

SFPP, L.P.

Operating Partnership

November 11, 2016

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 2016 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 2016 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 <u>11<sup>th</sup></u> day of <u>November</u> 2016. at <u>10:46 a.m.</u>

Atyche (

(signature)

Stephen T. Defibaugh (printed name)

Remediation Project Manager (title)



**CH2M** 6 Hutton Centre Drive Suite 700 Santa Ana, CA 92707 O +1 714 429 2000 F +1 714 429 2050 www.ch2m.com

Mr. Stephen Defibaugh Kinder Morgan Energy Partners, L.P. 1100 Town and Country Road Orange, California 92868

November 15, 2016

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

Dear Mr. Defibaugh,

This report has been prepared by CH2M HILL Engineers, Inc. (CH2M), on behalf of SFPP, L.P. (SFPP), an operating partnership of Kinder Morgan Energy Partners, L.P. (Kinder Morgan), to summarize National Pollutant Discharge Elimination System (NPDES) monitoring related to the discharge of treated groundwater from SFPP's product recovery and groundwater extraction (GWE) system. This system is installed at the SFPP Norwalk Pump Station located within the Defense Fuel Support Point Norwalk, at 15306 Norwalk Boulevard, Norwalk, California (the site; Figure 1).

SFPP performed certain operations, maintenance, and monitoring tasks on the product recovery and GWE systems. SFPP retained CH2M to prepare this report based on the NPDES monitoring performed by SFPP. This report describes NPDES monitoring activities during the period of July 1 to September 30, 2016.

# **Remediation Systems**

SFPP operates remediation systems consisting of soil vapor extraction (SVE), total fluids extraction (TFE; extraction of free product and/or groundwater using a top-loading pump), GWE (extraction of groundwater using a bottom-loading pump), and treatment of extracted soil vapors and groundwater to address the south-central and southeastern areas of the site. Biosparging is also employed in the south-central area to enhance natural attenuation of hydrocarbon constituents.

Operation of the West Side Barrier (WSB) GWE system (WSB system) for remediation of the western offsite area was discontinued in August 2008 based on the reduced lateral extent and low concentrations of volatile organic compounds (VOCs) west of the site.

The objectives of the remediation systems 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:

- South-Central Area
  - 20 TFE wells
  - 24 onsite and 6 offsite SVE wells (most collocated with TFE wells)
  - 2 horizontal SVE wells
  - 1 horizontal biosparge well

Mr. Stephen Defibaugh Page 2 November 15, 2016

- Southeastern Area (24-inch Block Valve Area)
  - 4 TFE wells (GMW-O-15, GMW-O-18, GMW-36, and GMW-SF-9)
  - 3 SVE wells (collocated with TFE wells)
  - 1 GWE well (GMW-SF-10)

The remediation system layout is shown on Figure 2. A brief description of each system is provided below.

## SVE System

SVE is performed using a blower to remove soil vapors from the south-central and southeastern areas. The extracted vapors are conveyed to a knock-out tank that separates entrained moisture from the soil vapors. Accumulated moisture in the knock-out tank is treated by the main groundwater treatment system (GWTS) described below. The soil vapors are then treated in a regenerative thermal oxidizer (RTO) where VOCs are converted to carbon dioxide and water prior to being discharged to the atmosphere. Operation of the GWTS and SVE system is conducted in accordance with Permits to Construct (Application Nos. 569588 and 567723, respectively; ID 110835) issued by the South Coast Air Quality Management District (SCAQMD).

## Groundwater Treatment System

The main 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 an oil-water separator (OWS). Free product, if any, from the OWS is collected in a storage tank and recycled at an offsite location. Water from the OWS is treated using liquid-phase granular activated carbon (LGAC). Treated water is routed through an onsite 3,000-gallon equalization tank. Two fluidized bed bioreactors (FBBRs) installed downstream of the equalization tank treat fuel oxygenates such as tertiary butyl alcohol (TBA) and methyl tertiary butyl ether (MTBE). 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 a National Pollutant Discharge Elimination System permit (No. CA0063509; Order R4-2016-0309).

## Horizontal Biosparge System

SFPP recently completed installation of a horizontal biosparge system in the south-central area of the site. 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 below ground surface. The lateral distance of the screen interval is 600 feet, which is centered below the central portion of the south-central area hydrocarbon plume. Further details regarding the construction of the biosparge well is documented in the report titled, *Horizontal Biosparge Well and Soil Vapor Monitoring Probe Completion Report, SFPP Norwalk Pump Station, 15306 Norwalk Boulevard, Norwalk, California* (CH2M, February 8, 2015).

The compressor used to deliver ambient air to the biosparge well has a maximum design rate of approximately 500 standard cubic feet per minute (scfm). SFPP's SVE system has an interlock that ensures the biosparge system cannot operate unless the SVE system is operating. Operation of the SVE system reduces the potential for offgassing of VOCs during biosparge operations. Pilot testing of the biosparge system commenced on January 6, 2016, and is anticipated to continue for approximately 1 year in order to evaluate the feasibility of system expansion.

A summary of the GWTS operations is presented below. Operations of the SVE and biosparge systems are presented separately in quarterly remediation progress reports that are provided to the Regional Water Quality Control Board.

# Summary of Quarterly GWTS Operations

A total of 217,956 gallons of groundwater were extracted from the south-central and southeastern areas during the third quarter 2016. Wells that were in operation included GMW-9 and GMW-25 in the south-central area and GMW-O-15 and GMW-SF-9 in the southeastern area. No groundwater was extracted from the WSB area during this period. Table 1 summarizes the average daily flow rate during the reporting period. The GWTS operated throughout the quarter, with the following exceptions:

- The GWTS was turned off on June 24, 2016, to facilitate groundwater sampling activities associated with biosparge pilot testing. The system remained offline during July and August 2016 to facilitate installation of a new OWS. The system was restarted on September 7, 2016, after installation of the OWS was complete.
- The GWTS was turned off on September 27, 2016, to facilitate gauging and sampling activities for the second semiannual groundwater monitoring event. The system was restarted on October 11, 2016, and will continue to operate during the fourth quarter 2016 for hydraulic control and product recovery in the south-central and southeastern areas.

No free product accumulated in the product holding tank of the GWTS during the third quarter 2016. Hand bailing of free product (from wells not equipped for TFE) was not performed in the third quarter 2016.

# **Routine Effluent Monitoring**

Effluent water samples were collected pursuant to the Waste Discharge Requirements (WDRs) under Order No. R4-2011-0095. Samples were collected at the Order-designated monitoring point EFF-001 (Remediation System Effluent). Samples were transported to Asset Laboratories (formerly Advanced Technology Laboratories) in Las Vegas, Nevada, for analysis. Asset Laboratories is certified by the National Environmental Laboratory Accreditation Program and the California Department of Public Health Environmental Laboratory Accreditation Program. The samples were analyzed in accordance with current U.S. Environmental Protection Agency guidelines or as specified in the WDRs for the site. Analytical results for the monthly and quarterly effluent monitoring are summarized in Table 2. Laboratory analytical reports and chain-of-custody documents are included in Appendix A.

# Summary of Compliance Results

As shown in Tables 1 and 2, the results of the monthly and quarterly effluent monitoring indicate that all discharge limitations were met during the reporting period.

# Waste Hauling

No waste was generated or removed from the site during the third quarter 2016.

Mr. Stephen Defibaugh Page 4 November 15, 2016

Should you require any further information, please contact me at (714) 435-6255.

Regards, CH2M HILL Engineers, Inc.

V Conter

Vidal Cortes Project Engineer

Attachments:

Table 1 – Effluent Flow Rate Measurements, Third Quarter 2016 Table 2 – NPDES Effluent Monitoring, Third Quarter 2016 Figure 1 – Site Location Map Figure 2 – Remediation System Layout Appendix A – Laboratory Analytical Reports and Chain-of-Custody Documents

Tables

	Average Flow Rate (gpd)
	(Maximum Daily Discharge
Date	Limit = 150,000 gpd <sup>a</sup> )
07/01/16	0
07/02/16	0
07/03/16	0
07/04/16	0
07/05/16	0
07/06/16	0
07/07/16	0
07/08/16	0
07/09/16	0
07/10/16	0
07/11/16	0
07/12/16	0
07/13/16	0
07/14/16	0
07/15/16	0
07/16/16	0
07/17/16	0
07/18/16	0
07/19/16	0
07/20/16	0
07/21/16	0
07/22/16	0
07/23/16	0
07/24/16	0
07/25/16	0
07/26/16	0
0//2//16	0
07/28/16	0
07/29/16	0
07/30/16	0
07/31/16	0
08/01/16	0
08/02/16	0
08/03/10	0
08/04/10	0
08/05/16	0
08/07/16	Ũ
08/08/16	Ŭ
08/09/16	Ŭ
08/10/16	ů
08/11/16	ů
08/12/16	ů 0
08/13/16	ů 0
08/14/16	0
08/15/16	0
08/16/16	0
08/17/16	0
08/18/16	0
08/19/16	0
08/20/16	0
08/21/16	0
08/22/16	0
08/23/16	0
08/24/16	0
08/25/16	0
08/26/16	0
08/27/16	0

#### Table 1. Effluent Flow Rate Measurements, Third Quarter 2016

SFPP Norwalk Pump Station, Norwalk, California

	Average Flow Rate (gpd)
	(Maximum Daily Discharge
Date	Limit = 150,000 gpd <sup>a</sup> )
08/28/16	0
08/29/16	0
08/30/16	0
08/31/16	0
09/01/16	0
09/02/16	0
09/03/16	0
09/04/16	0
09/05/16	0
09/06/16	0
09/07/16	1,452
09/08/16	7,500
09/09/16	9,398
09/10/16	8,751
09/11/16	8,572
09/12/16	6,461
09/13/16	7,884
09/14/16	15,252
09/15/16	13,971
09/16/16	13,640
09/17/16	12,723
09/18/16	12,156
09/19/16	12,387
09/20/16	10,771
09/21/16	12,609
09/22/16	11,929
09/23/16	11,324
09/24/16	11,093
09/25/16	11,405
09/26/16	10,943
09/27/16	7,735
09/28/16	0
09/29/16	0
09/30/16	0

#### Table 1. Effluent Flow Rate Measurements, Third Quarter 2016

SFPP Norwalk Pump Station, Norwalk, California

Notes:

<sup>a</sup> California Regional Water Quality Control Board Waste Discharge Requirements gpd = gallons per day

#### Table 2. NPDES Effluent Monitoring, Third Quarter 2016

SFPP Norwalk Pump Station, Norwalk, California

									Dischar	ge Limits <sup>b</sup>
	Sampling	Analytical							Monthly	Daily
Analyte	Frequency	Method	Units	MDL	RL	ML <sup>a</sup>	9/20/2016	9/22/2016	Average	Maximum
Temperature	Monthly		°F			NE		85.0		86
Oil and Grease	Monthly	EPA 1664A	mg/L	0.76	5	NE	1.5 J		10	15
TPH as Gasoline (C4-C12)	Monthly	EPA 8015B	μg/L	16	50	NE	<16			
TPH as Diesel (C13-C22)	Monthly	EPA 8015B	μg/L	16	26	NE	<16			
TPH as Oil (C23+)	Monthly	EPA 8015B	μg/L	14	26	NE	18 J			
Total TPH	Monthly	EPA 8015B	μg/L	16	50	NE	18 J		NE	100
Settleable Solids	Monthly	SM 2540F	mL/L/hr	0.091	0.091	NE	<0.10		0.1	0.3
Total Suspended Solids	Monthly	SM 2540D	mg/L	10	10	NE	<10		50	75
Phenol	Monthly	EPA 8270C	μg/L	0.33	2	1	<0.33		300	NE
Benzene	Monthly	EPA 8260B	μg/L	0.036	1.0	2.0	<0.036		1	NE
1,1-Dichloroethane	Monthly	EPA 8260B	μg/L	0.022	0.50	1.0	<0.022		5	NE
1,2-Dichloroethane	Monthly	EPA 8260B	μg/L	0.064	0.50	2.0	<0.064		0.5	NE
Ethylbenzene	Monthly	EPA 8260B	μg/L	0.036	1.0	2.0	<0.036		10	NE
Toluene	Monthly	EPA 8260B	μg/L	0.042	2.0	2.0	<0.042		10	NE
Methyl tertiary butyl ether	Monthly	EPA 8260B	μg/L	0.062	1.0	NE	<0.062		NE	5.0
Tertiary butyl alcohol	Monthly	EPA 8260B	μg/L	0.30	5.0	NE	<0.30		NE	12
Total Xylenes	Monthly	EPA 8260B	μg/L	1.5	2.0	NE	<1.5		10	NE
Copper (total recoverable) (dry weather)	Monthly	EPA 200.8	μg/L	0.26	0.50	0.5	<0.26		16	33
Copper (total recoverable) (wet weather)	Monthly	EPA 200.8	μg/L	0.26	0.50	0.5	<0.26		13	27
Lead (total recoverable) (dry weather)	Monthly	EPA 200.8	μg/L	0.053	0.50	0.5	< 0.053		8.2	15
Lead (total recoverable) (wet weather)	Monthly	EPA 200.8	μg/L	0.053	0.50	0.5	< 0.053		34	106
Mercury (total recoverable)	Monthly	EPA 245.1	μg/L	0.018	0.050	0.2	<0.018		0.051	0.14
Selenium (total recoverable)	Monthly	EPA 200.8	μg/L	0.070	0.50	2.0	0.11 J		3.4	9.2
Thallium (total recoverable)	Monthly	EPA 200.8	μg/L	0.034	0.50	1.0	0.081 J		6.3	13
Zinc (total recoverable) (wet weather) <sup>d</sup>	Monthly	EPA 200.8	μg/L	0.039	10	1.0	1.3 J		79	158
Chromium VI	Monthly	EPA 7199	μg/L	0.066	0.20	0.5	<0.066		8.1	16
рН	Quarterly		s.u.			NE		6.6		6.5/8.5
Ammonia Nitrogen (as N)	Quarterly	SM 4500 NH3C	mg/L	0.030	0.13	NE	<0.060		NE	NE
Di-isopropyl Ether	Quarterly	EPA 8260B	μg/L	0.017	1.0	NE	<0.017		NE	NE
Methylene Blue Active Substances	Quarterly	EPA 425.1	mg/L	0.015	0.10	NE	<0.015		NE	NE
Tert-amyl-methyl Ether	Quarterly	EPA 8260B	μg/L	0.039	1.0	NE	< 0.039		NE	NE
Turbidity	Quarterly	SM 2130B	NTU	0.10	0.10	NE	0.43		50	75
Methyl ethyl ketone	Quarterly	EPA 8260B	μg/L	0.48	10	NE	<0.48		50	NE
Other Priority Pollutants	Quarterly <sup>e</sup>								NE	NE

Notes:

<sup>a</sup> 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.

<sup>b</sup> California Regional Water Quality Control Board Waste Discharge Requirements (WDRs).

<sup>c</sup> The highest MDL and RL during this reporting period are shown.

<sup>d</sup> There are no dry weather limitations for zinc.

<sup>e</sup> Effluent monitoring will occur quarterly for the first 2 years after the Order is adopted. After the first 2 years, effluent will be monitored once per year.

= not measured or not analyzed
< = not detected above the MDL

° F = degrees Fahrenheit

µg/L = micrograms per liter

J = detected at a concentration below the RL and above the MDL. Reported value is estimated. MDL = laboratory method detection limit mg/L = milligrams per liter ML = minimum level. See note a. mL/L/hr = milliliters per liter per hour NE = not established

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.

EN1014151027SCO figure1.pdf 10/15





SCO662333.CR.03 figure2\_rev1.ai 4/15

# Legend ◆ Existing Groundwater Monitoring Well ↓ Existing Remediation Well Horizontal Biosparge Well (dashed line depicts approximate lateral extent of well screen) KMEP Remediation Piping Layout (above ground and below ground) Horizontal Vapor Extraction Well Piping

Imagery Source: Google Earth April 17, 2013.



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



Appendix A Laboratory Analytical Reports and Chain-of-Custody Documents September 27, 2016

Dan Jablonski
CH2MHill
1000 Wilshire Blvd.
Los Angeles, CA 90017
TEL:
FAX:

Workorder No.: N020998

RE: SFPP - Norwalk Site

Attention: Dan Jablonski

Enclosed are the results for sample(s) received on September 20, 2016 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,

Manay libucano Tor

Puri Romualdo Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories - Las Vegas.



"Serving Clients with Passion and Professionalism"

 CALIFORNIA
 P:562.219.7435
 F:562.219.7436

 11110
 Artesia
 Blvd.,
 Ste B,
 Cerritos,
 CA 90703

 ELAP
 Cert
 2921
 EPA ID
 CA01638

NEVADA P:702.307.2659 F:702.307.2691 3151 W. Post Rd., Las Vegas, NV 89118 ELAP Cert 2676 | NV Cert NV00922 ORELAP/NELAP Cert 4046

CLIENT:CH2MHillProject:SFPP - Norwalk SiteLab Order:N020998

## CASE NARRATIVE

#### SAMPLE RECEIVING/GENERAL COMMENTS:

Samples were received intact with proper chain of custody documentation.

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

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

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.

Subcontracted Analyses:

Ammonia and MBAS were subcontracted to BC Labs- Bakersfield,CA.

Analytical Comments for EPA 200.8:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for some analytes in QC samples N020998-001H-MS and N020998-001H-MSD possibly due to matrix interference. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 8260B:

RPD for Laboratory Control Sample (LCS)/Laboratory Control Sample (LCSD) is outside criteria for Tert-Butanol. Analyte recoveries on both met acceptance criteria.



CALIFORNIA | P:562.219.7435 F:562.219.7436 11110 Artesia Blvd., Ste B, Cerritos, CA 90703 ELAP Cert 2921 EPA ID CA01638

CLIENT:CH2MHillProject:SFPP - Norwalk SiteLab Order:N020998

#### **Contract No:**

## Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	<b>Collection Date</b>	Date Received	Date Reported
N020998-001A	EFF-09-20	Wastewater	9/20/2016 12:00:00 PM	9/20/2016	9/27/2016
N020998-001B	EFF-09-20	Wastewater	9/20/2016 12:00:00 PM	9/20/2016	9/27/2016
N020998-001C	EFF-09-20	Wastewater	9/20/2016 12:00:00 PM	9/20/2016	9/27/2016
N020998-001D	EFF-09-20	Wastewater	9/20/2016 12:00:00 PM	9/20/2016	9/27/2016
N020998-001E	EFF-09-20	Wastewater	9/20/2016 12:00:00 PM	9/20/2016	9/27/2016
N020998-001F	EFF-09-20	Wastewater	9/20/2016 12:00:00 PM	9/20/2016	9/27/2016
N020998-001G	EFF-09-20	Wastewater	9/20/2016 12:00:00 PM	9/20/2016	9/27/2016
N020998-001H	EFF-09-20	Wastewater	9/20/2016 12:00:00 PM	9/20/2016	9/27/2016
N020998-001I	EFF-09-20	Wastewater	9/20/2016 12:00:00 PM	9/20/2016	9/27/2016
N020998-001J	EFF-09-20	Wastewater	9/20/2016 12:00:00 PM	9/20/2016	9/27/2016
N020998-001K	EFF-09-20	Wastewater	9/20/2016 12:00:00 PM	9/20/2016	9/27/2016
N020998-001L	EFF-09-20	Wastewater	9/20/2016 12:00:00 PM	9/20/2016	9/27/2016



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## **ANALYTICAL RESULTS**

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Print Date: 27-Sep-16

Lab Ordani				C	lient Samp Callanting	ple ID: E	FF-09-20	0.00 <b>DM</b>
Lab Order: Project:	SEPP - Norwall	Site				Date: 9/	20/2010 12:00	D:00 PM
I ob ID.	N020008 001	x Site			IV	latrix: w	ASIEWAIE	K
Analyses	14020998-001	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL NON-F	ILTERABLE RESI	DUE		_	-			
	-	-		SN	12540D			
RunID: CA016	38-WC01_160921A	QC Batch: 5	9718		Prep	Date:	9/21/2016	Analyst: RB
Suspended So Filterable)	olids (Residue, Non-	ND	10	10		mg/L	1	9/21/2016
SETTLEABLE	MATTER			SM	12540F			
RunID: CA016	38-WC01 160921B	OC Batch: 5	9719	0.1	Pren	Date <sup>.</sup>	9/21/2016	Analyst: <b>BB</b>
Settleable Mat	ter	ND	0.10	0.10	11001	ml/l	1	9/21/2016
	RACTABLE MATE	RIAI (HFM)						
				EPA 1664	_HEM RE	EV B		
RunID: WETC	HEM_160926F	QC Batch: 5	9766		Prep	Date:	9/26/2016	Analyst: LR
Oil & Grease		1.5	0.70	4.3	J	mg/L	1	9/26/2016 01:07 PM
TURBIDITY								
				SM	2130B			
RunID: WETC	HEM_160921B	QC Batch: R	110629		Prep	Date:		Analyst: LR
Turbidity		0.43	0.10	0.10		NTU	1	9/21/2016 09:15 AM
SEMIVOLATIL	E ORGANIC COM	POUNDS BY GC	/MS					
		EPA 3510C		EPA	A 8270C			
RunID: MS9_1	60926A	QC Batch: 5	9763		Prep	Date:	9/26/2016	Analyst: MDM
Phenol		ND	0.33	2.0		µg/L	1	9/26/2016 03:49 PM
Surr: 1,2-Di	chlorobenzene-d4	62.0	0	16-120		%REC	1	9/26/2016 03:49 PM
Surr: 2-Fluc	probiphenyl	61.0	0	25-120		%REC	1	9/26/2016 03:49 PM
Surr: 4-Ter	onenyl-d14	93.0	0	46-132		%REC	1	9/26/2016 03:49 PM
			0	15-120		%REC	1	9/26/2016 03:49 PM
VOLATILE OR	GANIC COMPOU	NDS BT GC/NIS		EPA	A 8260B			
RunID: CA016	38-MS08_160920A	QC Batch: C	A16VW008		Prep	Date:		Analyst: <b>RB</b>
1,1-Dichloroet	hane	ND	0.022	0.50		ug/L	1	9/20/2016 09:45 PM
1,2-Dichloroet	hane	ND	0.064	0.50		ug/L	1	9/20/2016 09:45 PM
2-Butanone		ND	0.48	10		ug/L	1	9/20/2016 09:45 PM
Benzene		ND	0.036	1.0		ug/L	1	9/20/2016 09:45 PM
Di-isopropyl et	her	ND	0.017	1.0		ug/L	1	9/20/2016 09:45 PM
Ethylbenzene		ND	0.036	1.0		ug/L	1	9/20/2016 09:45 PM
m,p-Xylene		0.070	0.024	1.0	J	ug/L	1	9/20/2016 09:45 PM
Qualifiers: B	Analyte detected in the	he associated Method	Blank	Е	Value abo	ve quantitat	ion range	
Н	Holding times for pre	eparation or analysis	exceeded	J	Analyte de	etected below	w quantitation lin	nits
ND	Not Detected at the F	Reporting Limit		S	Spike/Surr	ogate outsic	le of limits due to	matrix interference
	Results are wet unles	s otherwise specified		DO	Surrogate	Diluted Out		
	ACCETIADODA	TODIES	CALIF	ORNIA P:562.2	19.7435 F:5	562.219.74	36 <u>NEVADA</u>	P:702.307.2659 F:702.3
	ASSET LABORA	NWL TECHNOLOGIES	11110	AI LESIA BIVO., S FI AP (	ые в, Cerrit Cert 2921	.us, ca 907	US SISTW FLAP	Cert 2676   NV Cert NV0
					and the second data is		And Address of Address	

## **ANALYTICAL RESULTS**

Print Date: 27-Sep-16

Collection Date: 9/20/2016 12:00:00 PM         SFPP - Norwalk Site       Matrix: WASTEWATER         N020998-001       Matrix: WASTEWATER         Collection Date: 9/20/2016 12:00:00 PM         Result MDL       Qual Units       DF       Date Analyzed         Collection Date: 9/20/2016 12:00:00 PM         Collection Date: WASTEWATER         N020998-001         Collection Date: 9/20/2016 09:45 PM         Collection Date: 9/20/2016 09:45 PM         ND 0.062 1.0 ug/L 1 9/20/2016 09:45 PM         ND 0.042 1.0 ug/L 1 9/20/2016 09:45 PM         ND 0.042 1.0 ug/L 1 9/20/2016 09:45 PM         ND 0.039 1.0 ug/L 1 9/20/2016 09:45 PM         ND 0.042 2.0 ug/L 1 9/20/2016 09:45 PM         Normofluorobenzene 99:8 0 76-119 %REC 1 9/20/2016 09:45 PM         Somofluorobenzene 99:8 0 76-119 %REC 1 9/20/2016 09:45 PM         ND 0.052 1.15 %REC 1 9/20/2016 09:45 PM         Somofluorobenzene 99:8 0 76-119 %REC 1 9/20/2016 09:45 PM         PM<
Matrix:         WASTEWATER           N020998-001         Result         MDL         PQL         Qual         Units         DF         Date Analyzed           ORGANIC COMPOUNDS BY GC/MS           EPA 8260B           ND         0.062         1.0         ug/L         1         9/20/2016 09:45 PM           ND         0.042         1.0         ug/L         1         9/20/2016 09:45 PM           ND         0.042         1.0         ug/L         1         9/20/2016 09:45 PM           ND         0.039         1.0         ug/L         1         9/20/2016 09:45 PM           ol         ND         0.30         5.0         ug/L         1         9/20/2016 09:45 PM           ol         ND         0.042         2.0         ug/L         1         9/20/2016 09:45 PM           ol         ND         0.30         5.0         ug/L         1         9/20/2016 09:45 PM           ol         ND         0.30         5.0         ug/L         1         9/20/2016 09:45 PM           ol         ND         0.30         5.0         ug/L         1         9/20/2016 09:45 PM           Stromofluorobenzene         99.8         0
N020998-001         Result         MDL         PQL         Qual         Units         DF         Date Analyzed           ORGANIC COMPOUNDS BY GC/MS         EPA 8260B           01638-MS08_160920A         QC Batch:         CA16VW008         PrepDate:         Analyst: RB           ND         0.062         1.0         ug/L         1         9/20/2016 09:45 PM           MD         0.042         1.0         ug/L         1         9/20/2016 09:45 PM           methyl ether         ND         0.039         1.0         ug/L         1         9/20/2016 09:45 PM           ol         ND         0.039         1.0         ug/L         1         9/20/2016 09:45 PM           ol         ND         0.042         2.0         ug/L         1         9/20/2016 09:45 PM           ol         ND         0.042         2.0         ug/L         1         9/20/2016 09:45 PM           otal         ND         1.5         2.0         ug/L         1         9/20/2016 09:45 PM           otal         ND         1.5         2.0         ug/L         1         9/20/2016 09:45 PM           cotal         ND         1.5         2.0         ug/L         1         9/20/2016
Result         MDL         PQL         Qual         Units         DF         Date Analyzed           ORGANIC COMPOUNDS BY GC/MS         EPA 8260B           01638-MS08_160920A         QC Batch:         CA16VW008         PrepDate:         Analyst: RB           01638-MS08_160920A         QC Batch:         CA16VW008         PrepDate:         Analyst: RB           01638-MS08_160920A         QC Batch:         CA16VW008         PrepDate:         Analyst: RB           01         0.062         1.0         ug/L         1         9/20/2016 09:45 PM           methyl ether         ND         0.039         1.0         ug/L         1         9/20/2016 09:45 PM           ol         ND         0.30         5.0         ug/L         1         9/20/2016 09:45 PM           ol         ND         0.30         5.0         ug/L         1         9/20/2016 09:45 PM           ol         ND         1.5         2.0         ug/L         1         9/20/2016 09:45 PM           otal         ND         1.5         2.0         ug/L         1         9/20/2016 09:45 PM           otal         ND         1.5         2.0         ug/L         1         9/20/2016 09:45 PM <td< th=""></td<>
ORGANIC COMPOUNDS BY GC/MS         EPA 8260B         ON GO Batch: CA16VW008       PrepDate:       Analyst: RB         ND       0.062       1.0       ug/L       1       9/20/2016 09:45 PM         ND       0.042       1.0       ug/L       1       9/20/2016 09:45 PM         ND       0.039       1.0       ug/L       1       9/20/2016 09:45 PM         ND       0.30       5.0       ug/L       1       9/20/2016 09:45 PM         ND       0.30       5.0       ug/L       1       9/20/2016 09:45 PM         ND       0.042       2.0       ug/L       1       9/20/2016 09:45 PM         ND       0.042       2.0       ug/L       1       9/20/2016 09:45 PM         Otal       ND       1.5       2.0       ug/L       1       9/20/2016 09:45 PM         Pathoroethane-d4       102       0       72-119       %REC       1       9/20/2016 09:45 PM         Bromofiluorobenzene       99.8       0       76-119       %REC       1       9/20/2016 09:45 PM         MD       0.3       85-115       %REC       1       9/20/2016
ND       0.062       1.0       ug/L       1       9/20/2016 09:45 PM         ND       0.062       1.0       ug/L       1       9/20/2016 09:45 PM         ND       0.042       1.0       ug/L       1       9/20/2016 09:45 PM         methyl ether       ND       0.039       1.0       ug/L       1       9/20/2016 09:45 PM         iol       ND       0.30       5.0       ug/L       1       9/20/2016 09:45 PM         iol       ND       0.30       5.0       ug/L       1       9/20/2016 09:45 PM         iol       ND       0.30       5.0       ug/L       1       9/20/2016 09:45 PM         iol       ND       0.422       2.0       ug/L       1       9/20/2016 09:45 PM         iotal       ND       1.5       2.0       ug/L       1       9/20/2016 09:45 PM         2-Dichloroethane-d4       102       0       72-119       %REC       1       9/20/2016 09:45 PM         Bromofluorobenzene       99.8       0       76-119       %REC       1       9/20/2016 09:45 PM         bluene-d8       103       0       81-120       %REC       1       9/20/2016 09:45 PM         ACTABLE BY G
ND       0.062       1.0       ug/L       1       9/20/2016 09:45 PM         ND       0.042       1.0       ug/L       1       9/20/2016 09:45 PM         methyl ether       ND       0.039       1.0       ug/L       1       9/20/2016 09:45 PM         ol       ND       0.30       5.0       ug/L       1       9/20/2016 09:45 PM         ND       0.30       5.0       ug/L       1       9/20/2016 09:45 PM         ND       0.30       5.0       ug/L       1       9/20/2016 09:45 PM         ND       0.042       2.0       ug/L       1       9/20/2016 09:45 PM         otal       ND       1.5       2.0       ug/L       1       9/20/2016 09:45 PM         2-Dichloroethane-d4       102       0       72-119       %REC       1       9/20/2016 09:45 PM         Bromofluorobenzene       99.8       0       76-119       %REC       1       9/20/2016 09:45 PM         bromofluoromethane       101       0       85-115       %REC       1       9/20/2016 09:45 PM         oluene-d8       103       0       81-120       %REC       1       9/20/2016 09:45 PM          EPA 3510C       <
ND       0.042       1.0       ug/L       1       9/20/2016 09:45 PM         methyl ether       ND       0.039       1.0       ug/L       1       9/20/2016 09:45 PM         ol       ND       0.30       5.0       ug/L       1       9/20/2016 09:45 PM         ol       ND       0.30       5.0       ug/L       1       9/20/2016 09:45 PM         ND       0.042       2.0       ug/L       1       9/20/2016 09:45 PM         Yotal       ND       1.5       2.0       ug/L       1       9/20/2016 09:45 PM         2-Dichloroethane-d4       102       0       72-119       %REC       1       9/20/2016 09:45 PM         Bromofluorobenzene       99.8       0       76-119       %REC       1       9/20/2016 09:45 PM         bromofluoromethane       101       0       85-115       %REC       1       9/20/2016 09:45 PM         oluene-d8       103       0       81-120       %REC       1       9/20/2016 09:45 PM         ACTABLE BY GC/FID       EPA 3510C       EPA 8015B         33 160922C       QC Batch:       59728       PrepDate:       9/22/2016       Analyst: F.I
ND       0.039       1.0       ug/L       1       9/20/2016 09:45 PM         ol       ND       0.30       5.0       ug/L       1       9/20/2016 09:45 PM         ol       ND       0.30       5.0       ug/L       1       9/20/2016 09:45 PM         ND       0.042       2.0       ug/L       1       9/20/2016 09:45 PM         fotal       ND       1.5       2.0       ug/L       1       9/20/2016 09:45 PM         2-Dichloroethane-d4       102       0       72-119       %REC       1       9/20/2016 09:45 PM         2-Dichloroethane-d4       102       0       72-119       %REC       1       9/20/2016 09:45 PM         Bromofluorobenzene       99.8       0       76-119       %REC       1       9/20/2016 09:45 PM         bromofluoromethane       101       0       85-115       %REC       1       9/20/2016 09:45 PM         bromofluoromethane       103       0       81-120       %REC       1       9/20/2016 09:45 PM         ACTABLE BY GC/FID       EPA 3510C       EPA 8015B         Si 160922C       QC Batch: 59728       PrepDate:       9/22/2016       Analyst: F.I
ND       ND       0.30       5.0       ug/L       1       9/20/2016 09:45 PM         ND       0.042       2.0       ug/L       1       9/20/2016 09:45 PM         iotal       ND       1.5       2.0       ug/L       1       9/20/2016 09:45 PM         iotal       ND       1.5       2.0       ug/L       1       9/20/2016 09:45 PM         2-Dichloroethane-d4       102       0       72-119       %REC       1       9/20/2016 09:45 PM         2-Dichloroethane-d4       102       0       72-119       %REC       1       9/20/2016 09:45 PM         Bromofluorobenzene       99.8       0       76-119       %REC       1       9/20/2016 09:45 PM         bromofluoromethane       101       0       85-115       %REC       1       9/20/2016 09:45 PM         oluene-d8       103       0       81-120       %REC       1       9/20/2016 09:45 PM         ACTABLE BY GC/FID         EPA 3510C       EPA 8015B         Si 160922C       QC Batch:       59728       PrepDate:       9/22/2016       Analyst: F.J
ND       0.042       2.0       ug/L       1       9/20/2016 09:45 PM         iotal       ND       1.5       2.0       ug/L       1       9/20/2016 09:45 PM         2-Dichloroethane-d4       102       0       72-119       %REC       1       9/20/2016 09:45 PM         Bromofluorobenzene       99.8       0       76-119       %REC       1       9/20/2016 09:45 PM         bromofluoromethane       101       0       85-115       %REC       1       9/20/2016 09:45 PM         bromofluoromethane       101       0       85-115       %REC       1       9/20/2016 09:45 PM         bromofluoromethane       103       0       81-120       %REC       1       9/20/2016 09:45 PM         ACTABLE BY GC/FID       EPA 3510C       EPA 8015B         C3 160922C       QC Batch:       59728       PrepDate:       9/22/2016       Analyst: F.J
ND       1.5       2.0       ug/L       1       9/20/2016 09:45 PM         2-Dichloroethane-d4       102       0       72-119       %REC       1       9/20/2016 09:45 PM         Bromofluorobenzene       99.8       0       76-119       %REC       1       9/20/2016 09:45 PM         bromofluoromethane       101       0       85-115       %REC       1       9/20/2016 09:45 PM         bromofluoromethane       101       0       85-115       %REC       1       9/20/2016 09:45 PM         bromofluoromethane       103       0       81-120       %REC       1       9/20/2016 09:45 PM         ACTABLE BY GC/FID       EPA 3510C       EPA 8015B         C3 160922C       QC Batch: 59728       PrepDate: 9/22/2016       Analyst: F.J
2-Dichloroethane-d4       102       0       72-119       %REC       1       9/20/2016 09:45 PM         Bromofluorobenzene       99.8       0       76-119       %REC       1       9/20/2016 09:45 PM         bromofluoromethane       101       0       85-115       %REC       1       9/20/2016 09:45 PM         bromofluoromethane       101       0       85-115       %REC       1       9/20/2016 09:45 PM         bluene-d8       103       0       81-120       %REC       1       9/20/2016 09:45 PM         ACTABLE BY GC/FID         EPA 3510C       EPA 8015B         C3 160922C       QC Batch:       59728       PrepDate:       9/22/2016       Analyst: F.I
Bromofluorobenzene       99.8       0       76-119       %REC       1       9/20/2016 09:45 PM         bromofluoromethane       101       0       85-115       %REC       1       9/20/2016 09:45 PM         bluene-d8       103       0       81-120       %REC       1       9/20/2016 09:45 PM         ACTABLE BY GC/FID       EPA 3510C       EPA 8015B         C3 160922C       QC Batch:       59728       PrepDate:       9/22/2016       Analyst: F.I
bit in the control of the control o
ACTABLE BY GC/FID EPA 3510C C3 160922C QC Batch: 59728 BC 1000-11009-45 PM BC 1 9/20/2016 09:45 PM EPA 8015B BrepDate: 9/22/2016 Analyst: F.I
ACTABLE BY GC/FID EPA 3510C EPA 8015B C3 160922C QC Batch: 59728 PrepDate: 9/22/2016 Analyst: F.I
ACTABLE BY GC/FID EPA 3510C EPA 8015B C3 160922C QC Batch: 59728 PrepDate: 9/22/2016 Analyst: F.I
C3 160922C QC Batch: 59728 PrepDate: 9/22/2016 Analyst: F.I
el (C13-C22) ND 16 26 ug/L 1 9/22/2016 11:12 PM
223-C36) 18 14 26 J ug/L 1 9/22/2016 11:12 PM
tacosane 77.6 0 26-152 %REC 1 9/22/2016 11:12 PM
Terphenyl 82.7 0 57-132 %REC 1 9/22/2016 11:12 PM
RANGE ORGANICS BY GC/FID
EPA 8015B
C4_160923AQC Batch:E16VW061PrepDate:Analyst:QBM
ND         16         50         ug/L         1         9/23/2016 11:53 AM           nlorobenzene - d5         120         0         74-138         %REC         1         9/23/2016 11:53 AM
LPA 7199
t Chromium ND 0.066 0.20 μg/L 1 9/21/2016 10:09 AM
EY COLD VAPOR TECHNIQUE EPA 245.1
BY COLD VAPOR TECHNIQUE         EPA 245.1           1_160921A         QC Batch: 59701         PrepDate: 9/21/2016         Analyst: CEI
line (C4-C12) ND 16 50 ug/L 1 hlorobenzene - d5 120 0 74-138 %REC 1 ENT CHROMIUM BY IC EPA 7199 7_160921A QC Batch: R110661 PrepDate: t Chromium ND 0.066 0.20 μg/L 1

## **ANALYTICAL RESULTS**

Print Date: 27-Sep-16

CLIENT: Lab Order:	CH2MHill N020998	<b>G</b> .,		С	lient Samj Collectior	ple ID: E	FF-09-20 /20/2016 12:00	0:00 PM
Project: Lab ID:	N020998-001	Site			Ν	latrix: W	ASTEWATE	R
Analyses		Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL ME	TALS BY COLLISION/	REACTION CELL	ICPMS					
				EP	A 200.8			
RunID: ICI	P7_160921B	QC Batch: 597	704		Prepl	Date:	9/21/2016	Analyst: CEI
Selenium		0.11	0.070	0.50	J	µg/L	1	9/21/2016 03:47 PM
TOTAL ME	TALS BY ICPMS							
				EP	A 200.8			
RunID: ICI	P7_160921B	QC Batch: 597	704		Prepl	Date:	9/21/2016	Analyst: CEI
Copper		ND	0.26	0.50		µg/L	1	9/21/2016 03:47 PM
Lead		ND	0.053	0.50		µg/L	1	9/21/2016 03:47 PM
Thallium		0.091	0.034	0.50	J	µg/L	1	9/21/2016 03:47 PM
Zinc		1.3	0.039	10	J	µg/L	1	9/21/2016 03:47 PM
TOTAL TPI	н							
				EP/	A 8015B			
RunID: GC	C3_160922C	QC Batch: R1	10692		Prepl	Date:		Analyst: FJ
Total TPH		18	16	50	J	ug/L	1	9/22/2016

**Qualifiers:** 

Analyte detected in the associated Method Blank В

- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Results are wet unless otherwise specified

ASSET LABORATORIES

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike/Surrogate outside of limits due to matrix interference

DO Surrogate Diluted Out

CALIFORNIA | P:562.219.7435 F:562.219.7436 11110 Artesia Blvd., Ste B, Cerritos, CA 90703 ELAP Cert 2921 EPA ID CA01638

NEVADA | P:702.307.2659 F:702.307.2691 3151 W. Post Rd., Las Vegas, NV 89118 ELAP Cert 2676 | NV Cert NV00922 ORELAP/NELAP Cert 4046

"Serving Clients with Passion and Professionalism"

#### **CLIENT:** CH2MHill

Work Order: N020998

SFPP - Norwalk Site **Project:** 

## ANALYTICAL QC SUMMARY REPORT

#### TestCode: 160.2\_2540D\_W

Sample ID: MB-59718	SampType: MBLK	TestCode: 160.2_2540D_ Units: mg/L	Prep Date: 9/21/2016	RunNo: 110637
Client ID: PBW	Batch ID: 59718	TestNo: SM2540D	Analysis Date: 9/21/2016	SeqNo: 2430443
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Suspended Solids (Residue, I	Non-Filter ND	10		
Sample ID: LCS-59718	SampType: LCS	TestCode: 160.2_2540D_ Units: mg/L	Prep Date: 9/21/2016	RunNo: <b>110637</b>
Client ID: LCSW	Batch ID: 59718	TestNo: SM2540D	Analysis Date: 9/21/2016	SeqNo: 2430447
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Suspended Solids (Residue, I	Non-Filter 1009.000	10 1000 0	101 80 120	
Sample ID: N021020-001ADU	JP SampType: DUP	TestCode: 160.2_2540D_ Units: mg/L	Prep Date: 9/21/2016	RunNo: <b>110637</b>
Client ID: ZZZZZZ	Batch ID: 59718	TestNo: <b>SM2540D</b>	Analysis Date: 9/21/2016	SeqNo: 2430450
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Suspended Solids (Residue, I	Non-Filter ND	10	0	0 5

Qualifiers:

- B Analyte detected in the associated Method Blank
- J Analyte detected below quantitation limits
- S Spike/Surrogate outside of limits due to matrix interference DO Surrogate Diluted Out
  - ASSET LABORATORIES
- CALIFORNIA | P:562.219.7435 F:562.219.7436 11110 Artesia Blvd., Ste B, Cerritos, CA 90703 ELAP Cert 2921 EPA ID CA01638
- E Value above quantitation range ND Not Detected at the Reporting Limit

NEVADA P:702.307.2659 F:702.307.2691 3151 W. Post Rd., Las Vegas, NV 89118 ELAP Cert 2676 | NV Cert NV00922 ORELAP/NELAP Cert 4046

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits Calculations are based on raw values

"Serving Clients with Passion and Professionalism"

Work Order: N020998

**Project:** SFPP - Norwalk Site

#### ANALYTICAL QC SUMMARY REPORT

TestCode: 160.5\_2540F\_W

Sample ID: <b>MB-59719</b> Client ID: <b>PBW</b>	SampType: MBLK Batch ID: 59719	TestCode: <b>160.5_2540F</b> Units: <b>mI/L</b> TestNo: <b>SM2540F</b>	Prep Date: 9/21/2016 Analysis Date: 9/21/2016	RunNo: <b>110638</b> SeaNo: <b>2430455</b>
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
- J Analyte detected below quantitation limits
- S Spike/Surrogate outside of limits due to matrix interference DO Surrogate Diluted Out



CALIFORNIA | P:562.219.7435 F:562.219.7436 11110 Artesia Blvd., Ste B, Cerritos, CA 90703 ELAP Cert 2921 EPA ID CA01638

E Value above quantitation range

ND Not Detected at the Reporting Limit

NEVADA P:702.307.2659 F:702.307.2691 3151 W. Post Rd., Las Vegas, NV 89118 ELAP Cert 2676 | NV Cert NV00922 ORELAP/NELAP Cert 4046

- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits Calculations are based on raw values

Work Order: N020998

**Project:** SFPP - Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

#### TestCode: 1664\_HEM\_W

Sample ID: MB-59766	SampType: MBLK	TestCode: 1664_HEM_W Units: mg/L	Prep Date: 9/26/2016	RunNo: 110756
Client ID: PBW	Batch ID: 59766	TestNo: EPA 1664 _H	Analysis Date: 9/26/2016	SeqNo: 2433438
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-59766	SampType: LCS	TestCode: 1664_HEM_W Units: mg/L	Prep Date: 9/26/2016	RunNo: 110756
Client ID: LCSW	Batch ID: 59766	TestNo: EPA 1664 _H	Analysis Date: 9/26/2016	SeqNo: 2433439
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Oil & Grease	32.100	4.0 40.00 0	80.3 78 114	
Sample ID: N020998-001AMS	SampType: <b>MS</b>	TestCode: 1664_HEM_W Units: mg/L	Prep Date: 9/26/2016	RunNo: <b>110756</b>
Sample ID: N020998-001AMS Client ID: ZZZZZZ	SampType: <b>MS</b> Batch ID: <b>59766</b>	TestCode: 1664_HEM_W Units: mg/L TestNo: EPA 1664 _H	Prep Date: <b>9/26/2016</b> Analysis Date: <b>9/26/2016</b>	RunNo: <b>110756</b> SeqNo: <b>2433441</b>
Sample ID: N020998-001AMS Client ID: ZZZZZZ Analyte	SampType: <b>MS</b> Batch ID: <b>59766</b> Result	TestCode: <b>1664_HEM_W</b> Units: <b>mg/L</b> TestNo: <b>EPA 1664</b> _ <b>H</b> PQL SPK value SPK Ref Val	Prep Date: <b>9/26/2016</b> Analysis Date: <b>9/26/2016</b> %REC LowLimit HighLimit RPD Ref Val	RunNo: <b>110756</b> SeqNo: <b>2433441</b> %RPD RPDLimit Qual
Sample ID: N020998-001AMS Client ID: ZZZZZZ Analyte Oil & Grease	SampType: <b>MS</b> Batch ID: <b>59766</b> Result 36.413	TestCode: 1664_HEM_W Units: mg/L TestNo: EPA 1664 _H PQL SPK value SPK Ref Val 4.3 43.48 1.505	Prep Date: 9/26/2016 Analysis Date: 9/26/2016 %REC LowLimit HighLimit RPD Ref Val 80.3 78 114	RunNo: <b>110756</b> SeqNo: <b>2433441</b> %RPD RPDLimit Qual
Sample ID: N020998-001AMS Client ID: ZZZZZZ Analyte Oil & Grease Sample ID: N020998-001AMSD	SampType: <b>MS</b> Batch ID: <b>59766</b> Result 36.413 SampType: <b>MSD</b>	TestCode:         1664_HEM_W         Units:         mg/L           TestNo:         EPA         1664_H         H           PQL         SPK value         SPK Ref Val         1.505           TestCode:         1664_HEM_W         Units:         mg/L	Prep Date:         9/26/2016           Analysis Date:         9/26/2016           %REC         LowLimit         HighLimit         RPD Ref Val           80.3         78         114           Prep Date:         9/26/2016	RunNo: <b>110756</b> SeqNo: <b>2433441</b> %RPD RPDLimit Qual RunNo: <b>110756</b>
Sample ID: N020998-001AMS Client ID: ZZZZZZ Analyte Oil & Grease Sample ID: N020998-001AMSD Client ID: ZZZZZZ	SampType: MS Batch ID: 59766 Result 36.413 SampType: MSD Batch ID: 59766	TestCode:       1664_HEM_W       Units:       mg/L         TestNo:       EPA       1664_H       H         PQL       SPK value       SPK Ref Val       4.3       43.48       1.505         TestCode:       1664_HEM_W       Units:       mg/L         TestCode:       1664_HEM_W       Units:       mg/L         TestNo:       EPA       1664_H       H	Prep Date:         9/26/2016           Analysis Date:         9/26/2016           %REC         LowLimit         HighLimit         RPD Ref Val           80.3         78         114           Prep Date:         9/26/2016           Analysis Date:         9/26/2016	RunNo: <b>110756</b> SeqNo: <b>2433441</b> %RPD RPDLimit Qual RunNo: <b>110756</b> SeqNo: <b>2433442</b>
Sample ID: N020998-001AMS Client ID: ZZZZZZ Analyte Oil & Grease Sample ID: N020998-001AMSD Client ID: ZZZZZZ Analyte	SampType: MS Batch ID: 59766 Result 36.413 SampType: MSD Batch ID: 59766 Result	TestCode: 1664_HEM_W Units: mg/L         TestNo: EPA 1664 _H         PQL       SPK value       SPK Ref Val         4.3       43.48       1.505         TestCode: 1664_HEM_W Units: mg/L         TestNo: EPA 1664 _H         PQL       SPK value       SPK Ref Val	Prep Date: 9/26/2016 Analysis Date: 9/26/2016 %REC LowLimit HighLimit RPD Ref Val 80.3 78 114 Prep Date: 9/26/2016 Analysis Date: 9/26/2016 %REC LowLimit HighLimit RPD Ref Val	RunNo: 110756 SeqNo: 2433441 %RPD RPDLimit Qual RunNo: 110756 SeqNo: 2433442 %RPD RPDLimit Qual

Qualifiers:

- B Analyte detected in the associated Method Blank
- J Analyte detected below quantitation limits
- S Spike/Surrogate outside of limits due to matrix interference DO Surrogate Diluted Out
  - ASSET LABORATORIES
- CALIFORNIA | P:562.219.7435 F:562.219.7436 11110 Artesia Blvd., Ste B, Cerritos, CA 90703 ELAP Cert 2921 EPA ID CA01638
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

NEVADA P:702.307.2659 F:702.307.2691 3151 W. Post Rd., Las Vegas, NV 89118 ELAP Cert 2676 | NV Cert NV00922 ORELAP/NELAP Cert 4046

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits Calculations are based on raw values

"Serving Clients with Passion and Professionalism"

Work Order: N020998

**Project:** SFPP - Norwalk Site

### ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8\_W\_DRC

Sample ID: MB-59704	SampType: MBLK	TestCode: 200.8_W_DR Units: µg/L	Prep Date: 9/21/2016	RunNo: 110644		
Client ID: PBW	Batch ID: 59704	TestNo: EPA 200.8	Analysis Date: 9/21/2016	SeqNo: 2429911		
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual		
Selenium	ND	0.50				
Sample ID: LCS-59704	SampType: LCS	TestCode: 200.8_W_DR Units: µg/L	Prep Date: 9/21/2016	RunNo: <b>110644</b>		
Client ID: LCSW	Batch ID: 59704	TestNo: EPA 200.8	Analysis Date: 9/21/2016	SeqNo: 2429912		
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual		
Selenium	9.950	0.50 10.00 0	99.5 85 115			
Sample ID: N020998-001H-MS	SampType: <b>MS</b>	TestCode: 200.8_W_DR Units: µg/L	Prep Date: 9/21/2016	RunNo: 110644		
Sample ID: N020998-001H-MS Client ID: ZZZZZZ	SampType: <b>MS</b> Batch ID: <b>59704</b>	TestCode: 200.8_W_DR Units: µg/L TestNo: EPA 200.8	Prep Date: 9/21/2016 Analysis Date: 9/21/2016	RunNo: <b>110644</b> SeqNo: <b>2429916</b>		
Sample ID: N020998-001H-MS Client ID: ZZZZZZ Analyte	SampType: <b>MS</b> Batch ID: <b>59704</b> Result	TestCode: <b>200.8_W_DR</b> Units: <b>µg/L</b> TestNo: <b>EPA 200.8</b> PQL SPK value SPK Ref Val	Prep Date: <b>9/21/2016</b> Analysis Date: <b>9/21/2016</b> %REC LowLimit HighLimit RPD Ref Val	RunNo: <b>110644</b> SeqNo: <b>2429916</b> %RPD RPDLimit Qual		
Sample ID: <b>N020998-001H-MS</b> Client ID: <b>ZZZZZZ</b> Analyte Selenium	SampType: <b>MS</b> Batch ID: <b>59704</b> Result 7.350	TestCode: 200.8_W_DR Units: μg/L TestNo: EPA 200.8 PQL SPK value SPK Ref Val 0.50 10.00 0.1133	Prep Date: 9/21/2016 Analysis Date: 9/21/2016 %REC LowLimit HighLimit RPD Ref Val 72.4 75 125	RunNo: <b>110644</b> SeqNo: <b>2429916</b> %RPD RPDLimit Qual S		
Sample ID: N020998-001H-MS Client ID: ZZZZZZ Analyte Selenium Sample ID: N020998-001H-MSD	SampType: <b>MS</b> Batch ID: <b>59704</b> Result 7.350 SampType: <b>MSD</b>	TestCode: 200.8_W_DR Units: μg/L TestNo: EPA 200.8 PQL SPK value SPK Ref Val 0.50 10.00 0.1133 TestCode: 200.8_W_DR Units: μg/L	Prep Date: 9/21/2016 Analysis Date: 9/21/2016 %REC LowLimit HighLimit RPD Ref Val 72.4 75 125 Prep Date: 9/21/2016	RunNo: 110644 SeqNo: 2429916 %RPD RPDLimit Qual S RunNo: 110644		
Sample ID: N020998-001H-MS Client ID: ZZZZZZ Analyte Selenium Sample ID: N020998-001H-MSD Client ID: ZZZZZZ	SampType: MS Batch ID: 59704 Result 7.350 SampType: MSD Batch ID: 59704	TestCode:         200.8_W_DR         Units:         μg/L           TestNo:         EPA         200.8            PQL         SPK value         SPK Ref Val            0.50         10.00         0.1133            TestCode:         200.8_W_DR         Units:         µg/L           TestCode:         200.8_W_DR         Units:         µg/L	Prep Date:         9/21/2016           Analysis Date:         9/21/2016           %REC         LowLimit         HighLimit         RPD Ref Val           72.4         75         125           Prep Date:         9/21/2016           Analysis Date:         9/21/2016	RunNo: 110644 SeqNo: 2429916 %RPD RPDLimit Qual S RunNo: 110644 SeqNo: 2429919		
Sample ID: N020998-001H-MS Client ID: ZZZZZZ Analyte Selenium Sample ID: N020998-001H-MSD Client ID: ZZZZZZ Analyte	SampType: MS Batch ID: 59704 Result 7.350 SampType: MSD Batch ID: 59704 Result	TestCode:         200.8_W_DR         Units:         μg/L           TestNo:         EPA         200.8         Value         SPK         Ref Val           0.50         10.00         0.1133         O.1133         TestCode:         200.8_W_DR         Units:         µg/L           TestCode:         200.8_W_DR         Units:         µg/L         TestNo:         EPA         200.8         PQL         SPK value         SPK Ref Val         SPK Value         SPK Value	Prep Date: 9/21/2016 Analysis Date: 9/21/2016 %REC LowLimit HighLimit RPD Ref Val 72.4 75 125 Prep Date: 9/21/2016 Analysis Date: 9/21/2016 %REC LowLimit HighLimit RPD Ref Val	RunNo:         110644           SeqNo:         2429916           %RPD         RPDLimit         Qual           S         S           RunNo:         110644           SeqNo:         2429919           %RPD         RPDLimit         Qual		

Qualifiers:

- B Analyte detected in the associated Method Blank
- J Analyte detected below quantitation limits
- S Spike/Surrogate outside of limits due to matrix interference DO Surrogate Diluted Out
  - ASSET LABORATORIES
- CALIFORNIA | P:562.219.7435 F:562.219.7436 11110 Artesia Blvd., Ste B, Cerritos, CA 90703 ELAP Cert 2921 EPA ID CA01638

E Value above quantitation range

- ND Not Detected at the Reporting Limit

NEVADA P:702.307.2659 F:702.307.2691 3151 W. Post Rd., Las Vegas, NV 89118 ELAP Cert 2676 | NV Cert NV00922 ORELAP/NELAP Cert 4046

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits Calculations are based on raw values

"Serving Clients with Passion and Professionalism"

Work Order: N020998

Project: SFPP - Norwalk Site

#### ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8\_W\_SFPP

Sample ID	: MB-59704	SampType: MBLK	TestCoo	le: 200.8_W_	SFP Units: µg/L	<b>J/L</b> Prep Date: <b>9/21/2016</b>			16	RunNo: 11		
Client ID:	PBW	Batch ID: 59704	TestN	lo: EPA 200.8	ł		Analysis Dat	te: 9/21/20	16	SeqNo: 242	29947	
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									
Thallium		ND	0.50									
Zinc		ND	10									
Sample ID	LCS-59704	SampType: LCS	TestCoo	TestCode: 200.8_W_SFP Units: µg/L			Prep Date: 9/21/2016				0644	
Client ID:	LCSW	Batch ID: 59704	TestN	TestNo: EPA 200.8			Analysis Date: 9/21/2016			SeqNo: 242	29948	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper		10.328	0.50	10.00	0	103	85	115				
Lead		10.456	0.50	10.00	0	105	85	115				
Thallium		10.099	0.50	10.00	0	101	85	115				
Zinc		106.765	10	100.0	0	107	85	115				
Sample ID	: N020998-001H-MS	SampType: <b>MS</b>	TestCoo	le: 200.8_W_	SFP Units: µg/L		Prep Dat	te: 9/21/20	16	RunNo: 11	0644	
Sample ID Client ID:	: N020998-001H-MS ZZZZZZ	SampType: <b>MS</b> Batch ID: <b>59704</b>	TestCoo TestN	de: 200.8_W_ lo: EPA 200.8	SFP Units: µg/L		Prep Dat Analysis Dat	te: 9/21/20 te: 9/21/20	916 916	RunNo: 11 SeqNo: 242	0644 29952	
Sample ID Client ID: Analyte	: N020998-001H-MS ZZZZZZ	SampType: <b>MS</b> Batch ID: <b>59704</b> Result	TestCoo TestN PQL	de: 200.8_W_ lo: EPA 200.8 SPK value	SFP Units: μg/L ; SPK Ref Val	%REC	Prep Dat Analysis Dat LowLimit	te: 9/21/20 te: 9/21/20 HighLimit	116 116 RPD Ref Val	RunNo: 110 SeqNo: 242 %RPD	0644 29952 RPDLimit	Qual
Sample ID Client ID: Analyte Copper	: N020998-001H-MS ZZZZZZ	SampType: MS Batch ID: 59704 Result 6.364	TestCoo TestN PQL 0.50	de: 200.8_W_ lo: EPA 200.8 SPK value 10.00	SFP Units: µg/L SPK Ref Val	%REC 63.6	Prep Dat Analysis Dat LowLimit 75	te: <b>9/21/20</b> te: <b>9/21/20</b> HighLimit 125	116 116 RPD Ref Val	RunNo: 110 SeqNo: 242 %RPD	0644 29952 RPDLimit	Qual S
Sample ID Client ID: Analyte Copper Lead	: N020998-001H-MS ZZZZZZ	SampType: <b>MS</b> Batch ID: <b>59704</b> Result 6.364 8.200	TestCoo TestN PQL 0.50 0.50	de: 200.8_W_i lo: EPA 200.8 SPK value 10.00 10.00	SFP Units: µg/L SPK Ref Val 0 0	%REC 63.6 82.0	Prep Dat Analysis Dat LowLimit 75 75	te: <b>9/21/20</b> te: <b>9/21/20</b> HighLimit 125 125	1 <b>6</b> 1 <b>6</b> RPD Ref Val	RunNo: 110 SeqNo: 242 %RPD	0644 29952 RPDLimit	Qual S
Sample ID Client ID: Analyte Copper Lead Thallium	: N020998-001H-MS ZZZZZZ	SampType: <b>MS</b> Batch ID: <b>59704</b> Result 6.364 8.200 8.374	TestCoo TestN PQL 0.50 0.50 0.50	de: 200.8_W_ lo: EPA 200.8 SPK value 10.00 10.00 10.00	SFP Units: μg/L SPK Ref Val 0 0 0.09120	%REC 63.6 82.0 82.8	Prep Dat Analysis Dat LowLimit 75 75 75	te: 9/21/20 te: 9/21/20 HighLimit 125 125 125	1 <b>6</b> 1 <b>6</b> RPD Ref Val	RunNo: 110 SeqNo: 242 %RPD	0644 29952 RPDLimit	Qual S
Sample ID Client ID: Analyte Copper Lead Thallium Zinc	: N020998-001H-MS ZZZZZZ	SampType: MS Batch ID: 59704 Result 6.364 8.200 8.374 72.078	TestCoc TestN PQL 0.50 0.50 0.50 10	ie: 200.8_W_i lo: EPA 200.8 SPK value 10.00 10.00 10.00 100.0	SFP Units: µg/L SPK Ref Val 0 0.09120 1.254	%REC 63.6 82.0 82.8 70.8	Prep Dat Analysis Dat LowLimit 75 75 75 75 75	te: 9/21/20 te: 9/21/20 HighLimit 125 125 125 125	1 <b>16</b> 1 <b>16</b> RPD Ref Val	RunNo: 11 SeqNo: 24 %RPD	0644 29952 RPDLimit	Qual S S
Sample ID Client ID: Analyte Copper Lead Thallium Zinc Sample ID	: N020998-001H-MS ZZZZZZ : N020998-001H-MSD	SampType: <b>MS</b> Batch ID: <b>59704</b> Result 6.364 8.200 8.374 72.078 SampType: <b>MSD</b>	TestCoo TestN PQL 0.50 0.50 0.50 10 TestCoo	de: 200.8_W_ lo: EPA 200.8 SPK value 10.00 10.00 100.0 de: 200.8_W_	SFP Units: μg/L SPK Ref Val 0 0.09120 1.254 SFP Units: μg/L	%REC 63.6 82.0 82.8 70.8	Prep Dat Analysis Dat LowLimit 75 75 75 75 75 Prep Dat	te: 9/21/20 te: 9/21/20 HighLimit 125 125 125 125 125	116 116 RPD Ref Val	RunNo: 110 SeqNo: 242 %RPD RunNo: 110	0644 29952 RPDLimit 0644	Qual S S
Sample ID Client ID: Analyte Copper Lead Thallium Zinc Sample ID Client ID:	: N020998-001H-MS ZZZZZZ : N020998-001H-MSD ZZZZZZ	SampType: <b>MS</b> Batch ID: <b>59704</b> Result 6.364 8.200 8.374 72.078 SampType: <b>MSD</b> Batch ID: <b>59704</b>	TestCoo TestN PQL 0.50 0.50 0.50 10 TestCoo TestN	de: 200.8_W_ lo: EPA 200.8 SPK value 10.00 10.00 100.0 de: 200.8_W_ lo: EPA 200.8	SFP Units: μg/L SPK Ref Val 0 0 0.09120 1.254 SFP Units: μg/L	%REC 63.6 82.0 82.8 70.8	Prep Dai Analysis Dai LowLimit 75 75 75 75 Prep Dai Analysis Dai	te: 9/21/20 te: 9/21/20 HighLimit 125 125 125 125 te: 9/21/20 te: 9/21/20	116 116 RPD Ref Val 116 116	RunNo: 110 SeqNo: 242 %RPD RunNo: 110 SeqNo: 242	0644 29952 RPDLimit 0644 29955	Qual S S
Sample ID Client ID: Analyte Copper Lead Thallium Zinc Sample ID Client ID: Analyte	: N020998-001H-MS ZZZZZZ : : N020998-001H-MSD ZZZZZZ	SampType: <b>MS</b> Batch ID: <b>59704</b> Result 6.364 8.200 8.374 72.078 SampType: <b>MSD</b> Batch ID: <b>59704</b> Result	TestCoo TestN PQL 0.50 0.50 10 TestCoo TestN PQL	de: 200.8_W_ lo: EPA 200.8 SPK value 10.00 10.00 100.0 de: 200.8_W_ lo: EPA 200.8 SPK value	SFP Units: μg/L SPK Ref Val 0 0 0.09120 1.254 SFP Units: μg/L SPK Ref Val	%REC 63.6 82.0 82.8 70.8 %REC	Prep Dat Analysis Dat LowLimit 75 75 75 Prep Dat Analysis Dat LowLimit	te: 9/21/20 te: 9/21/20 HighLimit 125 125 125 125 te: 9/21/20 te: 9/21/20 HighLimit	116 RPD Ref Val 116 116 RPD Ref Val	RunNo: 110 SeqNo: 242 %RPD RunNo: 110 SeqNo: 242 %RPD	0644 29952 RPDLimit 0644 29955 RPDLimit	Qual S S Qual
Sample ID Client ID: Analyte Copper Lead Thallium Zinc Sample ID Client ID: Analyte Copper	: N020998-001H-MS ZZZZZZ : N020998-001H-MSD ZZZZZZ	SampType: MS Batch ID: 59704 Result 6.364 8.200 8.374 72.078 SampType: MSD Batch ID: 59704 Result 6.261	TestCoo TestN PQL 0.50 0.50 0.50 10 TestCoo TestN PQL 0.50	ie: 200.8_W_ SPK value 10.00 10.00 10.00 100.0 ie: 200.8_W_ io: EPA 200.8 SPK value 10.00	SFP Units: μg/L SPK Ref Val 0 0.09120 1.254 SFP Units: μg/L SPK Ref Val 0	%REC 63.6 82.0 82.8 70.8 %REC 62.6	Prep Dat Analysis Dat LowLimit 75 75 75 75 Prep Dat Analysis Dat LowLimit 75	te: 9/21/20 te: 9/21/20 HighLimit 125 125 125 125 te: 9/21/20 HighLimit 125	116 RPD Ref Val 116 116 RPD Ref Val 6.364	RunNo: 110 SeqNo: 242 %RPD RunNo: 110 SeqNo: 242 %RPD 1.64	0644 29952 RPDLimit 0644 29955 RPDLimit 20	Qual S S Qual S

#### Qualifiers:

S

- B Analyte detected in the associated Method Blank
- J Analyte detected below quantitation limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- Spike/Surrogate outside of limits due to matrix interference DO Surrogate Diluted Out
  - urrogate Diluted Out 9.7436 <u>NEVADA</u> | P:702.307.2659 F:702.307.2691
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits
- Calculations are based on raw values

"Serving Clients with Passion and Professionalism"

ASSET LABORATORIES

CALIFORNIA P:562.219.7435 F:562.219.7436 1110 Artesia Blvd., Ste B, Cerritos, CA 90703 ELAP Cert 2921 EPA ID CA01638

Work Order: N020998

**Project:** SFPP - Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8\_W\_SFPP

Sample ID: N020998-001H-MSD	SampType: <b>MSD</b>	TestCode: 200.8_W_SFP Units: µg/L			Prep Date: 9/21/2016				RunNo: 110644		
Client ID: ZZZZZZ	Batch ID: 59704	TestN	lo: EPA 200.8	Analysis Date: 9/21/2016				SeqNo: 2429955			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Thallium	8.285	0.50	10.00	0.09120	81.9	75	125	8.374	1.07	20	
Zinc	72.149	10	100.0	1.254	70.9	75	125	72.08	0.0982	20	S

#### Qualifiers:

- B Analyte detected in the associated Method Blank
- J Analyte detected below quantitation limits
- S Spike/Surrogate outside of limits due to matrix interference DO Surrogate Diluted Out
- ASSET LABORATORIES

"Serving Clients with Passion and Professionalism"

- E Value above quantitation range
- ND Not Detected at the Reporting Limit

CALIFORNIA | P:562.219.7435 F:562.219.7436

11110 Artesia Blvd., Ste B, Cerritos, CA 90703 ELAP Cert 2921

EPA ID CA01638

NEVADA P:702.307.2659 F:702.307.2691 3151 W. Post Rd., Las Vegas, NV 89118 ELAP Cert 2676 | NV Cert NV00922 ORELAP/NELAP Cert 4046

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits Calculations are based on raw values

Work Order: N020998

**Project:** SFPP - Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

TestCode: 2130\_W

Sample ID: MB-R110629	SampType: <b>MBLK</b>	TestCode: 2130_W	Units: NTU	Prep Date:	RunNo: 110629
Client ID: PBW	Batch ID: R110629	TestNo: SM 2130B		Analysis Date: 9/21/2016	SeqNo: 2429655
Analyte	Result	PQL SPK value SPI	K Ref Val %	6REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Turbidity	ND	0.10			
Sample ID: N020998-001EDUP	SampType: <b>DUP</b>	TestCode: 2130_W	Units: NTU	Prep Date:	RunNo: 110629
Sample ID: N020998-001EDUP Client ID: ZZZZZZ	SampType: DUP Batch ID: R110629	TestCode: 2130_W TestNo: SM 2130B	Units: <b>NTU</b>	Prep Date: Analysis Date: 9/21/2016	RunNo: <b>110629</b> SeqNo: <b>2429657</b>
Sample ID: N020998-001EDUP Client ID: ZZZZZZ Analyte	SampType: <b>DUP</b> Batch ID: <b>R110629</b> Result	TestCode: <b>2130_W</b> TestNo: <b>SM 2130B</b> PQL SPK value SPF	Units: <b>NTU</b> K Ref Val %	Prep Date: Analysis Date: <b>9/21/2016</b> 6REC LowLimit HighLimit RPD Ref Val	RunNo: <b>110629</b> SeqNo: <b>2429657</b> %RPD RPDLimit Qual

Qualifiers:

- B Analyte detected in the associated Method Blank
- J Analyte detected below quantitation limits
- S Spike/Surrogate outside of limits due to matrix interference DO Surrogate Diluted Out
  - ASSET LABORATORIES

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CALIFORNIA | P:562.219.7435 F:562.219.7436 11110 Artesia Blvd., Ste B, Cerritos, CA 90703 ELAP Cert 2921

EPA ID CA01638

ND

Not Detected at the Reporting Limit

E Value above quantitation range

NEVADA P:702.307.2659 F:702.307.2691 3151 W. Post Rd., Las Vegas, NV 89118 ELAP Cert 2676 | NV Cert NV00922 ORELAP/NELAP Cert 4046

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits Calculations are based on raw values

Work Order: N020998

**Project:** SFPP - Norwalk Site

### ANALYTICAL QC SUMMARY REPORT

TestCode: 245.1\_W\_LL

Sample ID: MB-59701	SampType: MBLK	TestCode: 245.1_W_LL Units: µg/L	Prep Date: 9/21/2016	RunNo: 110632
Client ID: PBW	Batch ID: 59701	TestNo: EPA 245.1	Analysis Date: 9/21/2016	SeqNo: 2429689
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Mercury	ND	0.050		
Sample ID: LCS-59701	SampType: LCS	TestCode: 245.1_W_LL Units: µg/L	Prep Date: 9/21/2016	RunNo: 110632
Client ID: LCSW	Batch ID: 59701	TestNo: EPA 245.1	Analysis Date: 9/21/2016	SeqNo: <b>2429690</b>
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Mercury	5.137	0.050 5.000 0	103 85 115	
Sample ID: N020998-001H-MS	SampType: <b>MS</b>	TestCode: 245.1_W_LL Units: µg/L	Prep Date: 9/21/2016	RunNo: 110632
Sample ID: N020998-001H-MS Client ID: ZZZZZZ	SampType: <b>MS</b> Batch ID: <b>59701</b>	TestCode: 245.1_W_LL Units: µg/L TestNo: EPA 245.1	Prep Date: 9/21/2016 Analysis Date: 9/21/2016	RunNo: <b>110632</b> SeqNo: <b>2429691</b>
Sample ID: N020998-001H-MS Client ID: ZZZZZZ Analyte	SampType: <b>MS</b> Batch ID: <b>59701</b> Result	TestCode: <b>245.1_W_LL</b> Units: µg/L TestNo: EPA 245.1 PQL SPK value SPK Ref Val	Prep Date: <b>9/21/2016</b> Analysis Date: <b>9/21/2016</b> %REC LowLimit HighLimit RPD Ref Val	RunNo: <b>110632</b> SeqNo: <b>2429691</b> %RPD RPDLimit Qual
Sample ID: N020998-001H-MS Client ID: ZZZZZZ Analyte Mercury	SampType: <b>MS</b> Batch ID: <b>59701</b> Result 5.313	TestCode: <b>245.1_W_LL</b> Units: μg/L TestNo: <b>EPA 245.1</b> PQL SPK value SPK Ref Val 0.050 5.000 0	Prep Date: 9/21/2016 Analysis Date: 9/21/2016 %REC LowLimit HighLimit RPD Ref Val 106 75 125	RunNo: <b>110632</b> SeqNo: <b>2429691</b> %RPD RPDLimit Qual
Sample ID: N020998-001H-MS Client ID: ZZZZZZ Analyte Mercury Sample ID: N020998-001H-MSD	SampType: <b>MS</b> Batch ID: <b>59701</b> Result 5.313 SampType: <b>MSD</b>	TestCode:         245.1_W_LL         Units:         μg/L           TestNo:         EPA         245.1           PQL         SPK value         SPK Ref Val           0.050         5.000         0           TestCode:         245.1_W_LL         Units:         μg/L	Prep Date:         9/21/2016           Analysis Date:         9/21/2016           %REC         LowLimit         HighLimit         RPD Ref Val           106         75         125           Prep Date:         9/21/2016	RunNo: <b>110632</b> SeqNo: <b>2429691</b> %RPD RPDLimit Qual RunNo: <b>110632</b>
Sample ID: N020998-001H-MS Client ID: ZZZZZZ Analyte Mercury Sample ID: N020998-001H-MSD Client ID: ZZZZZZ	SampType: MS Batch ID: 59701 Result 5.313 SampType: MSD Batch ID: 59701	TestCode:         245.1_W_LL         Units:         μg/L           TestNo:         EPA 245.1         PQL         SPK value         SPK Ref Val           0.050         5.000         0         0           TestCode:         245.1_W_LL         Units:         μg/L           TestCode:         245.1_W_LL         Units:         μg/L           TestNo:         EPA 245.1	Prep Date:         9/21/2016           Analysis Date:         9/21/2016           %REC         LowLimit         HighLimit         RPD Ref Val           106         75         125           Prep Date:         9/21/2016           Analysis Date:         9/21/2016	RunNo: <b>110632</b> SeqNo: <b>2429691</b> %RPD RPDLimit Qual RunNo: <b>110632</b> SeqNo: <b>2429692</b>
Sample ID: N020998-001H-MS Client ID: ZZZZZZ Analyte Mercury Sample ID: N020998-001H-MSD Client ID: ZZZZZZ Analyte	SampType: MS Batch ID: 59701 Result 5.313 SampType: MSD Batch ID: 59701 Result	TestCode:         245.1_W_LL         Units:         µg/L           TestNo:         EPA 245.1         PQL         SPK value         SPK Ref Val           0.050         5.000         0         0           TestCode:         245.1_W_LL         Units:         µg/L           TestCode:         245.1_W_LL         Units:         µg/L           TestNo:         EPA 245.1         PQL         SPK value         SPK Ref Val	Prep Date: 9/21/2016 Analysis Date: 9/21/2016 %REC LowLimit HighLimit RPD Ref Val 106 75 125 Prep Date: 9/21/2016 Analysis Date: 9/21/2016 %REC LowLimit HighLimit RPD Ref Val	RunNo: 110632 SeqNo: 2429691 %RPD RPDLimit Qual RunNo: 110632 SeqNo: 2429692 %RPD RPDLimit Qual

Qualifiers:

- B Analyte detected in the associated Method Blank
- J Analyte detected below quantitation limits
- S Spike/Surrogate outside of limits due to matrix interference DO Surrogate Diluted Out
  - ASSET LABORATORIES
- CALIFORNIA | P:562.219.7435 F:562.219.7436 11110 Artesia Blvd., Ste B, Cerritos, CA 90703 ELAP Cert 2921 EPA ID CA01638
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

NEVADA P:702.307.2659 F:702.307.2691 3151 W. Post Rd., Las Vegas, NV 89118 ELAP Cert 2676 | NV Cert NV00922 ORELAP/NELAP Cert 4046

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits Calculations are based on raw values

"Serving Clients with Passion and Professionalism"

Work Order:

**Project:** SFPP - Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

TestCode: 7199\_WPGE

Sample ID: MB-R110661	SampType: MBLK	TestCode: 7199_WPGE Units: µg/L	Prep Date:	RunNo: 110661
Client ID: PBW	Batch ID: R110661	TestNo: EPA 7199	Analysis Date: 9/21/2016	SeqNo: 2430502
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Hexavalent Chromium	ND	0.20		
Sample ID: LCS-R110661	SampType: LCS	TestCode: 7199_WPGE Units: µg/L	Prep Date:	RunNo: 110661
Client ID: LCSW	Batch ID: R110661	TestNo: <b>EPA 7199</b>	Analysis Date: 9/21/2016	SeqNo: 2430503
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Hexavalent Chromium	5.031	0.20 5.000 0	101 90 110	
Sample ID: N020998-001IDUP	SampType: <b>DUP</b>	TestCode: 7199_WPGE Units: µg/L	Prep Date:	RunNo: 110661
Client ID: ZZZZZZ	Batch ID: R110661	TestNo: <b>EPA 7199</b>	Analysis Date: 9/21/2016	SeqNo: 2430505
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Hexavalent Chromium	ND	0.20	0	0 20
Sample ID: N020998-001IMS	SampType: <b>MS</b>	TestCode: 7199_WPGE Units: µg/L	Prep Date:	RunNo: 110661
Client ID: ZZZZZZ	Batch ID: R110661	TestNo: <b>EPA 7199</b>	Analysis Date: 9/21/2016	SeqNo: 2430506
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Hexavalent Chromium	1.014	0.20 1.000 0	101 85 115	
Sample ID: N020998-001IMSD	SampType: <b>MSD</b>	TestCode: 7199_WPGE Units: µg/L	Prep Date:	RunNo: 110661
Client ID: ZZZZZZ	Batch ID: R110661	TestNo: EPA 7199	Analysis Date: 9/21/2016	SeqNo: 2430507
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Hexavalent Chromium	1.005	0.20 1.000 0	100 85 115 1.014	0.921 20

Qualifiers:

J

- B Analyte detected in the associated Method Blank
  - Analyte detected below quantitation limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference DO Surrogate Diluted Out
  - ASSET LABORATORIES
- CALIFORNIA | P:562.219.7435 F:562.219.7436 11110 Artesia Blvd., Ste B, Cerritos, CA 90703 ELAP Cert 2921 EPA ID CA01638

H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

Calculations are based on raw values

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N020998

Work Order: N020998

Project: SFPP - Norwalk Site

### ANALYTICAL QC SUMMARY REPORT

TestCode: 8015\_W\_FP\_SFPP

Sample ID: MB-59728	SampType: MBLK	TestCo	TestCode: 8015_W_FP_ Units: ug/L			Prep Date: 9/22/2016				RunNo: 110692		
Client ID: PBW	Batch ID: 59728	TestN	estNo: EPA 8015B EPA 3510C			Analysis Date: 9/22/2016			SeqNo: 2431487			
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)	24.608	25									J	
Surr: Octacosane	61.997		80.00		77.5	26	152					
Surr: p-Terphenyl	63.450		80.00		79.3	57	132					

Qualifiers:

- B Analyte detected in the associated Method Blank
- J Analyte detected below quantitation limits
- S Spike/Surrogate outside of limits due to matrix interference DO Surrogate Diluted Out
- ASSET LABORATORIES

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ND

Not Detected at the Reporting Limit Surrogate Diluted Out

E Value above quantitation range

<u>NEVADA</u> | P:702.307.2659 F:702.307.2691 3151 W. Post Rd., Las Vegas, NV 89118 ELAP Cert 2676 | NV Cert NV00922 ORELAP/NELAP Cert 4046 H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits Calculations are based on raw values

Work Order: N020998

**Project:** SFPP - Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

#### TestCode: 8015GAS\_WSFPP

Sample ID: E160923LCS	SampType: LCS	TestCode: 8015GAS	_WS Units: ug/L		L Prep Date:				RunNo: 110712		
Client ID: LCSW	Batch ID: E16VW061	TestNo: EPA 8015	iВ		Analysis Dat	te: 9/23/20	16	SeqNo: 243	1943		
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
TPH-Gasoline (C4-C12)	967.000	50 1000	0	96.7	67	136					
Surr: Chlorobenzene - d5	52138.000	50000		104	74	138					
Sample ID: E160923MB2	SampType: MBLK	TestCode: 8015GAS	_WS Units: ug/L		Prep Dat	te:		RunNo: <b>110</b>			
Client ID: PBW	Batch ID: E16VW061	TestNo: EPA 8015	Analysis Date: 9/23/2016				SeqNo: 243	1945			
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
TPH-Gasoline (C4-C12)	ND	50									
Surr: Chlorobenzene - d5	57927.000	50000		116	74	138					
Sample ID: N020998-001BDUP	SampType: <b>DUP</b>	TestCode: 8015GAS	_WS Units: ug/L		Prep Dat	te:		RunNo: 110	0712		
Client ID: ZZZZZZ	Batch ID: E16VW061	TestNo: EPA 8015	iВ	Analysis Date: 9/23/2016			16	SeqNo: 2431947			
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
TPH-Gasoline (C4-C12)	ND	50					0	0	0		
Surr: Chlorobenzene - d5	60344.000	50000		121	74	138		0	0		
Sample ID: N020998-001BMS	SampType: <b>MS</b>	TestCode: 8015GAS	_WS Units: ug/L		Prep Dat	te:		RunNo: 110	0712		
Client ID: ZZZZZZ	Batch ID: E16VW061	TestNo: EPA 8015	iВ		Analysis Dat	te: 9/23/20	16	SeqNo: 243	1949		
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
TPH-Gasoline (C4-C12)	915.000	50 1000	0	91.5	67	136					
Surr: Chlorobenzene - d5	54459.000	50000		109	74	138					
Sample ID: N020998-001BMSD	SampType: <b>MSD</b>	TestCode: 8015GAS	_WS Units: ug/L		Prep Dat	te:		RunNo: 110	0712		
Client ID: ZZZZZZ	Batch ID: E16VW061	TestNo: EPA 8015	iВ		Analysis Dat	te: 9/23/20	16	SeqNo: 243	1950		
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	0	93.2	67	136	915.0	1.84	30		

#### Qualifiers:

J

- B Analyte detected in the associated Method Blank Analyte detected below quantitation limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

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S Spike/Surrogate outside of limits due to matrix interference DO Surrogate Diluted Out

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H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

Calculations are based on raw values

Work Order: N020998

**Project:** SFPP - Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GAS\_WSFPP

Sample ID: N020998-001BMSD	SampType: <b>MSD</b>	TestCo	TestCode: 8015GAS_WS Units: ug/L			Prep Da	te:		RunNo: 110		
Client ID: ZZZZZZ	Batch ID: E16VW061	Test	TestNo: EPA 8015B			Analysis Da	te: 9/23/20	16	SeqNo: 2431950		
Analyte	Result	PQL	PQL SPK value SPK Ref Val			LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Chlorobenzene - d5	55652.000		50000			74	138		0	0	

Qualifiers:

- B Analyte detected in the associated Method Blank
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CALIFORNIA | P:562.219.7435 F:562.219.7436 11110 Artesia Blvd., Ste B, Cerritos, CA 90703 ELAP Cert 2921 EPA ID CA01638

E Value above quantitation range

- ND Not Detected at the Reporting Limit

NEVADA P:702.307.2659 F:702.307.2691 3151 W. Post Rd., Las Vegas, NV 89118 ELAP Cert 2676 | NV Cert NV00922 ORELAP/NELAP Cert 4046

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits Calculations are based on raw values

"Serving Clients with Passion and Professionalism"

Work Order: N020998

Project: SFPP - Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8260\_WP\_SFPP

Sample ID: CA160920LCS	SampType: LCS	TestCo	de: 8260_WP_	SF Units: ug/L	Prep Date:				RunNo: <b>110595</b>		
Client ID: LCSW	Batch ID: CA16VW008	TestN	No: EPA 8260B		Analysis Date: 9/20/2016			16	SeqNo: 242	9081	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	19.670	0.50	20.00	0	98.4	69	133				
1,2-Dichloroethane	20.170	0.50	20.00	0	101	69	132				
2-Butanone	205.180	10	200.0	0	103	49	136				
Benzene	20.530	1.0	20.00	0	103	81	122				
Di-isopropyl ether	20.710	1.0	20.00	0	104	70	130				
Ethylbenzene	20.500	1.0	20.00	0	103	73	127				
m,p-Xylene	43.020	1.0	40.00	0	108	76	128				
MTBE	19.280	1.0	20.00	0	96.4	65	123				
o-Xylene	21.420	1.0	20.00	0	107	80	121				
Tert-amyl methyl ether	20.690	1.0	20.00	0	103	70	130				
Tert-Butanol	105.430	5.0	100.0	0	105	70	130				
Toluene	20.070	2.0	20.00	0	100	77	122				
Xylenes, Total	64.440	2.0	60.00	0	107	75	125				
Surr: 1,2-Dichloroethane-d4	24.200		25.00		96.8	72	119				
Surr: 4-Bromofluorobenzene	26.360		25.00		105	76	119				
Surr: Dibromofluoromethane	23.940		25.00		95.8	85	115				
Surr: Toluene-d8	25.340		25.00		101	81	120				
Sample ID: CA160920LCSD	SampType: LCSD	TestCo	de: 8260_WP_	SF Units: ug/L		Prep Dat	te:		RunNo: 110	595	
Client ID: LCSS02	Batch ID: CA16VW008	Test	No: EPA 8260B			Analysis Da	te: 9/20/20	16	SeqNo: 242	9082	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	19.720	0.50	20.00	0	98.6	69	133	19.67	0.254	20	
1,2-Dichloroethane	19.950	0.50	20.00	0	99.8	69	132	20.17	1.10	20	
2-Butanone	214.560	10	200.0	0	107	49	136	205.2	4.47	20	
Benzene	20.240	1.0	20.00	0	101	81	122	20.53	1.42	20	
Di-isopropyl ether	20.760	1.0	20.00	0	104	70	130	20.71	0.241	20	
Ethylbenzene	20.310	1.0	20.00	0	102	73	127	20.50	0.931	20	
m,p-Xylene	42.060	1.0	40.00	0	105	76	128	43.02	2.26	20	
MTBE	19.220	1.0	20.00	0	96.1	65	123	19.28	0.312	20	

#### Qualifiers:

J

- B Analyte detected in the associated Method Blank
  - Analyte detected below quantitation limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference DO Surrogate Diluted Out

e to matrix interference DO Surrogat CALIFORNIA P:562.219.7435 F:562.219.7436

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EPA ID CA01638

 Diluted Out

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 F:702.307.2691

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

Calculations are based on raw values

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ASSET LABORATORIES

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3151 W. Post Rd., Las Vegas, NV 89118 ELAP Cert 2676 | NV Cert NV00922 ORELAP/NELAP Cert 4046

#### Work Order: N020998

**Project:** SFPP - Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

#### TestCode: 8260\_WP\_SFPP

Sample ID: CA160920LCSD	SampType: LCSD	TestCode: 8260_WP_SF Units: ug/L			/L Prep Date:				RunNo: 110595		
Client ID: LCSS02	Batch ID: CA16VW008	Test	No: EPA 8260	В		Analysis Da	ite: 9/20/20	016	SeqNo: 242	29082	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
o-Xylene	20.750	1.0	20.00	0	104	80	121	21.42	3.18	20	
Tert-amyl methyl ether	20.590	1.0	20.00	0	103	70	130	20.69	0.484	20	
Tert-Butanol	79.400	5.0	100.0	0	79.4	70	130	105.4	28.2	20	R
Toluene	19.790	2.0	20.00	0	99.0	77	122	20.07	1.40	20	
Xylenes, Total	62.810	2.0	60.00	0	105	75	125	64.44	2.56	20	
Surr: 1,2-Dichloroethane-d4	24.250		25.00		97.0	72	119		0		
Surr: 4-Bromofluorobenzene	26.510		25.00		106	76	119		0		
Surr: Dibromofluoromethane	23.920		25.00		95.7	85	115		0		
Surr: Toluene-d8	25.470		25.00		102	81	120		0		
Sample ID: CA160920MB3	SampType: <b>MBLK</b>	TestCo	de: 8260_WP	_SF Units: ug/L		Prep Da	te:		RunNo: 11(	)595	
Client ID: PBW	Batch ID: CA16VW008	Test	No: EPA 8260	В		Analysis Da	ite: 9/20/20	016	SeqNo: 242	29085	
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									
2-Butanone	ND	10									
Benzene	ND	1.0									
Di-isopropyl ether	ND	1.0									
Ethylbenzene	ND	1.0									
m,p-Xylene	0.150	1.0									J
MTBE	ND	1.0									
o-Xylene	0.090	1.0									J
Tert-amyl methyl ether	ND	1.0									
Tert-Butanol	ND	5.0									
Toluene	0.110	2.0									J
Xylenes, Total	ND	2.0									
Surr: 1,2-Dichloroethane-d4	25.420		25.00		102	72	119				
Surr: 4-Bromofluorobenzene	24.990		25.00		100	76	119				
Surr: Dibromofluoromethane	24.440		25.00		97.8	85	115				

#### Qualifiers:

J

B Analyte detected in the associated Method Blank Analyte detected below quantitation limits

ASSET LABORATORIES

"Serving Clients with Passion and Professionalism"

- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference DO Surrogate Diluted Out

CALIFORNIA | P:562.219.7435 F:562.219.7436 11110 Artesia Blvd., Ste B, Cerritos, CA 90703

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits Calculations are based on raw values

ELAP Cert 2921

EPA ID CA01638

NEVADA P:702.307.2659 F:702.307.2691 3151 W. Post Rd., Las Vegas, NV 89118 ELAP Cert 2676 | NV Cert NV00922 ORELAP/NELAP Cert 4046

Work Order: N020998

**Project:** SFPP - Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8260\_WP\_SFPP

Sample ID: CA160920MB3	SampType: MBLK	TestCoo	TestCode: 8260_WP_SF Units: ug/L			Prep Date:				RunNo: 110595		
Client ID: PBW	Batch ID: CA16VW008	TestN	TestNo: EPA 8260B			Analysis Date: 9/20/2016				SeqNo: 2429085		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Surr: Toluene-d8	25.380		25.00		102	81	120					

Qualifiers:

- B Analyte detected in the associated Method Blank
- J Analyte detected below quantitation limits
- S Spike/Surrogate outside of limits due to matrix interference DO Surrogate Diluted Out



- CALIFORNIA | P:562.219.7435 F:562.219.7436 11110 Artesia Blvd., Ste B, Cerritos, CA 90703 ELAP Cert 2921 EPA ID CA01638
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

NEVADA P:702.307.2659 F:702.307.2691 3151 W. Post Rd., Las Vegas, NV 89118 ELAP Cert 2676 | NV Cert NV00922 ORELAP/NELAP Cert 4046

- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits Calculations are based on raw values

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#### Work Order: N020998

Project: SFPP - Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

#### TestCode: 8270WATER\_SIMEXT

Sample ID: LCS-59763	SampType: LCS	TestCode: 8270WATE	R_ Units: µg/L		Prep Dat	te: 9/26/201	16	RunNo: 110	0746	
Client ID: LCSW	Batch ID: 59763	TestNo: EPA 8270C	EPA 3510C		Analysis Dat	te: 9/26/201	16	SeqNo: 243	33130	
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	1.710	2.0 4.000	0	42.8	24	120				J
Surr: 1,2-Dichlorobenzene-d4	0.570	1.000		57.0	16	120				
Surr: 2-Fluorobiphenyl	0.580	1.000		58.0	25	120				
Surr: 4-Terphenyl-d14	1.020	1.000		102	46	132				
Surr: Phenol-d5	0.530	1.000		53.0	15	120				
Sample ID: LCSD-59763	SampType: LCSD	TestCode: 8270WATE	R_ Units: µg/L		Prep Dat	te: 9/26/201	16	RunNo: 110	)746	
Client ID: LCSS02	Batch ID: 59763	TestNo: EPA 8270C	EPA 3510C		Analysis Dat	te: 9/26/201	16	SeqNo: 243	33131	
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	1.620	2.0 4.000	0	40.5	24	120	1.710	0	20	J
Surr: 1,2-Dichlorobenzene-d4	0.560	1.000		56.0	16	120		0		
Surr: 2-Fluorobiphenyl	0.640	1.000		64.0	25	120		0		
Surr: 4-Terphenyl-d14	1.010	1.000		101	46	132		0		
Surr: Phenol-d5	0.550	1.000		55.0	15	120		0		
Sample ID: MB-59763	SampType: MBLK	TestCode: 8270WATE	R_ Units: µg/L		Prep Dat	te: 9/26/201	16	RunNo: 110	0746	
Client ID: PBW	Batch ID: 59763	TestNo: EPA 8270C	EPA 3510C		Analysis Dat	te: 9/26/201	16	SeqNo: 243	33132	
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	ND	2.0								
Surr: 1,2-Dichlorobenzene-d4	0.420	1.000		42.0	16	120				
Surr: 2-Fluorobiphenyl	0.430	1.000		43.0	25	120				
Surr: 4-Terphenyl-d14	0.730	1.000		73.0	46	132				
Surr: Phenol-d5	0.380	1.000		38.0	15	120				

#### Qualifiers:

- B Analyte detected in the associated Method Blank
- J Analyte detected below quantitation limits
- S Spike/Surrogate outside of limits due to matrix interference DO Surrogate Diluted Out
- ASSET LABORATORIES
- CALIFORNIA P:562.219.7435 F:562.219.7436 11110 Artesia Blvd., Ste B, Cerritos, CA 90703 ELAP Cert 2921 EPA ID CA01638

ND

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits Calculations are based on raw values

"Serving Clients with Passion and Professionalism"

3151 W. Post Rd., Las Vegas, NV 89118 ELAP Cert 2676 | NV Cert NV00922 ORELAP/NELAP Cert 4046 22 of 22

NEVADA P:702.307.2659 F:702.307.2691

E Value above quantitation range

Not Detected at the Reporting Limit

NULUTT
--------

Advanced	Technology	Laboratories
----------	------------	--------------

3151 W. Post Road Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

Marion Cartin (marion@atl-labs.com)

CHAIN OF CUSTODY RECORD 9/20 16 DATE:

PAGE: \_\_\_\_\_\_ of \_\_\_\_\_

Section A		Section 8	Section C	Section D
Required Clien	t information:	Required Project information:	invoice information:	Sampler Information:
Company:	Kinder Morgan Energy Partners	Report To: Dan Jablonski	Attention: Steve Defibaugh - Ref. AFEA \$1195	Sampler James Dye
	Attention: Steve Defibaugh			Name:
Address:	1100 Town & Country Road	Copy To: Steve Defibaugh	Company Kinder Morgan Energy Partners	Sampler
	Orange, CA 92868		Name:	Signature:
Email To:	steve deflaguelssixmdeemorgan.com	Purchase Order No.:	Address: 1100 Town & Country Road	Sample under Clark Charles
	danatijabionski@ch20.com		Grange, CA 92868	Date: / 1120100
Phone: 714	-550-4802 Fax: 714-560-4801	Project Name: SFPP Norwalk	ATL Project Marlon Cartin	E manufacture and a second sec
L	{		Manager:	

Section	) E #Sample information		Ι		CONTAINER	TYPE		, ;	A	Р	P	A	v	v	P	Ρ	р	P	v	Р	p	
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					PRESERVAT	₽VE		н				\$	н	Ì Н	N			5	н			
					VOLUME (r	nL)		1000	100	1000	1000	1000	40	40	\$00	500	250	500	40	1000	1000	
11EIN #	SAMPLE ID	LOCATION/ DESCRIPTION	MATRIX SAMPLE TYPE (Georgan Cectomp)	SAM	TING	OTAL # OF CONTAINERS	SAMPLE TEMPERATURE ( <sup>*</sup> 2)	Analysis lest 24 & Grease (1664)	1801.58 [1801.58]	iettieable Solids (SM7240E)	(otal Suspended Solids (SM25400)	2henoi [8270]	3TEX, 1,1-DCA, 1,2-DCA (\$2608)	wittes and Tea, {82608}; 48HR TAT	0u, Pb, Se, Ti, and Zn (200.8); 48 Hr IAT	46 (245.1); 48 Hr 10T	± Vi (7199)	Ammonia Nitrogen (as N) (SM-4500 NH3C)	31PE, TAME, and MEK (82608)	VIBAs (SNI 5540C)	turbidity [SM21308]	4°C 2.2°C Q LV Lab.
1	EFF. Q.Y. SU	EFFLUENT	ww e	9 look	1.200	19	f T	×	x	х	x	x	X	x	x	х	х	x	x	x	х	N020998 - 01
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				W = Water O × Oil	WW = Wastewater P = Product	5 = 5ori	H = HCl Z = Zn(AC)2	N = HNO3 O = NaOH	S = H2SO4 T = Na2S2O3	T v Tube A=Amber Glass	V = VOA 8 = Tedlar	P = Pint J=Jar
L			L	Matrix:	<u>, 100-</u>		Preservatives:			Container Type	);	
Relinquisted by (Sign	atuce and hintud Hymei: <b>/ / G</b> oty / Time		Relightation of the (Signature and Pionted Hantel:	and the second s	10 /	Ayer	TAT Starfs at 8 Al	rkdays 4 the followiin <b>g day</b> if 3:00 PM.	samples received after			
Mal	unie mo printe difference. Use i trake U20/1, 15:4/	2	Pertinguising for (standard in inned some): Vog Andrew Kod	Linger 2	9/21/16	7:43	D = 72 Hos	irs idays				
	- 12 9/20/16	1250	AA-A-	9/20/1	6 15:5		☐ A = Same ☐ B = 24 Hou 557 C ≍ 48 Hou	Day irs irs				
Rebriques hed by (Sigr	ature and Printed Starle). Date / Dire	•	Bellensished by (Sprature and Printed Name).	Oate / Tin	14		Turn Around Time I	TAT):		Special Instruction	04:	

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:	9/20/2016	5			Workorder:	N020998		
Rep sample Temp (Deg C):	4/2.2				IR Gun ID:	2		
Temp Blank:	Yes	🗌 No						
Carrier name:	Golden St	ate Overnight						
Last 4 digits of Tracking No .:	3392			Packing	Material Used:	Bubble Wrap		
Cooling process:	✓ Ice	Ice Pack	Dry Ice	Other	None None			
		<u>Sa</u>	ample Receij	ot Checklist				
1. Shipping container/cooler in g	jood conditio	on?			Yes 🗹	No 🗌	Not Present	
2. Custody seals intact, signed,	dated on sh	ippping container/	cooler?		Yes 🗌	No 🗌	Not Present	$\checkmark$
3. Custody seals intact on samp	le bottles?				Yes 🗌	No 🗌	Not Present	$\checkmark$
4. Chain of custody present?					Yes 🗹	No 🗌		
5. Sampler's name present in C	OC?				Yes 🗹	No 🗌		
6. Chain of custody signed when	n relinquishe	ed and received?			Yes 🗹	No 🗌		
7. Chain of custody agrees with	sample labe	els?			Yes 🗹	No 🗌		
8. Samples in proper container/b	oottle?				Yes 🗹	No 🗌		
9. Sample containers intact?					Yes 🗹	No 🗌		
10. Sufficient sample volume for	r indicated te	est?			Yes 🗹	No 🗌		
11. All samples received within I	nolding time	?			Yes 🗹	No 🗌		
12. Temperature of rep sample	or Temp Bla	nk within acceptal	ble limit?		Yes 🗹	No 🗌	NA	
13. Water - VOA vials have zero	headspace	?			Yes 🗹	No 🗌	NA	
14. Water - pH acceptable upon	receipt?				Yes 🗹	No 🗌	NA	
Example: pH > 12 for (CN	I,S); pH<2 f	or Metals						
15. Did the bottle labels indicate	correct pres	servatives used?			Yes 🗹	No 🗌	NA	
16. Were there Non-Conforman	ce issues at	login?			Yes	No 🗌	NA	
W	as Client no	tified?			Yes 🗌	No 🗌	NA	
Comments:								

Comments:



Reviewed By: <u><u>Ann 9/21/2</u>016</u>

WORK C	RDER Summar	V				21-Sep-16	
Client ID:	CH2HI03	•				WorkOrde	er: N020998
Project:	SFPP - Norwalk Site		QC Level	I: RTNE		Date Receive	ed: 9/20/2016
Comments:	Report to D. Jablonski	/CH2M HILL, cc:KMEP					
Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld MS Sub Storage
N020998-001A	EFF-09-20	9/20/2016 12:00:00 PM	9/27/2016	Wastewater		Oil and Grease Sample Prep	WW
			9/27/2016		EPA 1664 _HEM	Hexane Extractable Material (HEM)	WW
N020998-001B			9/27/2016		EPA 8015B	GASOLINE RANGE ORGANICS BY GC/FID	
N020998-001C			9/27/2016		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: EXTRACTABLE FUELS	ww
			9/27/2016		EPA 8015B	TPH EXTRACTABLE BY GC/FID	ww
			9/27/2016		EPA 8015B	Total TPH	ww
N020998-001D			9/27/2016		SM2540F	SETTLEABLE MATTER	ww
			9/27/2016			Setteable Matter	ww
N020998-001E			9/27/2016		SM2540D	TOTAL NON-FILTERABLE RESIDUE	ww
			9/27/2016			Total Suspended Solids Prep	ww
			9/27/2016		SM 2130B	TURBIDITY	ww
N020998-001F			9/27/2016		EPA 420.4	PHENOLICS	SUB
N020998-001G			9/22/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	
N020998-001H			9/22/2016			AQPREP TOTAL METALS: ICP, FLAA	ww
			9/22/2016		EPA 200.8	TOTAL METALS BY COLLISION/REACTION CELL ICPMS	WW
			9/22/2016		EPA 200.8	TOTAL METALS BY ICPMS	ww
			9/22/2016		EPA 245.1	MERCURY BY COLD VAPOR TECHNIQUE	ww
			9/22/2016			MERCURY PREP	ww
N020998-001I			9/27/2016		EPA 7199	Hexavalent Chromium by IC	WW
N020998-001J			9/27/2016		SM4500-NH3C	AMMONIA-N	SUB

WORK O	RDER Summary	V				21-Sep-16	
	CU201000	, ,				WorkOrd	er: N020998
Client ID:	CH2HI03						
Project:	SFPP - Norwalk Site		QC Leve	I: RTNE		Date Receive	ed: 9/20/2016
Comments:	Report to D. Jablonski/	CH2M HILL, cc:KMEP					
Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld MS Sub Storage
N020998-001K	EFF-09-20	9/20/2016 12:00:00 PM	9/27/2016	Wastewater	SM 5540 C	SURFACTANTS	SUB
N020998-001L			9/22/2016		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: 8270C	ww
			9/22/2016		EPA 8270C	SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS	ww
N020998-002A	FOLDER		9/22/2016		Folder	Folder	



Cubaantusatan

# CHAIN-OF-CUSTODY RECORD

Page 1 of 1

QC Level: RTNE

Subcontractor:					
BC Labs	TEL:	(661) 327-4911	Field Sampler:	James Dye	
4100 Atlas Court	FAX:	(661) 327-1918			
Bakersfield, CA 93308	Acct #:				21-Sep-16

					Requested Tests	
Sample ID	Matrix	Date Collected	Bottle Type	SM 5540 C	SM4500-NH3C	
	-		-	-		
N020998-001J / EFF-09-20	Wastewater	9/20/2016 12:00:00 PM	16OZP		1	
N020998-001K / EFF-09-20	Wastewater	9/20/2016 12:00:00 PM	32OZP	1		

General Comments: Please email sample receipt acknowledgement to the PM.

Please use PO#: N20998A Please email Invoices and Account Receivable Statements to <u>AssetAP@assetlaboratories.com</u>. For questions, call Molky at (562)-219-7435. Please e-mail results to <u>reports@assetlaboratories.com</u> by: Normal TAT.

Please analyze for Ammonia and MBAs. CH2M Hill Samples

				Date/Time		Date/Time
Relinquished by:	For:	YR1	9/21/2	2016	Received by:	
Relinquished by:					Received by:	



# CHAIN OF CUSTODY RECORD

Contact us:

Nevada: 3151 W. Post Road, Las Vegas, NV 89118 P: 702.307.2659 F: 702.3072691 California: 11110 Artesia Blvd. Ste. B - Cerritos, CA 90703 P: 562.219.7435 F: 562.219.7436 www.assetlaboratories.com

Client:	Asset La	65	Report to:				Bill to:										EDD R	equire	ment		QAV	ac	Τ	Sampe Receipt Condition		
Address:			Company:				Address:									Exce	el EDD			RTNE		1			Y	N
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Address:			Email:													Labs	spec			CalTr	ans	1	2	. Headspace		
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Submitte	d By: MOLKY B	al			S. Curre		Phone:				Fa	ax:				Glob	al ID:			Speci	fy Sta	te:	6	i. Method of Cooling		
Title:			Phone:	Fax:				M	atrix					Analys	es Re	quest	ted						00	Sample Temp:		
Signature	θ:	Date:	Sampler's Signature	and Date:			Ground	□ s	ediment																	
							Potable		Soil															Courier:		
hereby a Project N	uthorize ASSET Labs to perform th lame:	ne tests indicated below:	-				NPDES		Other											•			z			
C		11-	I - March to the confidite and	authenticity of this s	ample Lam aware t	that tomoging			Solid		0									d Tim	ainer	lype	VATIC	Tracking No.		
21	FIP Norwa		with or intentionally misle	abeling the sample lo	cation, date or time	of collection is	Surface				2		-	-						Aroun	of cont	ainer	SER			
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Item No.	Laboratory Work Order No.	Sam	ple ID/Location		Date	Time	Water	r	Solid	Others	5	¥	Σ											Remarks		1
1		EFF-09-20	)		9/20/16	1200					X	X	X							E	3	PG				
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		<i>ai i</i> .												A < 24	Hrs o	Sam	e Day	TAT	opeena	· moure	et et					
1	19	- 9/20/16	12:20											B = N	ext Wo	rkdav										
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Terms				5. Trip Blanks and Equi	ment Blanks are billable	sample.							Pres	ervative	s:					Ic	ontai	ner Ty	vpe:			
1. All sample	es will be disposed in 45 days upon receipt and	records will be destroyed in 5 years upon submissio	on of final report.	6. ASSET Laboratories is	not responsible for sam	ples collected using	incorrect metho	odology.					H=H	CI	N = HNO	03	S=Ho	SOA	C = 4°C	T	= Tut	be	1	V = VOA	P = Pint	t
Z. Regular T/	AT is 5-7 business days, surcharges will apply fo an 24 Hrs = 200% Next Day = 100%	or rush analysis 2 Workdays = 50% 3 Workdays = 35% 4 W	Vorkdays = 20%	8. All reports are submit	ted in electronic format.	Please inform ASSE	T Laboratrories	if hard co	py of report is ne	eded.			Z = 7	n(AC)2	O = Nat	DH	T = Na	2\$203		- Li	= .la	-	-	B = Tedlar	G = Gla	ISS
3. Custom El	DD formats will be an additional 3% of the tota	I project price.	roject price	9. For subcontract anal	sis. TAT and Surcharges	will vary.							Other	s/Specify						M	= Me	etal	-	P = Plastic	C = Car	n
4. Add 10% s	surcharge for Level III Data Packages, 15% for L	even iv Data Packages, Surcharge applied on total p	ojeccipice.	14/6:4	- Leherster (	Conv							Valle	- Cu	stomer	a Cor				1.4						-



Print Date: 9/20/2016 4:16 PM:

LABEL INSTRUCTIONS:

# Do not copy or reprint this label for additional shipments - each package must have a unique barcode.

Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer. Securely attach this label to your package, do not cover the barcode.

2.20 JR#2



Date of Report: 09/27/2016

Molky Brar

ASSET Laboratories 3151-3153 W. Post Rd Las Vegas, NV 89118

Client Project:SFPP NorwalkBCL Project:Water AnalysisBCL Work Order:1626388Invoice ID:B247298

Enclosed are the results of analyses for samples received by the laboratory on 9/21/2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Christina Herndon Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101



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1626388-01 - EFF-09-20	
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Notes and Definitions	10



Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation. 4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com



#### Chain of Custody and Cooler Receipt Form for 1626388 Page 2 of 2

BC LABORATORIES INC.		(	COOLER	RECEIPT	FORM	(한국) : 		Pag	e	_Of
Submission #: $10 - 20$	288 L									
SHIPPING INI	FORMATION			S	HIPPING	CONTA	INER		FREE L	.IQUID
	trac 🗆 Han	d Deliver	X 只	Ice Ch	est 🖉	None 🗆	Box 🗆		YES R	NO 🗆
BC Lab Field Service U O	ther (Specif	n_5;	<u> </u>	Oth	er 🗀 (Spe	ecify)			W	) s
Refrigerant: Ice 🕸 Blue I	ce 🗆 Non	e 🗋	Other 🗆	Comr	nents:					
Custody Seals lice Chest 🖸	Contain Intact? Yes	ers⊡ ⊡_No⊡	Noné	Com	ments:					
All samples received? Yes 🛛 No 🗆	All samples	container	s intact?	Yes No	0	Descrip	otion(s) ima	tch COC?	Yes 7	No 🗆
COC Received	Emissivity: _	17	Container	: UTP	LThermor	neter ID: ∠	208	Date/Tir	ne <u>]:</u> _	2114
∽¢)YES □ NO	Temperature	(4)	3.10		1012	9	°C	Analyst	Init Å	MAIL
	I		<u>// Q</u>		(01-)	21	0	Analyse		
SAMPLE CONTAINERS					SAMPLE	E NUMBERS			<u></u>	
		2	3	4	5	6	7	8	9	10
407 / 807 / 1607 PE LINPRES	A				<u> </u>		+			
2										
		1		+			+	+		
NORCANIC CHEMICAL METALS	/1600	1		+			+	+		
ANONGAINE CREMICAL METALS 402 / 802	/ 1002	1	1	<u> </u>			1		<u> </u>	
TI UIANIDE	6		+	+				+		
PT NITROGEN FORMS	V			+						
PT TOTAL SOLFIDE			+					- <u> </u>	<u> </u>	
202. NITRATE / NITRITE							<u> </u>	+		
T CHEMICAL ONVOEN DEMAND							<u> </u>			
HENOLICS	C.			+				+		
IN YOA WAL TRAVEL BLANK			1							
Ami VOA VIAL		<u> </u>	<u> </u>							
T FPA 1664									·	
T ODOR										
ADIOLOGICAL		†								
ACTERIOLOGICAL			İ							
0 m) VOA VIAL-504										
T EPA 508/608/8080								· ·		+
T EPA 515.1/8150										
T EPA 525	1									
T EPA 525 TRAVEL BLANK										
)ml EPA 547	1									
ml EPA 531.1					-					
z EPA 548										
T EPA 549										
Г ЕРА 8015M										
Г ЕРА 8270										
z/16oz/32oz AMBER										
z / 160z / 320z JAR										
IL SLEEVE										
B VIAL										
ASTIC BAG										
DLAR BAG										
RROUS IRON										
CORE										
ART KIT										
MMA CANISTER										

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4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com

Laboratories, Inc.

ASSET Laboratories 3151-3153 W. Post Rd Las Vegas, NV 89118

09/27/2016 10:44 Reported: Project: Water Analysis Project Number: SFPP Norwalk Project Manager: Molky Brar

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	0n		
1626388-01	COC Number:		Receive Date:	09/21/2016 10:10
	Project Number:		Sampling Date:	09/20/2016 12:00
	Sampling Location:		Sample Depth:	
	Sampling Point:	EFF-09-20	Lab Matrix:	Water
	Sampled By:	Molky Brar	Sample Type:	Water

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4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com

Laboratories, Inc.

ASSET Laboratories 3151-3153 W. Post Rd

Las Vegas, NV 89118

Reported:09/27/201610:44Project:Water AnalysisProject Number:SFPP NorwalkProject Manager:Molky Brar

# Water Analysis (General Chemistry)

BCL Sample ID:	1626388-01	Client Sample	e Name:	EFF-09-20	0, 9/20/201	6 12:00:00PM,	Molky Brar		
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
MBAS		ND	mg/L	0.10	0.015	EPA-425.1	ND		1
Ammonia as NH3		ND	mg/L	0.26	0.060	EPA-350.1	ND	A07	2

			Run				QC
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-425.1	09/21/16	09/21/16 14:00	JMN	MANUAL	1	BZI1749
2	EPA-350.1	09/26/16	09/26/16 13:54	JMH	SC-1	2	BZI2257

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# Water Analysis (General Chemistry)

## **Quality Control Report - Method Blank Analysis**

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BZI1749						
MBAS	BZI1749-BLK1	ND	mg/L	0.10	0.015	
QC Batch ID: BZI2257						
Ammonia as NH3	BZI2257-BLK1	ND	mg/L	0.13	0.030	



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# Water Analysis (General Chemistry)

## **Quality Control Report - Laboratory Control Sample**

								Control L	.imits		
Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Percent Recovery	RPD	Lab Quals	
	40 00p.0.12	. )   0								4.4.4	
QC Batch ID: BZI1749											
MBAS	BZI1749-BS1	LCS	0.20260	0.20000	mg/L	101		85 - 115			
QC Batch ID: BZI2257											
Ammonia as NH3	BZI2257-BS1	LCS	1.1446	1.2160	mg/L	94.1		90 - 110			



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## Water Analysis (General Chemistry)

## **Quality Control Report - Precision & Accuracy**

									Cont	rol Limits	
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: BZI1749	Use	d client sam	ole: N								
MBAS	DUP	1626062-01	0.035200	0.035200		mg/L	0		20		J
	MS	1626062-01	0.035200	0.44600	0.40000	mg/L		103		80 - 120	
	MSD	1626062-01	0.035200	0.44100	0.40000	mg/L	1.1	101	20	80 - 120	
QC Batch ID: BZI2257	Use	d client sam	ole: N								
Ammonia as NH3	DUP	1625735-01	ND	ND		mg/L			10		
	MS	1625735-01	ND	1.3406	1.3511	mg/L		99.2		90 - 110	
	MSD	1625735-01	ND	1.3180	1.3511	mg/L	1.7	97.6	10	90 - 110	

Laboratories, Inc.

3151-3153 W. Post Rd     Project:     Water Analysis       Las Vegas, NV 89118     Project Number:     SFPP Norwalk	Project Manager: Molky Brar	Notes And Definitions
3151-3153 W. Post Rd Project: Water Analysis	Project Number: SFPP Norwalk	Las Vegas, NV 89118
	Project: Water Analysis	3151-3153 W. Post Rd
ASSET Laboratories Beported: 09/27/2016 10:44	Reported: 09/27/2016 10:44	ASSET Laboratories

#### Estimated Value (CLP Flag) J

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

A07 Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.

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