis Date: **8/17/2020**	SeqNo: **3902606**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.660	0.050	2.500	0	106	75	125				

Sample ID: **N041853-001D-MSD**	SampType: **MSD**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **8/17/2020**	RunNo: **146690**
Client ID: **ZZZZZZ**	Batch ID: **81734**	TestNo: **EPA 245.1**		Analysis Date: **8/17/2020**	SeqNo: **3902607**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.610	0.050	2.500	0	104	75	125	2.660	1.90	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: N041853
Project: SFFP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_FP_SFPP

Sample ID: **MB-81820**	SampType: **MBLK**	TestCode: **8015_W_FP_**	Units: **ug/L**	Prep Date: **8/20/2020**	RunNo: **146787**
Client ID: **PBW**	Batch ID: **81820**	TestNo: **EPA 8015B**	**EPA 3510C**	Analysis Date: **8/20/2020**	SeqNo: **3908049**

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)	23.472	25									J
Surr: Octacosane	65.003		80.00		81.3	26	152				
Surr: p-Terphenyl	64.412		80.00		80.5	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: N041853
Project: SFFP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_SFPPTOT

Sample ID: **MB-R146787** SampType: **MBLK** TestCode: **8015_W_SFP** Units: **ug/L** Prep Date: RunNo: **146787**
Client ID: **PBW** Batch ID: **R146787** TestNo: **EPA 8015B** Analysis Date: **8/20/2020** SeqNo: **3911842**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total TPH	69.472	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: N041853
Project: SFFP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GAS_WSFPP

Sample ID: **E200816LCS** SampType: **LCS** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **146674**
Client ID: **LCSW** Batch ID: **E20VW077** TestNo: **EPA 8015B** Analysis Date: **8/16/2020** SeqNo: **3901943**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	972.000	50	1000	0	97.2	67	136				
Surr: Chlorobenzene - d5	43638.000		50000		87.3	74	138				

Sample ID: **E200816MB** SampType: **MBLK** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **146674**
Client ID: **PBW** Batch ID: **E20VW077** TestNo: **EPA 8015B** Analysis Date: **8/16/2020** SeqNo: **3901944**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	46.000	50									J
Surr: Chlorobenzene - d5	47268.000		50000		94.5	74	138				

Sample ID: **N041814-002DMS** SampType: **MS** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **146674**
Client ID: **ZZZZZZ** Batch ID: **E20VW077** TestNo: **EPA 8015B** Analysis Date: **8/16/2020** SeqNo: **3901946**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	1116.000	50	1000	58.00	106	67	136				
Surr: Chlorobenzene - d5	44118.000		50000		88.2	74	138				

Sample ID: **N041814-002DMSD** SampType: **MSD** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **146674**
Client ID: **ZZZZZZ** Batch ID: **E20VW077** TestNo: **EPA 8015B** Analysis Date: **8/16/2020** SeqNo: **3901947**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	972.000	50	1000	58.00	91.4	67	136	1116	13.8	30	
Surr: Chlorobenzene - d5	44122.000		50000		88.2	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: N041853
Project: SFFP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **CA200814-LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **146653**
Client ID: **LCSW** Batch ID: **CA20VW106** TestNo: **EPA 8260B** Analysis Date: **8/14/2020** SeqNo: **3900628**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	19.590	0.50	20.00	0	98.0	69	133				
1,2-Dichloroethane	18.350	0.50	20.00	0	91.8	69	132				
Benzene	21.600	1.0	20.00	0	108	81	122				
Ethylbenzene	21.660	1.0	20.00	0	108	73	127				
m,p-Xylene	44.290	1.0	40.00	0	111	76	128				
MTBE	16.830	1.0	20.00	0	84.2	65	123				
o-Xylene	21.540	1.0	20.00	0	108	80	121				
Tert-Butanol	86.260	5.0	100.0	0	86.3	70	130				
Toluene	21.820	2.0	20.00	0	109	77	122				
Xylenes, Total	65.830	2.0	60.00	0	110	75	125				
Surr: 1,2-Dichloroethane-d4	24.280		25.00		97.1	72	119				
Surr: 4-Bromofluorobenzene	24.590		25.00		98.4	76	119				
Surr: Dibromofluoromethane	25.050		25.00		100	85	115				
Surr: Toluene-d8	26.880		25.00		108	81	120				

Sample ID: **N041773-003C-MS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **146653**
Client ID: **ZZZZZZ** Batch ID: **CA20VW106** TestNo: **EPA 8260B** Analysis Date: **8/14/2020** SeqNo: **3900629**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	18.710	0.50	20.00	0	93.6	69	133				
1,2-Dichloroethane	17.050	0.50	20.00	0	85.2	69	132				
Benzene	19.970	1.0	20.00	0	99.8	81	122				
Ethylbenzene	20.000	1.0	20.00	0	100	73	127				
m,p-Xylene	41.330	1.0	40.00	0	103	76	128				
MTBE	17.020	1.0	20.00	0	85.1	65	123				
o-Xylene	19.670	1.0	20.00	0	98.4	80	121				
Tert-Butanol	84.470	5.0	100.0	0	84.5	70	130				
Toluene	20.840	2.0	20.00	0	104	77	122				
Xylenes, Total	61.000	2.0	60.00	0	102	75	125				
Surr: 1,2-Dichloroethane-d4	23.820		25.00		95.3	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: N041853
Project: SFFP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N041773-003C-MS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **146653**
Client ID: **ZZZZZZ** Batch ID: **CA20VW106** TestNo: **EPA 8260B** Analysis Date: **8/14/2020** SeqNo: **3900629**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	25.350		25.00		101	76	119				
Surr: Dibromofluoromethane	25.370		25.00		101	85	115				
Surr: Toluene-d8	27.370		25.00		109	81	120				

Sample ID: **N041773-003C-MSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **146653**
Client ID: **ZZZZZZ** Batch ID: **CA20VW106** TestNo: **EPA 8260B** Analysis Date: **8/14/2020** SeqNo: **3900630**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	16.770	0.50	20.00	0	83.9	69	133	18.71	10.9	20	
1,2-Dichloroethane	18.430	0.50	20.00	0	92.2	69	132	17.05	7.78	20	
Benzene	18.440	1.0	20.00	0	92.2	81	122	19.97	7.97	20	
Ethylbenzene	18.070	1.0	20.00	0	90.4	73	127	20.00	10.1	20	
m,p-Xylene	36.600	1.0	40.00	0	91.5	76	128	41.33	12.1	20	
MTBE	17.490	1.0	20.00	0	87.5	65	123	17.02	2.72	20	
o-Xylene	18.530	1.0	20.00	0	92.6	80	121	19.67	5.97	20	
Tert-Butanol	104.980	5.0	100.0	0	105	70	130	84.47	21.7	20	R
Toluene	18.630	2.0	20.00	0	93.2	77	122	20.84	11.2	20	
Xylenes, Total	55.130	2.0	60.00	0	91.9	75	125	61.00	10.1	20	
Surr: 1,2-Dichloroethane-d4	24.590		25.00		98.4	72	119		0		
Surr: 4-Bromofluorobenzene	24.590		25.00		98.4	76	119		0		
Surr: Dibromofluoromethane	26.190		25.00		105	85	115		0		
Surr: Toluene-d8	26.390		25.00		106	81	120		0		

Sample ID: **CA200814-MB2** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **146653**
Client ID: **PBW** Batch ID: **CA20VW106** TestNo: **EPA 8260B** Analysis Date: **8/14/2020** SeqNo: **3900631**

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: N041853
Project: SFFP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **CA200814-MB2** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **146653**
Client ID: **PBW** Batch ID: **CA20VW106** TestNo: **EPA 8260B** Analysis Date: **8/14/2020** SeqNo: **3900631**

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	25.350		25.00		101	72	119				
Surr: 4-Bromofluorobenzene	25.430		25.00		102	76	119				
Surr: Dibromofluoromethane	28.280		25.00		113	85	115				
Surr: Toluene-d8	28.000		25.00		112	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: N041853
Project: SFFP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270WATER_SIMEXT

Sample ID: **LCS-81818**	SampType: **LCS**	TestCode: **8270WATER_**	Units: **µg/L**	Prep Date: **8/20/2020**	RunNo: **147026**
Client ID: **LCSW**	Batch ID: **81818**	TestNo: **EPA 8270C**	**EPA 3510C**	Analysis Date: **8/29/2020**	SeqNo: **3920230**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	3.740	1.0	6.000	0	62.3	24	120				
Surr: Phenol-d5	0.580		1.000		58.0	25	108				

Sample ID: **LCSD-81818**	SampType: **LCSD**	TestCode: **8270WATER_**	Units: **µg/L**	Prep Date: **8/20/2020**	RunNo: **147026**
Client ID: **LCSS02**	Batch ID: **81818**	TestNo: **EPA 8270C**	**EPA 3510C**	Analysis Date: **8/29/2020**	SeqNo: **3920231**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	3.710	1.0	6.000	0	61.8	24	120	3.740	0.805	20	
Surr: Phenol-d5	0.570		1.000		57.0	25	108		0		

Sample ID: **MB-81818**	SampType: **MBLK**	TestCode: **8270WATER_**	Units: **µg/L**	Prep Date: **8/20/2020**	RunNo: **147026**
Client ID: **PBW**	Batch ID: **81818**	TestNo: **EPA 8270C**	**EPA 3510C**	Analysis Date: **8/29/2020**	SeqNo: **3920236**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	ND	1.0									
Surr: Phenol-d5	0.290		1.000		29.0	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: N041853
Project: SFFP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270WSIM_DIOXANE

Sample ID: **LCS-81819**	SampType: **LCS**	TestCode: **8270WSIM_DI**	Units: **µg/L**	Prep Date: **8/20/2020**	RunNo: **147029**
Client ID: **LCSW**	Batch ID: **81819**	TestNo: **EPA 8270C(M**	**EPA 3510C**	Analysis Date: **8/29/2020**	SeqNo: **3920488**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	3.578	1.0	4.000	0.1210	86.4	70	130				
Surr: 1,2-Dichlorobenzene-d4	0.855		1.000		85.5	27	100				

Sample ID: **LCSD-81819**	SampType: **LCSD**	TestCode: **8270WSIM_DI**	Units: **µg/L**	Prep Date: **8/20/2020**	RunNo: **147029**
Client ID: **LCSS02**	Batch ID: **81819**	TestNo: **EPA 8270C(M**	**EPA 3510C**	Analysis Date: **8/29/2020**	SeqNo: **3920489**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	3.650	1.0	4.000	0.1210	88.2	70	130	3.578	1.99	20	
Surr: 1,2-Dichlorobenzene-d4	0.816		1.000		81.6	27	100		0		

Sample ID: **MB-81819**	SampType: **MBLK**	TestCode: **8270WSIM_DI**	Units: **µg/L**	Prep Date: **8/20/2020**	RunNo: **147029**
Client ID: **PBW**	Batch ID: **81819**	TestNo: **EPA 8270C(M**	**EPA 3510C**	Analysis Date: **8/29/2020**	SeqNo: **3920490**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	0.121	1.0									J
Surr: 1,2-Dichlorobenzene-d4	0.979		1.000		97.9	27	100				

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

4.8°C IR#1

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Marlon Cartin (marlon@assetlaboratories.com)

CHAIN OF CUSTODY RECORD

DATE: 8/14/20
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: Ryan Koch - Ref. AFE# 81195	Sampler Name: James Dye
Address: 1001 Louisiana St., Houston, TX 77002		Copy To: Ryan Koch	Company Name: Kinder Morgan Energy Partners	Sampler Signature:
Email To: Ryan_Koch@kindermorgan.com eric.davis@jacobs.com; nils.orliczky@jacobs.com		Purchase Order No.:	Address: 1001 Louisiana St., Houston, TX 77002	Sample Date: 8/14/20
Phone 713-420-6730	Fax 714-560-4801	Project Name: **SFPP Norwalk**	ATL Project Manager: Marlon Cartin	

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)	Total Suspended Solids (SM2540D); Turbidity (SM2130B)	Oil & Grease (1664)	Ammonia Nitrogen (as N) (SM-4500 NH3C)	Settleable Solids (SM2540F)	1,4 dioxane				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	2				
PRESERVATIVE										H	H	--	N	--	--	--	S	S	--	--				
VOLUME (mL)										40	40	1000	500	1000	1000	1000	1000	500	1000	1000				
1	EFF- 08-14	EFFLUENT	WW	G	8/14/20	1100	21			X	X	X	X	X	X	X	X	X	X	X				N041853-01
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
	8/14/20 1130		8/14/20 1225 (22)
Relinquished by (Signature and Printed Name):	Date / Time	Relinquished by (Signature and Printed Name):	Date / Time
	8/14/20 1235	A. DASILVA	8/14/20 1235
Relinquished by (Signature and Printed Name):	Date / Time	Relinquished by (Signature and Printed Name):	Date / Time
EMIL R	8/14/20 1800		8/15/20 900

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:

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	

4.8°C
IR#2

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:	8/14/2020	Workorder:	N041853
Rep sample Temp (Deg C):	4.8	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 8/15/20 (GSO # 5438) at 4.8 oC, IR # 2.

For:

Checklist Completed By: EAR YRJ 8/17/2020

Reviewed By: MBC 8/18/2020

ASSET Laboratories

WORK ORDER Summary

17-Aug-20

WorkOrder: N041853

Client ID: CH2HI03

Project: SFFP Norwalk **QC Level:** RTNE **Date Received:** 8/14/2020

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
N041853-001A	EFF-08-14	8/14/2020 11:00:00 AM	8/18/2020	Wastewater	EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	V-CA
N041853-001B			8/18/2020		EPA 8015B	GASOLINE RANGE ORGANICS BY GC/FID	☐	☐	☐	VW
N041853-001C			8/18/2020		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: EXTRACTABLE FUELS	☐	☐	☐	WW
			8/18/2020		EPA 8015B	TPH EXTRACTABLE BY GC/FID	☐	☐	☐	WW
			8/18/2020		EPA 8015B	Total TPH	☐	☐	☐	WW
N041853-001D			8/18/2020			AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			8/18/2020		EPA 200.8	TOTAL METALS BY ICPMS	☐	☐	☐	WW
			8/18/2020		EPA 245.1	MERCURY BY COLD VAPOR TECHNIQUE	☐	☐	☐	WW
			8/18/2020			MERCURY PREP	☐	☐	☐	WW
N041853-001E			8/21/2020		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: DIOXANE-SIM	☐	☐	☐	WW
			8/21/2020		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: 8270C - SIM	☐	☐	☐	WW
			8/21/2020		EPA 8270C	SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	WW
			8/21/2020		EPA 8270C(M)	1,4-DIOXANE BY GCMS-SIM ISOTOPE DILUTION TECHNIQUE	☐	☐	☐	WW
N041853-001F			8/21/2020		SM 5210 B	BIOCHEMICAL OXYGEN DEMAND	☐	☐	☑	SUB
N041853-001G			8/21/2020		SM 2130B	TURBIDITY	☐	☐	☐	LSR
N041853-001H			8/21/2020			Oil and Grease Sample Prep	☐	☐	☐	LSR
			8/21/2020		EPA 1664 _HEM Rev B	Hexane Extractable Material (HEM)	☐	☐	☐	LSR
N041853-001I			8/21/2020		SM4500-NH3C	AMMONIA-N	☐	☐	☑	SUB
N041853-001J			8/21/2020		SM2540D	TOTAL NON-FILTERABLE RESIDUE	☐	☐	☐	WW
			8/21/2020			Total Suspended Solids Prep	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

17-Aug-20

WorkOrder: N041853

Client ID: CH2HI03

Project: SFFP Norwalk **QC Level:** RTNE **Date Received:** 8/14/2020

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
N041853-001J	EFF-08-14	8/14/2020 11:00:00 AM	8/21/2020	Wastewater	SM2540F	SETTLEABLE MATTER	☐	☐	☐	WW
			8/21/2020			Setteable Matter	☐	☐	☐	WW
N041853-002A	FOLDER	8/18/2020	8/18/2020		Folder	Folder	☐	☐	☐	LAB
			8/18/2020		Folder	Folder	☐	☐	☐	LAB

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL

SUBCOC to MICHELSON

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: Emil Angelo Rodriguez	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	
Address: Cerritos, CA 90703	Email: emilangelo@assetlaboratories.com	Cerritos, CA 90703	
Phone: 562.219.7435 Fax: 562.219.7436	Address: 11110 Artesia Blvd Ste B	Email to: elvira@assetlaboratories.com PO# N41853A	Global ID:
Submitted By: Emil Angelo Rodriguez	Cerritos, CA 90703	Phone: 562.219.7435 Fax: 562.218.7436	
Title: Project Manager	Phone: 562.881.0611 Fax: 562.219.7436	Matrix: Ground ☐ Potable ☐ NPDES ☐ Surface ☐ Sediment ☐ Soil ☐ Other Solid ☐	
Signature: Date:	Sampled by: SIGNED		
I hereby authorize ASSET Labs to perform the tests indicated below:	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.		
Project Name: SFPP Norwalk			
Project Number:	Signature: Date:		

QA/QC		Sample Receipt Condition	Y	N
RTNE	☐			
RWQCB	☐	1. Chilled	☐	☐
CalTrans	☐	2. Headspace	☐	☐
Level III	☐	3. Container Intact	☐	☐
LEVEL IV	☐	4. Seal Present	☐	☐
Regulatory	☐	5. IR number		
Specify State:		6. Method of Cooling		
		Sample Temp:		

Item No.	Laboratory Work Order No.	Sample ID/Location	Date	Time	Water	Solid	Others	Ammonia (as N) SM-4500 NH3	BOD (@ 20 deg) SM5210B	Turn Around Time (TAT)	No. of Containers	Container Type	Preservation	Courier: / Tracking No. / Remarks
1		EFF-08-14	8/14/2020	1100	X			X	X	E				
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
A. PASILWA	8/14/20 1445	EMIL A. R	8/14/20 1445
EMIL R	8/14/20 1537		8/14/20 5:37 PM
	8/14/20 3:37		

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, tmallt@assetlaboratories.com and sonny.lorenzo@assetlaboratories.com when reporting

Results needed 8/24/20

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
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:			
H: HCl	N: HNO_3	S: H_2SO_4	C: <= 6°C
Z: $Zn(AC)_2$	O: NaOH	T: $Na_2S_2O_3$	
Others/Specify:			

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

White = Laboratory Copy
Yellow = Customer's Copy

Our Experience Is Your Protection

Michelson Laboratories, Inc.

6280 Chalet Drive, Commerce, CA 90040-3704, Telephone (562) 928-0553 / FAX (562) 927-6625

LABORATORY CERTIFICATE

Submitted By: ASSET LABORATORIES
11110 ARTESIA BLVD
SUITE B
CERRITOS, CA 90703
Attn : THAD MALIT

Printed : 08/20/2020
Lab No. : 081420-C217772
Report No. : 081420-C217772B
Order No. : N41853A
Received : 8/14/2020
Page : 1 of 1

REPORT #	PRODUCT / TEST	METHOD	RESULT	DET LIMIT	UNITS	START:DT
C217772-01	EFF-08-14					
	BIOCHEMICAL OXYGEN DEMAND, BOD	SM 5210 B	890	2.0	mg/l	08/14/20
C217772-02	EFF-08-14					
	NITROGEN, AMMONIA	SM 4500 NH3B,C	<0.10	0.10	mg/l NH3	08/20/20

MICHELSON LABORATORIES, INC.

Leanne Salleza

Leanne Salleza, Quality Systems | 8/20/2020 6:34:40 PM

(Amended Report)

Our Experience Is Your Protection

Michelson Laboratories, Inc.

6280 Chalet Drive, Commerce, CA 90040-3704, Telephone (562) 928-0553 / FAX (562) 927-6625

LABORATORY CERTIFICATE

Submitted By: ASSET LABORATORIES
11110 ARTESIA BLVD
SUITE B
CERRITOS, CA 90703
Attn : THAD MALIT

Printed : 09/03/2020
Lab No. : 081420-C217772
Report No. : 081420-C217772C
Order No. : N41853A
Received : 8/14/2020
Page : 1 of 1

REPORT #	PRODUCT / TEST	METHOD	RESULT	DET LIMIT	UNITS	START:DT
C217772-01	EFF-08-14					
	BIOCHEMICAL OXYGEN DEMAND, BOD	SM 5210 B	890	2.0	mg/l	08/14/20
C217772-02	EFF-08-14					
	NITROGEN, AMMONIA	SM 4500 NH3B,C	<0.10	0.10	mg/l NH3	08/20/20

LCS Recovery: 80.3 %
LCS/LCSD RPD: 13.5 %
BOD Blank: 1.9100 mg/L
BOD Blank + Seed: 1.3200 mg/L

MICHELSON LABORATORIES, INC.

Maria Lopez, Instrumentation Manager | 9/3/2020 4:15:16 PM

October 13, 2020

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

TEL:
FAX:

Workorder No.: N042371

RE: SFPP Norwalk

Attention: Eric Davis

Enclosed are the results for sample(s) received on September 29, 2020 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: N042371

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.

Ammonica and BOD was subcontracted to BC Laboratories, Bakersfield CA

Analytical comments for EPA 8260B:

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

Analytical comments for EPA 8270C:

Surrogate Phenol-d5 recovery was below the laboratory acceptable limit on sample N042371-001. Reanalysis confirms low recovery caused by matrix effect.

CLIENT: CH2MHill
Project: SFPP Norwalk
Lab Order: N042371
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N042371-001A	EFF-09-29-20	Water	9/29/2020 8:00:00 AM	9/29/2020	10/13/2020
N042371-001B	EFF-09-29-20	Water	9/29/2020 8:00:00 AM	9/29/2020	10/13/2020
N042371-001C	EFF-09-29-20	Water	9/29/2020 8:00:00 AM	9/29/2020	10/13/2020
N042371-001D	EFF-09-29-20	Water	9/29/2020 8:00:00 AM	9/29/2020	10/13/2020
N042371-001E	EFF-09-29-20	Water	9/29/2020 8:00:00 AM	9/29/2020	10/13/2020
N042371-001F	EFF-09-29-20	Water	9/29/2020 8:00:00 AM	9/29/2020	10/13/2020
N042371-001G	EFF-09-29-20	Water	9/29/2020 8:00:00 AM	9/29/2020	10/13/2020

CLIENT: CH2MHill
Lab Order: N042371
Project: SFPP Norwalk
Lab ID: N042371-001

Client Sample ID: EFF-09-29-20
Collection Date: 9/29/2020 8:00:00 AM
Matrix: WATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS							
EPA 3510C			**EPA 8270C**				
RunID: **NV00922-MS9_201005C** QC Batch: **82409**				PrepDate:		**10/5/2020**	Analyst: **PL**
Phenol	ND	0.33	1.0		µg/L	1	10/6/2020 01:52 AM
Surr: Phenol-d5	23.0	0	25-108	S	%REC	1	10/6/2020 01:52 AM
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **CA01638-MS10_200930A** QC Batch: **CA20VW122**				PrepDate:			Analyst: **AW**
1,1-Dichloroethane	ND	0.22	0.50		ug/L	1	9/30/2020 01:31 PM
1,2-Dichloroethane	ND	0.16	0.50		ug/L	1	9/30/2020 01:31 PM
Benzene	ND	0.11	1.0		ug/L	1	9/30/2020 01:31 PM
Ethylbenzene	ND	0.11	1.0		ug/L	1	9/30/2020 01:31 PM
m,p-Xylene	ND	0.23	1.0		ug/L	1	9/30/2020 01:31 PM
MTBE	ND	0.44	1.0		ug/L	1	9/30/2020 01:31 PM
o-Xylene	ND	0.087	1.0		ug/L	1	9/30/2020 01:31 PM
Tert-Butanol	ND	2.8	5.0		ug/L	1	9/30/2020 01:31 PM
Toluene	ND	0.13	2.0		ug/L	1	9/30/2020 01:31 PM
Xylenes, Total	ND	1.5	2.0		ug/L	1	9/30/2020 01:31 PM
Surr: 1,2-Dichloroethane-d4	103	0	72-119		%REC	1	9/30/2020 01:31 PM
Surr: 4-Bromofluorobenzene	80.5	0	76-119		%REC	1	9/30/2020 01:31 PM
Surr: Dibromofluoromethane	88.4	0	85-115		%REC	1	9/30/2020 01:31 PM
Surr: Toluene-d8	95.9	0	81-120		%REC	1	9/30/2020 01:31 PM
TPH EXTRACTABLE BY GC/FID							
EPA 3510C			**EPA 8015B**				
RunID: **NV00922-GC3_200930A** QC Batch: **82363**				PrepDate:		**9/30/2020**	Analyst: **PL**
TPH-Diesel (C13-C22)	ND	15	25		ug/L	1	10/1/2020 02:13 AM
TPH-Oil (C23-C36)	18	14	25	J	ug/L	1	10/1/2020 02:13 AM
Surr: Octacosane	77.3	0	26-152		%REC	1	10/1/2020 02:13 AM
Surr: p-Terphenyl	73.3	0	57-132		%REC	1	10/1/2020 02:13 AM
GASOLINE RANGE ORGANICS BY GC/FID							
			EPA 8015B				
RunID: **NV00922-GC4_200930A** QC Batch: **E20VW093**				PrepDate:			Analyst: **BH**
TPH-Gasoline (C4-C12)	41	21	50	J	ug/L	1	9/30/2020 10:42 AM
Surr: Chlorobenzene - d5	121	0	74-138		%REC	1	9/30/2020 10:42 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	**Client Sample ID:**	EFF-09-29-20
Lab Order:	N042371	**Collection Date:**	9/29/2020 8:00:00 AM
Project:	SFPP Norwalk	**Matrix:**	WATER
Lab ID:	N042371-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
MERCURY BY COLD VAPOR TECHNIQUE							
EPA 245.1							
RunID: **NV00922-AA2_200930A** QC Batch: **82355** PrepDate: **9/30/2020** Analyst: **DJ**							
Mercury	ND	0.018	0.050		µg/L	1	9/30/2020 02:05 PM
TOTAL METALS BY ICPMS							
EPA 200.8							
RunID: **NV00922-ICP8_200930A** QC Batch: **82350** PrepDate: **9/30/2020** Analyst: **CEI**							
Copper	0.49	0.26	0.50	J	µg/L	1	9/30/2020 12:21 PM
Lead	ND	0.13	0.50		µg/L	1	9/30/2020 12:21 PM
Zinc	1.1	0.27	1.0		µg/L	1	9/30/2020 12:21 PM
TOTAL TPH							
EPA 8015B							
RunID: **NV00922-GC3_200930A** QC Batch: **R147669** PrepDate: Analyst: **PL**							
Total TPH	59	21	100	J	ug/L	1	10/1/2020

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: N042371
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_W_SFPP

Sample ID: **MB-82350** SampType: **MBLK** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **9/30/2020** RunNo: **147679**
Client ID: **PBW** Batch ID: **82350** TestNo: **EPA 200.8** Analysis Date: **9/30/2020** SeqNo: **3950024**

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-82350** SampType: **LCS** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **9/30/2020** RunNo: **147679**
Client ID: **LCSW** Batch ID: **82350** TestNo: **EPA 200.8** Analysis Date: **9/30/2020** SeqNo: **3950025**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	10.215	0.50	10.00	0	102	85	115				
Lead	10.006	0.50	10.00	0	100	85	115				
Zinc	9.208	1.0	10.00	0	92.1	85	115				

Sample ID: **N042371-001D-DUP** SampType: **DUP** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **9/30/2020** RunNo: **147679**
Client ID: **ZZZZZZ** Batch ID: **82350** TestNo: **EPA 200.8** Analysis Date: **9/30/2020** SeqNo: **3950031**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	ND	0.50						0.4886	0	20	
Lead	ND	0.50						0	0	20	
Zinc	0.649	1.0						1.132	0	20	J

Sample ID: **N042371-001D-MS** SampType: **MS** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **9/30/2020** RunNo: **147679**
Client ID: **ZZZZZZ** Batch ID: **82350** TestNo: **EPA 200.8** Analysis Date: **9/30/2020** SeqNo: **3950033**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	9.553	0.50	10.00	0.4886	90.6	75	125				
Lead	10.489	0.50	10.00	0	105	75	125				
Zinc	10.625	1.0	10.00	1.132	94.9	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: N042371
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_W_SFPP

Sample ID: **N042371-001D-MSD** SampType: **MSD** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **9/30/2020** RunNo: **147679**
Client ID: **ZZZZZZ** Batch ID: **82350** TestNo: **EPA 200.8** Analysis Date: **9/30/2020** SeqNo: **3950034**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	9.570	0.50	10.00	0.4886	90.8	75	125	9.553	0.179	20	
Lead	10.472	0.50	10.00	0	105	75	125	10.49	0.167	20	
Zinc	10.654	1.0	10.00	1.132	95.2	75	125	10.63	0.271	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: N042371
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 245.1_W_LL

Sample ID: **MB-82355**	SampType: **MBLK**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **9/30/2020**	RunNo: **147657**
Client ID: **PBW**	Batch ID: **82355**	TestNo: **EPA 245.1**		Analysis Date: **9/30/2020**	SeqNo: **3948525**

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

Sample ID: **LCS-82355**	SampType: **LCS**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **9/30/2020**	RunNo: **147657**
Client ID: **LCSW**	Batch ID: **82355**	TestNo: **EPA 245.1**		Analysis Date: **9/30/2020**	SeqNo: **3948526**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.260	0.050	2.500	0	90.4	85	115				

Sample ID: **N042371-001D-DUP**	SampType: **DUP**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **9/30/2020**	RunNo: **147657**
Client ID: **ZZZZZZ**	Batch ID: **82355**	TestNo: **EPA 245.1**		Analysis Date: **9/30/2020**	SeqNo: **3948529**

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

Sample ID: **N042371-001D-MS**	SampType: **MS**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **9/30/2020**	RunNo: **147657**
Client ID: **ZZZZZZ**	Batch ID: **82355**	TestNo: **EPA 245.1**		Analysis Date: **9/30/2020**	SeqNo: **3948531**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.330	0.050	2.500	0	93.2	75	125				

Sample ID: **N042371-001D-MSD**	SampType: **MSD**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **9/30/2020**	RunNo: **147657**
Client ID: **ZZZZZZ**	Batch ID: **82355**	TestNo: **EPA 245.1**		Analysis Date: **9/30/2020**	SeqNo: **3948532**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.250	0.050	2.500	0	90.0	75	125	2.330	3.49	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: N042371
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_FP_SFPP

Sample ID: **MB-82363**	SampType: **MBLK**	TestCode: **8015_W_FP_**	Units: **ug/L**	Prep Date: **9/30/2020**	RunNo: **147669**
Client ID: **PBW**	Batch ID: **82363**	TestNo: **EPA 8015B**	**EPA 3510C**	Analysis Date: **10/1/2020**	SeqNo: **3949914**

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)	17.210	25									J
Surr: Octacosane	51.760		80.00		64.7	26	152				
Surr: p-Terphenyl	48.254		80.00		60.3	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: N042371
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_SFPPTOT

Sample ID: **MB-R147669** SampType: **MBLK** TestCode: **8015_W_SFP** Units: **ug/L** Prep Date: RunNo: **147669**
Client ID: **PBW** Batch ID: **R147669** TestNo: **EPA 8015B** Analysis Date: **10/1/2020** SeqNo: **3949947**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total TPH	62.210	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: N042371
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GAS_WSFPP

Sample ID: **E200930LCS** SampType: **LCS** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **147675**
Client ID: **LCSW** Batch ID: **E20VW093** TestNo: **EPA 8015B** Analysis Date: **9/30/2020** SeqNo: **3949889**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	856.000	50	1000	0	85.6	67	136				
Surr: Chlorobenzene - d5	49016.000		50000		98.0	74	138				

Sample ID: **E200930MB** SampType: **MBLK** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **147675**
Client ID: **PBW** Batch ID: **E20VW093** TestNo: **EPA 8015B** Analysis Date: **9/30/2020** SeqNo: **3949890**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	45.000	50									J
Surr: Chlorobenzene - d5	48820.000		50000		97.6	74	138				

Sample ID: **N042371-001BMS** SampType: **MS** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **147675**
Client ID: **ZZZZZZ** Batch ID: **E20VW093** TestNo: **EPA 8015B** Analysis Date: **9/30/2020** SeqNo: **3949892**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	872.000	50	1000	41.00	83.1	67	136				
Surr: Chlorobenzene - d5	52488.000		50000		105	74	138				

Sample ID: **N042371-001BMSD** SampType: **MSD** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **147675**
Client ID: **ZZZZZZ** Batch ID: **E20VW093** TestNo: **EPA 8015B** Analysis Date: **9/30/2020** SeqNo: **3949893**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	1043.000	50	1000	41.00	100	67	136	872.0	17.9	30	
Surr: Chlorobenzene - d5	53172.000		50000		106	74	138		0	0	

Sample ID: **N042376-001BDUP** SampType: **DUP** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **147675**
Client ID: **ZZZZZZ** Batch ID: **E20VW093** TestNo: **EPA 8015B** Analysis Date: **9/30/2020** SeqNo: **3949895**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	35.000	50						39.00	0	0	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: N042371
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GAS_WSFPP

Sample ID: **N042376-001BDUP** SampType: **DUP** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **147675**
Client ID: **ZZZZZZ** Batch ID: **E20VW093** TestNo: **EPA 8015B** Analysis Date: **9/30/2020** SeqNo: **3949895**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Chlorobenzene - d5	54650.000		50000		109	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: N042371
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **CA200930-LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **147656**
Client ID: **LCSW** Batch ID: **CA20VW122** TestNo: **EPA 8260B** Analysis Date: **9/30/2020** SeqNo: **3948895**

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				
1,2-Dichloroethane	18.410	0.50	20.00	0	92.0	69	132				
Benzene	17.840	1.0	20.00	0	89.2	81	122				
Ethylbenzene	20.370	1.0	20.00	0	102	73	127				
m,p-Xylene	42.360	1.0	40.00	0	106	76	128				
MTBE	16.020	1.0	20.00	0	80.1	65	123				
o-Xylene	17.300	1.0	20.00	0	86.5	80	121				
Tert-Butanol	97.990	5.0	100.0	0	98.0	70	130				
Toluene	19.360	2.0	20.00	0	96.8	77	122				
Xylenes, Total	59.660	2.0	60.00	0	99.4	75	125				
Surr: 1,2-Dichloroethane-d4	23.920		25.00		95.7	72	119				
Surr: 4-Bromofluorobenzene	21.340		25.00		85.4	76	119				
Surr: Dibromofluoromethane	22.040		25.00		88.2	85	115				
Surr: Toluene-d8	21.920		25.00		87.7	81	120				

Sample ID: **N042371-001A-MS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **147656**
Client ID: **ZZZZZZ** Batch ID: **CA20VW122** TestNo: **EPA 8260B** Analysis Date: **9/30/2020** SeqNo: **3948896**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	18.320	0.50	20.00	0	91.6	69	133				
1,2-Dichloroethane	17.520	0.50	20.00	0	87.6	69	132				
Benzene	17.190	1.0	20.00	0	86.0	81	122				
Ethylbenzene	18.690	1.0	20.00	0	93.5	73	127				
m,p-Xylene	37.970	1.0	40.00	0	94.9	76	128				
MTBE	18.080	1.0	20.00	0	90.4	65	123				
o-Xylene	15.970	1.0	20.00	0	79.8	80	121				S
Tert-Butanol	107.080	5.0	100.0	0	107	70	130				
Toluene	18.300	2.0	20.00	0	91.5	77	122				
Xylenes, Total	53.940	2.0	60.00	0	89.9	75	125				
Surr: 1,2-Dichloroethane-d4	22.310		25.00		89.2	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: N042371
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N042371-001A-MS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **147656**
Client ID: **ZZZZZZ** Batch ID: **CA20VW122** TestNo: **EPA 8260B** Analysis Date: **9/30/2020** SeqNo: **3948896**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	21.730		25.00		86.9	76	119				
Surr: Dibromofluoromethane	22.990		25.00		92.0	85	115				
Surr: Toluene-d8	23.160		25.00		92.6	81	120				

Sample ID: **N042371-001A-MSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **147656**
Client ID: **ZZZZZZ** Batch ID: **CA20VW122** TestNo: **EPA 8260B** Analysis Date: **9/30/2020** SeqNo: **3948897**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	20.150	0.50	20.00	0	101	69	133	18.32	9.51	20	
1,2-Dichloroethane	19.810	0.50	20.00	0	99.0	69	132	17.52	12.3	20	
Benzene	18.530	1.0	20.00	0	92.6	81	122	17.19	7.50	20	
Ethylbenzene	19.820	1.0	20.00	0	99.1	73	127	18.69	5.87	20	
m,p-Xylene	41.540	1.0	40.00	0	104	76	128	37.97	8.98	20	
MTBE	18.110	1.0	20.00	0	90.6	65	123	18.08	0.166	20	
o-Xylene	16.320	1.0	20.00	0	81.6	80	121	15.97	2.17	20	
Tert-Butanol	104.160	5.0	100.0	0	104	70	130	107.1	2.76	20	
Toluene	20.400	2.0	20.00	0	102	77	122	18.30	10.9	20	
Xylenes, Total	57.860	2.0	60.00	0	96.4	75	125	53.94	7.01	20	
Surr: 1,2-Dichloroethane-d4	23.910		25.00		95.6	72	119		0		
Surr: 4-Bromofluorobenzene	21.270		25.00		85.1	76	119		0		
Surr: Dibromofluoromethane	25.490		25.00		102	85	115		0		
Surr: Toluene-d8	22.200		25.00		88.8	81	120		0		

Sample ID: **CA200930-MB5** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **147656**
Client ID: **PBW** Batch ID: **CA20VW122** TestNo: **EPA 8260B** Analysis Date: **9/30/2020** SeqNo: **3948898**

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: N042371
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **CA200930-MB5** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **147656**
Client ID: **PBW** Batch ID: **CA20VW122** TestNo: **EPA 8260B** Analysis Date: **9/30/2020** SeqNo: **3948898**

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	24.340		25.00		97.4	72	119				
Surr: 4-Bromofluorobenzene	20.230		25.00		80.9	76	119				
Surr: Dibromofluoromethane	24.380		25.00		97.5	85	115				
Surr: Toluene-d8	21.860		25.00		87.4	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: N042371
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270WATER_SIMEXT

Sample ID: **LCS-82409**	SampType: **LCS**	TestCode: **8270WATER_**	Units: **µg/L**	Prep Date: **10/5/2020**	RunNo: **147782**
Client ID: **LCSW**	Batch ID: **82409**	TestNo: **EPA 8270C**	**EPA 3510C**	Analysis Date: **10/6/2020**	SeqNo: **3956367**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	3.870	1.0	6.000	0	64.5	24	120				
Surr: Phenol-d5	0.500		1.000		50.0	25	108				

Sample ID: **LCSD-82409**	SampType: **LCSD**	TestCode: **8270WATER_**	Units: **µg/L**	Prep Date: **10/5/2020**	RunNo: **147782**
Client ID: **LCSS02**	Batch ID: **82409**	TestNo: **EPA 8270C**	**EPA 3510C**	Analysis Date: **10/6/2020**	SeqNo: **3956368**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	4.170	1.0	6.000	0	69.5	24	120	3.870	7.46	20	
Surr: Phenol-d5	0.530		1.000		53.0	25	108		0		

Sample ID: **MB-82409**	SampType: **MBLK**	TestCode: **8270WATER_**	Units: **µg/L**	Prep Date: **10/5/2020**	RunNo: **147782**
Client ID: **PBW**	Batch ID: **82409**	TestNo: **EPA 8270C**	**EPA 3510C**	Analysis Date: **10/6/2020**	SeqNo: **3956369**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	ND	1.0									
Surr: Phenol-d5	0.310		1.000		31.0	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

N042371

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

IR#1 4.4°C

CHAIN OF CUSTODY RECORD
DATE: 9/29/20
PAGE: ____ of ____

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: Ryan Koch - Ref. AFE# 81195	Sampler Name: James Dye
Address: 1001 Louisiana St., Houston, TX 77002	Copy To: Ryan Koch	Company Name: Kinder Morgan Energy Partners	Sampler Signature:
Email To: Ryan_Koch@kindermorgan.com eric.davis@jacobs.com; nils.orlie@jacobs.com	Purchase Order No.:	Address: 1001 Louisiana St., Houston, TX 77002	Sample Date: 9/29/20
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	C	P	
	# OF CONTAINERS							3	3	3	1	2	1	1	
	PRESERVATIVE							H	H	--	N	-	-	S	
	VOLUME (mL)							40	40	1000	500	1000	1000	500	
1	EFF09-29-20	EFFLUENT	W	G	9/29	0800	14	X	X	X	X	X	X	X	N042371-01
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
	9/29/20 0900	JUAN J ARCO	9/29/20 1445
JUAN J ARCO	9/29/20 1508	EMIL R	9/29/20 1508
EMIL R	9/29/20 1800	LUCAS L. AMOS	9/30/20 8:26 AM

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 5:00 PM.

Special Instruction:
GSO 2896
IR # 2
ICE
3.8°C

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:	9/29/2020	Workorder:	N042371
Rep sample Temp (Deg C):	4.4	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 in Las Vegas Lab on 9/30/20 at 3.8 C, IR# 2 - GSO#2896

Checklist Completed By: EAR 9/30/20

Reviewed By: MBC 9/30/2020

ASSET Laboratories

WORK ORDER Summary

30-Sep-20

WorkOrder: N042371

Client ID: CH2HI03

Project: SFPP Norwalk **QC Level:** RTNE **Date Received:** 9/29/2020

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

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N042371-001A	EF-F09-29-20	9/29/2020 8:00:00 AM	10/1/2020	Water	EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	V-CA
N042371-001B	EFF-09-29-20		10/1/2020		EPA 8015B	GASOLINE RANGE ORGANICS BY GC/FID	☐	☐	☐	VW
N042371-001C			10/1/2020		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: EXTRACTABLE FUELS	☐	☐	☐	WW
			10/1/2020		EPA 8015B	TPH EXTRACTABLE BY GC/FID	☐	☐	☐	WW
			10/1/2020		EPA 8015B	Total TPH	☐	☐	☐	WW
N042371-001D			10/1/2020			AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			10/1/2020		EPA 200.8	TOTAL METALS BY ICPMS	☐	☐	☐	WW
			10/1/2020		EPA 245.1	MERCURY BY COLD VAPOR TECHNIQUE	☐	☐	☐	WW
			10/1/2020			MERCURY PREP	☐	☐	☐	WW
N042371-001E			10/5/2020		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: 8270C - SIM	☐	☐	☐	WW
			10/5/2020		EPA 8270C	SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	WW
N042371-001F			10/5/2020		SM 5210 B	BIOCHEMICAL OXYGEN DEMAND	☐	☐	☑	SUB
N042371-001G			10/5/2020		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N042371-002A	FOLDER	10/1/2020	10/1/2020		Folder	Folder	☐	☐	☐	LAB
			10/1/2020		Folder	Folder	☐	☐	☐	LAB

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 PICK UP
Signature Type: STANDARD

Tracking #: 550612896

CPS

LAS VEGAS

C89102A

27927266

LVS NV891-A 1

Print Date: 9/29/2020 4:27 PM

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.

8:26 am
IR#2
3.8°C

Date of Report: 10/13/2020

Emil Angelo Rodriguez

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

Client Project:	N042371
BCL Project:	Cerritos
BCL Work Order:	2028438
Invoice ID:	B394577

Enclosed are the results of analyses for samples received by the laboratory on 9/30/2020. 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 2028438 Page 1 of 2

20-28438

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

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

QC Level: RTNE

Field Sampler:

29-Sep-20

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: SM 5210 B	SM4500-NH3D
ND42371-001F / EFF09-29-20	Water	9/29/2020 8:00:00 AM	32OZP	1	
ND42371-001G / EFF09-29-20	Water	9/29/2020 8:00:00 AM	16OZP		1

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

DISTRIBUTION
SUB OUT

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com
PO#:N42371A. Please email invoices & statements to elvira@assetlaboratories.com. For questions, call Emil Angelo Rodriguez at (562)-219-7435. RESULTS NEEDED: 10/7/20. EMAIL RESULTS TO: reports@assetlaboratories.com, sonny.lorenzo@assetlaboratories.com.
Please analyze samples for Ammonia and BOD. CSO#: 550612930

Relinquished by:	Date/Time	Received by:	Date/Time
	9/29/20 1625		9-30-20 0935
Relinquished by:		Received by:	

Chain of Custody and Cooler Receipt Form for 2028438 Page 2 of 2

BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 Of 1

Submission #: 2028438

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 Date/Time 9-30-20 955

Temperature: (A) 2.9 °C / (C) 2.7 °C Analyst Init TKJ

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	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: Con 2 Date/Time: 9/30/20 1430
A = Actual / C = Corrected

Rev 21 05/23/2016
(S:\WPDocs\WordPerfect\LAB_DOCS\FORMS\SAMREC rev 20)

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

Reported: 10/13/2020 11:28
Project: Cerritos
Project Number: N042371
Project Manager: Emil Angelo Rodriguez

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2028438-01	**COC Number:**	---	**Receive Date:**	09/30/2020 09:55
	Project Number:	---	**Sampling Date:**	09/29/2020 08:00
	Sampling Location:	NA	**Sample Depth:**	---
	Sampling Point:	N042371-001F / EFF09-29-20	**Lab Matrix:**	Water
	Sampled By:	---	**Sample Type:**	Water
2028438-02	**COC Number:**	---	**Receive Date:**	09/30/2020 09:55
	Project Number:	---	**Sampling Date:**	09/29/2020 08:00
	Sampling Location:	NA	**Sample Depth:**	---
	Sampling Point:	N042371-001G / EFF09-29-20	**Lab Matrix:**	Water
	Sampled By:	---	**Sample Type:**	Water

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

Reported: 10/13/2020 11:28
Project: Cerritos
Project Number: N042371
Project Manager: Emil Angelo Rodriguez

Water Analysis (General Chemistry)

BCL Sample ID: 2028438-01 | **Client Sample Name:** NA, N042371-001F / EFF09-29-20, 9/29/2020 8:00:00AM

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	SM17-5210B	10/01/20 06:30	10/01/20 06:30	HPR	YSIPRO	1.525	B088992	No Prep

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

Reported: 10/13/2020 11:28
Project: Cerritos
Project Number: N042371
Project Manager: Emil Angelo Rodriguez

Water Analysis (General Chemistry)

BCL Sample ID: 2028438-02 | **Client Sample Name:** NA, N042371-001G / EFF09-29-20, 9/29/2020 8:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ammonia as N	**0.096**	**mg/L**	**0.20**	**0.067**	**EPA-350.1**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-350.1	10/08/20 15:15	10/12/20 10:31	JMH2	SC-1	1.066	B089315	No Prep

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

Reported: 10/13/2020 11:28
Project: Cerritos
Project Number: N042371
Project Manager: Emil Angelo Rodriguez

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B088992						
Biochemical Oxygen Demand - Seeded	B088992-BLK1	ND	mg/L	1.0	1.0	
QC Batch ID: B089315						
Ammonia as N	B089315-BLK1	ND	mg/L	0.20	0.067	

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

Reported: 10/13/2020 11:28
Project: Cerritos
Project Number: N042371
Project Manager: Emil Angelo Rodriguez

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: B088992										
Biochemical Oxygen Demand - Seeded	B088992-BS1	LCS	194.82	198.00	mg/L	98.4		85 - 115		
QC Batch ID: B089315										
Ammonia as N	B089315-BS1	LCS	1.9392	2.0000	mg/L	97.0		90 - 110		

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

Reported: 10/13/2020 11:28
Project: Cerritos
Project Number: N042371
Project Manager: Emil Angelo Rodriguez

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: B088992	Used client sample: N										
Biochemical Oxygen Demand - Seeded	DUP	2028392-01	4.4530	4.9003		mg/L	9.6		20		
QC Batch ID: B089315	Used client sample: N										
Ammonia as N	DUP	2027806-01	0.14139	0.13599		mg/L	3.9		10		J
	MS	2027806-01	0.14139	2.5208	2.2642	mg/L		105		90 - 110	
	MSD	2027806-01	0.14139	2.4130	2.2642	mg/L	4.4	100	10	90 - 110	

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

Reported: 10/13/2020 11:28
Project: Cerritos
Project Number: N042371
Project Manager: Emil Angelo Rodriguez

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit

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 three normal effluent samples. Samples were collected on July 23, August 14, and September 29, 2020. Analyses were performed by Asset Laboratories in Cerritos, California, Michelson Laboratories, Inc. In Commerce, California and BC Laboratories in Bakersfield, California. The sample results were reported as three sample delivery groups:

Sample Delivery Groups
N041547
N041853
N042371

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	EPA 350.1
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. Three associated results were detected less than five times the blank concentrations and were qualified as not detected and flagged "U" in samples EFF-07-23-20, EFF-08-14-20 and EFF-09-29-20.
- TPH-diesel and total TPH were detected less than the RL in the method blanks for Method SW8015B. Six associated results were detected less than five times the blank concentrations and were qualified as not detected and flagged "U" in samples EFF-07-23-20, EFF-08-14-20 and EFF-09-29-20.
- 1,4-Dioxane was detected less than the RL in a method blank for Method SW8270C. One associated result was detected less than five times the blank concentration and was qualified as not detected and flagged "U" in sample EFF-08-14-20.

Surrogates

All surrogate recovery criteria were met.

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 the following exception:

The recovery of o-xylene was less than the lower control limit in the MS of sample EFF-09-29-20 for Method SW8260B, indicating the associated parent sample result is possibly biased low. The 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.

Miscellaneous

The BOD result for sample EFF-08-14-20 was erroneously high and a sample mix-up was suspected. Repeated requests for associated supporting raw data from Michelson Laboratories, Inc. were not fulfilled; the reported result could not be confirmed. The BOD result for sample EFF-08-14-20 was excluded for use.

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	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
CAT080033962	1	800-624-9136	014823354 JJK

GENERATOR

5. Generator's Name and Mailing Address
SFPP, L.P. Norwalk Station
1100 Town and Country Rd.
Orange CA 92868
Att: ~~Karina Hankins~~ Nathaniel Grace Jr.
Generator's Phone: 714 560-4887

Generator's Site Address (if different than mailing address)
SFPP, L.P. Norwalk Station
15306 Norwalk Blvd.
Norwalk CA 90651

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, Flammable liquids, n.o.s. (Gasoline) 3, PGII	001	TT	1500	G	D001 D018 134
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1) Gasoline ERG#128 Well Redevelopment Water Bill to SFPP, L.P.
Attn: Steve Deflbaugh
#456237
Always wear appropriate PPE when handling waste. JOB# 01-20-00810

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: James D'Ab
Signature:
Month Day Year: 7 21 20

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: Jorge A Deleon
Signature:
Month Day Year: 07 21 2020

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)