REPORT

Fourth Quarter 2017 Remediation Progress Report SFPP Norwalk Pump Station Norwalk, California

Prepared for

Kinder Morgan Energy Partners, L.P.

January 15, 2018

CH2M HILL Engineers, Inc.
6 Hutton Centre Drive
Suite 700
Santa Ana, California 92707

Signature Page

The material and data presented in this report were prepared consistent with current and generally accepted consulting principles and practices. This work was supervised by the following CH2M HILL Engineers, Inc. (CH2M) licensed professional.

January 15, 2018

William Breedlove
CH2M California Professional Chemical Engineer,
No. 5142

Date

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Acronyms and Abbreviations

1,2-DCA	1,2-dichloroethane
Air Tech	Air Technology Laboratories
Asset	Asset Laboratories
ASTM	ASTM International
BTEX	benzene, toluene, ethylbenzene, and total xylenes
CH2M	CH2M HILL Engineers, Inc.
EPA	U.S. Environmental Protection Agency
GWE	groundwater extraction
GWTS	groundwater treatment system
Kinder Morgan	Kinder Morgan Energy Partners, L.P.
LGAC	liquid-phase granular activated carbon
MTBE	methyl tertiary butyl ether
No.	number
O&M	operations and maintenance
OWS	oil-water separator
PVC	polyvinyl chloride
RTO	regenerative thermal oxidizer
Water Board	California Regional Water Quality Control Board, Los Angeles Region
scfm	standard cubic feet per minute
SFPP	SFPP, L.P.
SVE	soil vapor extraction
TBA	tertiary butyl alcohol
TFE	total fluids extraction
TPH	total petroleum hydrocarbons
TPH-d	total petroleum hydrocarbons quantified as diesel
TPH-g	total petroleum hydrocarbons quantified as gasoline
TPH-o	total petroleum hydrocarbons quantified as oil
TPH-total	total petroleum hydrocarbons quantified as gasoline, diesel, and oil
VOC	volatile organic compound
WSB	West Side Barrier

SECTION 1

Introduction

CH2M HILL Engineers, Inc. (CH2M) prepared this report on behalf of SFPP, L.P. (SFPP), an operating partnership of Kinder Morgan Energy Partners, L.P. (Kinder Morgan), to summarize remediation activities performed at the former SFPP Norwalk Pump Station located within the Defense Fuel Support Point Norwalk, at 15306 Norwalk Boulevard, Norwalk, California (the site; Figure 1) during the fourth quarter 2017 reporting period.

This progress report is submitted pursuant to a request from the California Regional Water Quality Control Board, Los Angeles Region (Water Board) in its letter, dated October 25, 2006 (Water Board, 2006). Additional site background information can be found in the report titled, *Conceptual Site Model and Proposed Alternate Interim Remedy for Soil, Groundwater, and LNAPL* (CH2M, 2013), and in previously submitted semiannual groundwater monitoring reports.

This report summarizes the remediation systems present at the site and describes remediation activities for the period of October through December 2017 with documentation of the following tasks:

- Operations and maintenance (O&M) of remediation systems performed by Kinder Morgan field personnel
- Remediation system evaluation

The remediation activities performed from October through December 2017 and the progress achieved through those activities are summarized in the following sections.

SECTION 2

Remediation Systems

Kinder Morgan 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), groundwater extraction (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 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 systems include 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
- 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)

A summary of remediation wells in the south-central, southeastern, and WSB areas is presented in Table 1. Table 1 includes well identifications, well construction details, well use, and operational status at the end of the fourth quarter 2017. The remediation system layout is shown on Figure 2. A brief description of each system is provided below.

Kinder Morgan currently operates three refined fuel pipelines (two 16-inch and one 24-inch) that traverse the southern border of the site. These pipelines previously supplied fuel products to the former tank farm, and various block valves and other connection points were identified as potential sources of subsurface releases in the south-central and southeastern areas of the site. Between the third quarter of 2016 and the second quarter of 2017, the pipelines were modified to remove all valves and connections so that the pipelines now span across the site in a continuous manner, reducing the potential for future releases that could have occurred at those connection points.

2.1 Soil Vapor Extraction System

SVE is performed using a blower to remove soil vapors from the south-central and southeastern areas of the site. The extracted vapors are conveyed to a knock-out tank that separates entrained moisture from the soil 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 Operate (Permit Number [No.] G46188 A/N 578779 and No. G46187 A/N 578777) issued by the South Coast Air Quality Management District.

2.2 Groundwater Treatment System

The main GWTS processes 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 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 (Permit No. CA0063509; Order No. R4-2016-0309).

2.3 Horizontal Biosparge System

In December 2015, Kinder Morgan 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 are documented in the report titled, *Horizontal Biosparge Well and Soil Vapor Monitoring Probe Completion Report* (CH2M, 2015).

The air sparge compressor delivers ambient air to the biosparge well at a maximum design rate of approximately 500 standard cubic feet per minute (scfm). The 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 off-gassing of VOCs during biosparge operations. Pilot testing of the biosparge system commenced in early January 2016 and continued through October 2016. Soil vapor data collected as part of the pilot testing have been submitted to the Water Board and Restoration Advisory Board under separate covers. A comprehensive evaluation report that incorporates soil vapor and groundwater data was submitted to the Water Board in August 2017 (CH2M, 2017). The biosparge was restarted on June 27, 2017 after installation and start-up of the new RTO system.

Based on the favorable results of the pilot study, a second horizontal biosparge well was installed in the southeastern area of the site in November 2017. The design of the second biosparge well is similar to the south-central biosparge well, 4-inch-diameter Schedule 80 PVC casing and screen completed to a depth of approximately 45 feet below ground surface. The lateral distance of the screen interval is 240 feet centered below the southeast area hydrocarbon plume. A construction completion report documenting construction activities and specifications will be submitted during the first quarter of 2018. A new air sparge compressor will be installed in 2018 to deliver ambient air to the new biosparge well, which will be appropriately sized to allow for future system expansion.

SECTION 3

Operations and Maintenance

During the fourth quarter 2017 reporting period, O&M of the remediation systems included the following tasks:

- Performed ongoing weekly maintenance on the GWTS.
- Removed, inspected, and repaired existing TFE/GWE pumps and associated discharge lines.
- Installed pumps and associated equipment necessary for TFE at select wells with measurable free product.
- Installed the southeast biosparge system from November 10 through November 21, 2017.
- Removed galvanized piping on the polishing carbon filters due to trace metals (zinc and copper) in midpoint water samples and replaced them with stainless steel fittings.

The remediation systems operated continuously during the fourth quarter 2017, with the following exceptions:

- The GWTS and SVE systems were shut down from September 26 through October 6, 2017, to facilitate gauging and sampling activities for the second semiannual groundwater sampling event that was conducted on October 2 to 6, 2017.
- The SVE system shutdown from October 16 through November 2, 2017, due to low compressed air flow to the RTO. The air is required to operate pneumatic valves. The air filters into the RTO fouled up due to water and particulates. A particulate filter was installed upstream of the existing filters and the galvanized piping was replaced with hoses to decrease condensate from building up in the air line. The quarterly soil vapor sampling for the biosparge system occurred during this time period, as well.
- The SVE shutdown during the weekend of November 25, 2017 due to an electrical problem with the air compressor. The air compressor was restarted on Monday November 27, 2017, and the SVE was restarted the same day.
- The air sparge system was shut down from November 13 through November 21, 2017, for the installation of the new southeast biosparge well.

During this reporting period, and when the system was operating, GWTS inspections were performed on a weekly basis. For these inspections, volumes of extracted groundwater, hours of operation, and other system parameters were recorded during system operation.

During the fourth quarter 2017, the GWTS was operational approximately 96 percent of the time (100 percent of the time excluding planned shutdowns). The SVE system was operational approximately 68 percent of the time. The biosparge system operated 52 percent of the time (68 percent of the time excluding planned shutdowns). Table 2 presents the SVE system operations summary. Extracted vapor photoionization detector (PID) measurements and analytical results taken during the fourth quarter 2017 are summarized in Tables 3 and 4, respectively. The groundwater remediation system operation activities for the fourth quarter 2017 are summarized in Table 5. The extracted groundwater analytical results for the fourth quarter 2017 are summarized in Table 6. Table 7 presents the biosparge system operations summary. Historical (post-2007) gauging results of select TFE and SVE wells are provided in Table 8. Pre-2007 data can be found in previous semiannual groundwater monitoring reports.

Water samples from the GWTS influent were collected on October 10, November 8, and December 15, 2017. The water samples were delivered to Asset Laboratories (Asset) of Las Vegas,

Nevada, for analysis. Asset is certified by the California Department of Public Health Environmental Laboratory Accreditation Program.

Asset analyzed the water samples for the following:

- Total petroleum hydrocarbons (TPH) quantified as gasoline (TPH-g), TPH quantified as diesel (TPH-d), and TPH quantified as oil (TPH-o) (collectively referred to as TPH-total) using U.S. Environmental Protection Agency (EPA) Method 8015(M)
- VOCs using EPA Method 8260B

Vapor samples from the SVE influent were collected on October 13, November 10, and December 8, 2017. The vapor samples were delivered to Air Technology Laboratories (Air Tech), located in City of Industry, California, for analysis.

Air Tech analyzed the vapor samples for the following:

- Fixed gases (methane, carbon dioxide, oxygen, and argon) using ASTM International (ASTM) D1946
- VOCs using EPA Method TO-15
- Total VOCs using EPA Method TO-3

The laboratory analytical reports and chain-of-custody documents for these samples are included in Appendix A.

SECTION 4

Summary of Remediation Progress

Based on weekly monitoring of the influent vapor concentration, vapor extraction flow rate, and hours of operation, the total mass of VOCs removed by SVE was 16,087 pounds during the fourth quarter 2017. Since SVE implementation in September 1995, the cumulative mass of VOCs removed was 3,518,849 pounds (Table 2). The cumulative mass removed by SVE does not include the mass removed by naturally occurring in situ biodegradation.

A total of 812,187 gallons of groundwater was extracted during the fourth quarter 2017 (Table 5). No water was extracted from the WSB area during the fourth quarter 2017. Approximately 102.2 million gallons of groundwater has been extracted from the south-central, southeastern, and WSB areas since GWTS operations first began in 1996.

GWE was discontinued in the WSB region during the third quarter 2008 based on the reduced lateral extent and low concentrations of MTBE and 1,2-dichloroethane (1,2-DCA) west of the site. 1,2-DCA, MTBE, and TBA concentrations in the western area during the semiannual groundwater monitoring event conducted in the fourth quarter 2017 did not warrant restarting the WSB system.

No free product accumulated in the product holding tank during the fourth quarter 2017. Since 1995, a total of 14,426 gallons of product has been removed by TFE, vacuum truck, or manual bailing operations. The estimated mass removal (pounds) of hydrocarbons by the GWTS is shown in Table 5. Mass removal estimates between 1996 and 2005 are based on benzene, toluene, ethylbenzene, and total xylene (BTEX) and MTBE concentrations in the groundwater influent (TPH data were not available) and total volume of extracted groundwater. Mass removal estimates between 2006 and 2011 are based on groundwater influent concentrations of TPH-g and TPH quantified as fuel product, and the total volume of extracted groundwater. Mass removal estimates between 2012 and 2017 are based on groundwater influent TPH-total concentrations (TPH-total includes TPH-g, TPH-d, and TPH-o) and the total volume of extracted groundwater. Since GWE first began in 1996, hydrocarbon mass removed by the GWTS is estimated to be 18,403 pounds. During the fourth quarter 2017, the mass removal of hydrocarbons was estimated to be 111 pounds. Table 6 shows the extracted groundwater analytical results for the samples collected on October 10, November 8, and December 15, 2017. TPH concentrations during the fourth quarter 2017 were less than the concentrations reported in late 2015, early 2016. This reduction in dissolved-phase hydrocarbon concentrations can be attributed to biosparge operations in the south-central area. BTEX and MTBE concentrations decreased during the fourth quarter 2017 as compared to first and second quarters of 2017.

The biosparge system operated for 1,325 hours in the fourth quarter 2017 (Table 7). The biosparge system flow (air injection) rate ranged from 250 to 782 scfm during the fourth quarter 2017. Soil vapor samples were collected from 15 locations around the southeastern biosparge well in July, August, September, and October 2017. Results of the soil vapor sampling will be included in the annual soil vapor monitoring report.

SECTION 5

System Evaluation and Optimization

During the fourth quarter 2017, all offsite SVE well valves (except VEW-2) in the south-central area were fully open to ensure maximum vapor extraction from the offsite area. The SVE wells at the southeastern area are also fully open to ensure maximum vapor extraction.

The GWTS continued to operate during the fourth quarter 2017 for hydraulic control and product recovery in the south-central and southeastern areas. The GWTS was temporarily offline from September 26 to October 6, 2017, to facilitate semiannual groundwater monitoring activities planned during the week of October 2, 2017.

Gauging results from the semiannual monitoring event performed in the fourth quarter 2017 are provided in Table 8. Historical (post-2007) gauging data for all TFE and SVE wells are also provided in the table. During the fourth quarter, only GMW-O-12 had free product in the south-central area with a thickness of 1.20 feet. The substantial decline in measurable product in the south-central area, relative to the fourth quarter 2015 (pre-biosparge conditions) (SGI, 2016), is directly attributable to biosparge system operations that were performed in 2016. Biosparge system operation was restarted during the second quarter 2017 on June 27, 2017 and continued to operate during the remainder of 2017.

SECTION 6

Planned First Quarter 2018 Activities

During the first quarter 2018, Kinder Morgan plans to continue to focus remedial efforts on the south-central and southeastern areas. The following maintenance and other activities are planned to be completed during the first quarter 2018:

- Continue operation of SVE and the south-central horizontal biosparge system.
- Conduct one quarterly soil vapor monitoring event for all the soil vapor probes in the south-central.
- Measure weekly VOC concentrations as hexane at the influent and effluent of the RTO system.
- Collect monthly vapor samples at the influent and effluent of the RTO system to be analyzed by TO-15 (VOCs), TO-3 (total VOCs as hexane), and ASTM-D 1946 (fixed gases).
- Continue weekly maintenance and monitoring of the south-central and southeastern SVE and TFE/GWE treatment systems, and the biosparge system.
- Measure quarterly individual well vapor concentrations with a photoionization detector at the manifold.
- Collect and analyze system influent vapor and groundwater samples.
- Perform as-needed carbon changeouts of the LGAC vessels.
- Perform as-needed monitoring and remediation well rehabilitation to remove biofouling and sediment occluding the well screens.
- Remove, inspect, and repair existing TFE/GWE pumps and associated discharge lines.
- Install pumps and associated equipment necessary for TFE at select wells with measurable free product.
- Continue to remove free product from wells without TFE pumps using manual bailing methods.

The TFE, GWE, and SVE systems for the south-central and southeastern areas will continue to operate. Operation of the TFE system in the southeastern area will be monitored closely and adjustments will be made to improve fluid recovery. System inspections will continue on a weekly basis; system evaluation parameters will be collected as needed. The remediation activities and progress for the first quarter 2018 will be described in the First Quarter 2018 Remediation Progress Report, to be submitted by April 15, 2018.

Pilot testing of the horizontal biosparge system in the south-central area was completed during the fourth quarter 2016. A comprehensive evaluation report that incorporates soil vapor and groundwater data was submitted to the Water Board in August 2017 (CH2M, 2017). A recommendation for system expansion was included in the report, and an additional horizontal biosparge well was installed in the southeast area in November 2017. The horizontal biosparge system will continue to operate at ideal air flow to decrease product thickness in the south-central area.

SECTION 7

References

California Regional Water Quality Control Board, Los Angeles Region (Water Board). 2006. Letter to Mr. Kola Olowu, Defense Energy Support Center, Los Angeles, and Mr. Michael Pitta, Kinder Morgan Energy Partners; Conditional Approval of Revised Remedial Action Plan and Second Addendum to Remedial Action Plan for the Defense Fuel Support Point Norwalk, 15306 Norwalk Boulevard, Norwalk (SLIC No. 0286A, DOD No. 16638). October 25.

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Tables

Table 1. Remediation Well Construction and Status

SFPP Norwalk Pump Station, Norwalk, California

Remediation Area	Remediation Well ID	Installation Date	Top of Well Casing Elevation (feet msl)	Well Screen Interval (feet bgs)	Remediation Well Function	Well Operation Status at End of Fourth Quarter 2017	
						SVE/BS	TFE/GWE
South-Central	MW-SF-1	6/18/1990	78.93	25 - 40	SVE	ON	--
	MW-SF-2	6/18/1990	78.53	25 - 40	SVE; TFE	ON	OFF
	MW-SF-3	6/18/1990	78.12	25 - 40	SVE; TFE	ON	ON
	MW-SF-4	6/19/1990	79.38	25 - 40	SVE	ON	--
	MW-SF-5	9/19/1990	79.74	23 - 38	SVE	ON	--
	MW-SF-6	9/19/1990	76.80	25 - 40	SVE; TFE	ON	OFF
	MW-SF-9	6/15/1995	74.10	--	SVE	ON	--
	MW-SF-10	9/23/2003	76.53	10 - 30	SVE	ON	--
	MW-SF-11	6/19/2007	78.56	20 - 40	SVE; TFE	ON	OFF
	MW-SF-12	6/18/2007	78.07	20 - 40	SVE; TFE	ON	OFF
	MW-SF-13	6/19/2007	73.40	20 - 40	SVE; TFE	ON	OFF
	MW-SF-14	6/21/2007	78.16	20 - 40	SVE; TFE	ON	OFF
	MW-SF-15	6/21/2007	78.27	20 - 40	SVE; TFE	ON	ON
	MW-SF-16	6/20/2007	78.21	20 - 40	SVE; TFE	ON	OFF
	MW-SF-17	--	--	--	SVE	--	--
	GMW-9	7/8/1991	77.16	20 - 50	SVE; TFE	ON	ON
	GMW-10	7/8/1991	N/A	25 - 50	SVE; TFE	ON	ON
	GMW-22	8/2/1991	77.24	25 - 60	SVE; TFE	ON	OFF
	GMW-24	8/5/1991	77.48	25 - 60	SVE; TFE	ON	OFF
	GMW-25	1/10/1992	78.14	20 - 50	SVE; TFE	ON	OFF
	GWR-3	1/10/1992	77.60	20 - 50	SVE; TFE	ON	OFF
	VEW-1	09/19/90	--	5 - 25	SVE	ON	--
	VEW-2	09/19/90	--	5 - 25	SVE	OFF	--
	MW-O-1	1/22/1991	75.48	25 - 40	SVE; TFE	ON	OFF
	MW-O-2	1/23/1991	71.90	25 - 40	SVE; TFE	ON	OFF
	GMW-O-11	5/20/1992	74.17	20 - 50	SVE; TFE	ON	ON
	GMW-O-12	5/21/1992	73.49	20 - 50	SVE	ON	--
	GMW-O-20	6/15/1995	73.32	--	SVE; TFE	ON	ON
	GMW-O-21	10/1/1997	71.43	26 - 46	TFE	--	OFF
	GMW-O-23	6/25/2007	73.63	20 - 40	SVE; TFE	ON	ON
	MW-18 (MID)	6/10/1991	75.67	50 - 60	SVE	ON	--
	HW-1	09/06/92	--	--	SVE	ON	--
	HW-2	09/06/92	--	--	SVE	ON	--
	BS-01	08/27/14	75.06	--	BIOSPARGE	ON	--
Southeastern	GMW-O-15	4/19/1994	74.23	20 - 50	SVE; TFE	ON	ON
	GMW-O-18	7/25/1994	74.36	21 - 40	SVE; TFE	ON	ON
	GMW-36	4/11/1994	76.66	20 - 50	SVE; TFE	ON	ON
	GMW-SF-9	4/1/2003	73.05	37 - 46	TFE	--	ON
	GMW-SF-10	4/2/2003	75.77	37 - 46	TFE	--	--
West Side Barrier	BW-2	5/20/1996	73.57	27 - 47	GWE	--	OFF
	BW-3	5/17/1996	74.16	31 - 50	GWE	--	OFF
	BW-4	5/20/1996	74.61	28 - 47	GWE	--	OFF
	BW-5	5/23/1996	73.59	27 - 46	GWE	--	OFF
	BW-6	5/22/1996	73.48	28 - 47	GWE	--	OFF
	BW-7	5/22/1996	74.65	27 - 46	GWE	--	OFF
	BW-8	5/21/1996	75.08	27 - 46	GWE	--	OFF
	BW-9	5/21/1996	76.19	27 - 46	GWE	--	OFF

Notes:

-- = information not available or not applicable

BS = biosparge

feet bgs = feet below ground surface

feet msl = feet above mean sea level based on the National Geodetic Vertical Datum of 1929

GWE = groundwater extraction

SVE = soil vapor extraction

TFE = total fluids extraction

Table 2. Vapor Remediation System Operation Summary

SFPP Norwalk Pump Station, Norwalk, California

System Inspection Date	Cumulative Hours of Operation (hours)	Incremental Hours of Operation (hours)	Influent PID Reading (ppmv as hexane)	System Flow (scfm)	Header Vacuum (in. H_2O)	Mass Removed (pounds)[a]
1995 Totals	1,240		--	--	--	281,065
1996 Totals	7,208	5,968	--	--	--	516,717
1997 Totals	12,865	5,657	--	--	--	489,526
1998 Totals	17,877	5,012	--	--	--	223,055
1999 Totals	23,600	5,723	--	--	--	390,836
2000 Totals	29,690	6,090	--	--	--	359,092
2001 Totals	33,671	3,981	--	--	--	224,091
2002 Totals	36,358	2,687	--	--	--	79,363
2003 Totals	39,676	3,319	--	--	--	64,671
2004 Totals	44,193	4,517	--	--	--	120,240
2005 Totals	49,750	5,557	--	--	--	212,175
2006 Totals	52,735	2,985	--	--	--	17,263
2007 Totals	58,319	2,058	--	--	--	7,378
2008 Totals	64,233	5,915	--	--	--	5,878
2009 Totals	68,858	4,625	--	--	--	9,387
2010 Totals	72,369	3,511	--	--	--	1,507
2011 Totals	77,489	5,120	--	--	--	14,629
2012 Totals	84,173	6,684	--	--	--	22,260
2013 Totals	90,414	6,241	--	--	--	90,880
2014 Totals	94,083	3,688	--	--	--	67,744
2015 Totals	98,408	4,325	--	--	--	122,706
2016 Totals	104,405	7,694	--	--	--	156,193
First Quarter 2017 Totals	**104,405**	**--**	**--**	**--**	**--**	**--**
6/7/2017	104,426	21	574	2062	50	319
6/13/2017	104,568	142	810	1395	50	1,634
6/20/2017	104,735	167	856	1419	50	2,130
6/23/2017	104,807	72	856	1312	50	1,086
6/27/2017	104,810	3	550	1212	50	19
6/30/2017	104,875	65	1,092	1231	52	833
Second Quarter 2017 Totals	**104,875**	**470**	**--**	**--**	**--**	**6,022**
7/5/2017	104,999	124	742	1380	51	1,080
7/10/2017	105,118	119	578	1442	50	807
7/13/2017	105,193	75	591	1318	50	520
7/20/2017	105,357	164	578	1240	50	1,621
7/25/2017	105,474	117	584	1523	50	1,158
7/28/2017	105,551	77	600	1533	50	792
8/3/2017	105,690	139	658	1535	50	1,635
8/8/2017	105,809	119	756	1479	50	1,587
8/15/2017	105,977	168	820	1444	50	2,437
8/22/2017	106,147	170	798	1528	50	2,262
8/29/2017	106,313	166	646	1447	49	1,791

Table 2. Vapor Remediation System Operation Summary

SFPP Norwalk Pump Station, Norwalk, California

System Inspection Date	Cumulative Hours of Operation (hours)	Incremental Hours of Operation (hours)	Influent PID Reading (ppmv as hexane)	System Flow (scfm)	Header Vacuum (in. H_2O)	Mass Removed (pounds)[a]
9/7/2017	106,387	74	598	1662	50	739
9/12/2017	106,501	114	588	1523	50	1,141
9/19/2017	106,649	148	432	1469	52	1,090
9/26/2017	106,817	168	498	1486	50	1,426
Third Quarter 2017 Totals	**106,817**	**1,942**	--	--	--	**20,086**
10/6/2017	106,822	5	502	1,619	50	43
10/10/2017	106,917	95	498	1,550	50	798
10/16/2017	107,048	131	598	1,525	50	1,322
11/2/2017	107,051	3	566	1,642	50	29
11/7/2017	107,168	117	490	1,592	50	1,098
11/10/2017	107,237	69	516	1,971	50	878
11/14/2017	107,327	90	546	1,314	45	813
11/21/2017	107,496	169	562	1,394	50	1,572
11/28/2017	107,594	98	575	1,581	50	1,016
12/5/2017	107,758	164	634	1,509	50	2,004
12/8/2017	107,828	70	645	1,537	50	870
12/12/2017	107,925	97	629	1,458	50	1,121
12/19/2017	108,092	167	742	1,449	50	2,277
12/22/2017	108,163	71	758	1,475	50	989
12/26/2017	108,262	99	692	1,420	53	1,259
Fourth Quarter 2017 Totals	**108,262**	**1,445**				**16,087**
Cumulative Totals	**107,925**	--	--	--	--	**3,518,849**

Notes:

[a] The total mass removed is based on influent FID or PID readings, hours of operation, and flow rate.

-- = not applicable or not available

FID = flame ionization detector

in. H_2O = inches of water

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

TPH-g = total petroleum hydrocarbons quantified as gasoline (C4-C12)

Table 3. Remediation Well Vapor Concentrations

SFPP Norwalk Pump Station, Norwalk, California

Remediation Area	Remediation Well ID	Remediation Well Function	11/10/2017 (ppmv as Hexane)[a]
South-Central	MW-SF-1	SVE	112
	MW-SF-2	SVE; TFE	62
	MW-SF-3	SVE; TFE	486
	MW-SF-4	SVE	0
	MW-SF-5	SVE	58
	MW-SF-6	SVE; TFE	326
	MW-SF-9	SVE	50
	MW-SF-10	SVE	20
	MW-SF-11	SVE; TFE	20
	MW-SF-12	SVE; TFE	150
	MW-SF-13	SVE; TFE	54
	MW-SF-14	SVE; TFE	74
	MW-SF-15	SVE; TFE	104
	MW-SF-16	SVE; TFE	36
	MW-SF-17	SVE; TFE	--
	GMW-9	SVE; TFE	0
	GMW-10	SVE	810
	GMW-22	SVE; TFE	0
	GMW-24	SVE; TFE	116
	GMW-25	SVE; GWE	116
	GWR-3	SVE; GWE	348
	VEW-1	SVE	--
	VEW-2	SVE	146
	MW-O-1	SVE; TFE	104
	MW-O-2	SVE; TFE	42
	GMW-O-11	SVE; TFE	1,104
	GMW-O-12	SVE	184
	GMW-O-20	SVE; TFE	5,000
	GMW-O-23	SVE; TFE	306
	MW-18 (MID)	SVE	394
	HW-1	SVE	672
	HW-2	SVE	406
Southeastern	GMW-36	SVE; TFE	3,082
	GMW-O-15	SVE; TFE	3,082
	GMW-O-18	SVE; TFE	3,082

Notes:

[a] Vapor readings measured in the field with an Eagle 2 photoionization detector (PID) calibrated using

-- = not applicable or not available

GWE = groundwater extraction

ppmv = parts per million by volume

SVE = soil vapor extraction

TFE = total fluids extraction

Table 4. Extracted Vapor Analytical Results[a]

SFPP Norwalk Pump Station, Norwalk, California

	ASTM D-1946			EPA TO-3		SCAQMD 25.1	EPA TO-15 (VOCs)[b]				
Date Sampled	Methane (%v)	Carbon Dioxide (%v)	Oxygen and Argon (%v)	TPH-g (ppmv)	TVOC (ppmv)	TGNMOC (ppmv)	Benzene (ppbv)	Ethylbenzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	MTBE (ppbv)
8/3/2007	<0.5	<0.5	22.0	63	---	---	650	220	1,100	1,420	55
9/5/2007	<0.5	<0.5	22.0	9	---	---	32	48	140	320	18
10/2/2007	<0.5	<0.5	21.9	27	---	---	250	75	430	610	20
11/2/2007	<0.5	<0.5	22.1	5	---	---	40	10	74	95	7
2/1/2008	<0.5	<0.5	21.8	100	---	---	830	260	2,200	1,850	<50
3/4/2008	<0.5	<0.5	21.7	50	---	---	380	98	570	1,250	36
4/8/2008	<0.5	<0.5	22.2	69	---	---	290	110	480	1,040	41
5/23/2008	<0.5	<0.5	21.8	14	---	---	180	24	190	280	23
6/3/2008	<0.5	<0.5	21.7	30	---	---	380	42	400	330	70
7/2/2008	<0.5	<0.5	21.4	49	---	---	32	6	34	45	10
8/19/2008	<0.5	1.7	20.8	50	---	---	390	63	230	450	40
9/5/2008	<0.5	2.0	21.2	22	---	---	130	39	130	340	42
10/7/2008	<0.5	1.43	21.4	10	---	---	41	15	54	181	6.8
11/4/2008	<0.5	2.08	21.1	7.5	---	---	31	47	190	242	<2.0
3/6/2009	<0.5	<0.5	22.0	83	---	---	1,900	180	990	770	240
4/17/2009	<0.5	<0.5	22.2	3.1	---	---	140	8	37	68	26
5/29/2009	<0.5	1.08	21.0	130	---	---	1,700	640	3,700	3,100	100
8/18/2009	<0.5	0.78	21.7	28	---	---	380	37	290	310	33
8/25/2009	<0.5	0.87	20.6	37	---	---	500	44	320	293	20
9/18/2009	<0.5	0.37	21.6	11	---	---	75	11	39	107	3
10/29/2009	<0.5	1.80	18.2	77	---	---	350	45	250	440	4
11/25/2009	<0.5	<0.5	21.1	14	---	---	110	12	110	164	11
12/15/2009	<0.5	<0.5	21.7	7	---	---	28	3	20	47	<3.2
2/26/2010	<0.5	0.4	21.2	20	---	---	300	18	220	260	21
3/26/2010	<0.5	1.0	20.2	18	---	---	380	20	110	90	5
5/4/2010	<0.5	0.4	21.4	13	---	---	100	42	170	222	3
6/29/2010	<0.5	0.4	21.3	9	---	---	74	13	66	82	<5.0
8/3/2010	<0.5	0.6	20.4	29	---	---	210	13	64	85	9
8/31/2010	0.0039[c]	<0.5	21.4	11	---	---	72	12	66	87	8
9/14/2010	<0.5	<0.5	21.6	6	---	---	63	15	57	84	<3.2
11/2/2010	--	--	--	11	---	---	140	<10	31	28	<10
11/17/2010	0.00075	0.4	22.0	--	---	---	--	--	--	--	--
12/28/2010	0.0052	0.27	22.0	16	---	---	160	37	230	324	4.5
1/14/2011	0.016	0.20	22.0	68	---	---	340	34	89	183	<10
2/8/2011	0.026	0.24	21.0	210	---	---	3,000	1,700	11,000	7,400	110
3/29/2011	0.013	0.13	20.0	5	---	---	170	15	18	41.5	<2.5
4/26/2011	0.0011	0.079	20.0	1.9	---	---	16	2.4	8.8	7.7	<1.2
5/17/2011	0.021	0.65	22.0	90	---	---	2,600	140	2,200	1,100	220
6/17/2011	0.001	0.20	22.0	3	---	---	59	8.1	31	56	<0.25
7/19/2011	0.0056	0.49	22.0	80	---	---	1,800	130	2,200	1,000	<31
8/16/2011	0.0026	0.31	22.0	140	---	---	3,000	600	4,000	2,330	490
9/20/2011	--	--	--	100	---	---	2,100	740.0	2,700	2,040	660
11/22/2011	0.070	0.70	20.0	11	---	---	150	12.0	67	35	<5.0
12/20/2011	0.020	0.34	22.0	0	---	---	110	<25	260	216	<25
1/10/2012	0.010	0.66	20.0	11	---	---	150	14	86	160	<12
2/28/2012	0.0067	0.90	20.0	27	---	---	140	42	140	224	<25
3/13/2012	0.0044	0.71	20.0	27	---	---	440	38	450	241	<25
4/27/2012	0.0290	0.22	21.0	39	---	---	540	42	630	299	<25
5/22/2012	0.0100	0.31	20.0	65	---	---	590	350	770	2,070	<12
6/19/2012	0.0028	0.41	21.0	17	---	---	130	26	150	162	<12
7/27/2012	0.0059	0.40	21.0	13	---	---	46	<5	33	78	<5
8/30/2012	0.0049	0.56	21.0	69	---	---	150	<25	66	194	<25
9/25/2012	0.0073	0.80	21.0	57	---	---	190	19	120	283	<2.5
10/30/2012	0.0099	0.96	21.0	50	---	---	380	<50	230	130	<50
12/11/2012	0.0074	0.84	21.0	53	---	---	130	17	110	173	<5.0

Table 4. Extracted Vapor Analytical Results[a]

SFPP Norwalk Pump Station, Norwalk, California

	ASTM D-1946			EPA TO-3		SCAQMD 25.1	EPA TO-15 (VOCs)[b]				
Date Sampled	Methane (%v)	Carbon Dioxide (%v)	Oxygen and Argon (%v)	TPH-g (ppmv)	TVOC (ppmv)	TGNMOC (ppmv)	Benzene (ppbv)	Ethylbenzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	MTBE (ppbv)
1/29/2013	0.0028	0.29	22.0	1.4	---	---	8.7	<1.2	9.4	9.6	<1.2
2/12/2013	0.0057	0.88	21.0	60	---	---	500	<50	440	400	<50
3/19/2013	0.0058	0.80	21.0	77	---	---	560	66	490	520	<40
4/16/2013	0.0079	0.74	21.0	53	---	---	430	29	240	193	<25
5/14/2013	0.017	1.6	19	280	---	---	1,700	190	1,800	840	<12
6/28/2013	0.0068	<0.010	21	22	---	---	190	<25	130	131	<25
SVE system down for repair from July 16, 2013, to September 17, 2013.											
9/20/2013	0.014	1	21	590	---	---	4,200	520	3,600	2,830	<40
10/15/2013	0.011	0.68	21	410	---	---	3,500	360	2,800	1,970	<20
11/12/2013	0.012	0.66	21	430	---	---	2,900	440	2,600	1,930	<15
12/10/2013	0.013	0.92	21	910	---	---	8,400	920	7,200	5,500	<50
1/17/2014	0.0077	0.57	21	350	---	---	6,600	6,800	8,200	23,300	3,000
2/11/2014	0.011	0.60	21	640	---	---	6,600	570	6,000	3,800	<100
3/21/2014	0.0050	0.40	21	390	---	---	4,500	290	4,000	1,930	<50
4/21/2014	0.011	0.65	21	700	---	---	6,900	370	6,900	3,400	<40
SVE system down for repair from April 29, 2014 to May 13, 2014.											
5/27/2014	0.011	0.56	21	530	---	---	6,600	570	8,900	3,820	<50
6/13/2014	0.0076	0.49	21	780	---	---	10,000	1,200	15,000	7,100	<80
SVE system down for repair and permit modification from July 1, 2014 to March 27, 2015.											
3/31/2015	0.090	1.3	20	1,400	---	1,300	12,000	1,000	11,000	7,400	<200
4/7/2015	0.014	0.56	21	---	---	710	8,200	8,200	610	3,260	<160
5/5/2015	---	---	---	---	---	760	6,100	1,100	9,600	7,200	<140
6/30/2015	0.0065	0.37	21	---	---	270	3,100	380	3,800	2,820	<160
7/14/2015	0.0094	0.62	21	---	---	650	7,000	950	7,900	6,100	<200
8/4/2015	0.0053	0.49	21	---	---	560	6,200	710	7,700	4,800	<0.097
8/17/2015[c]	---	---	---	---	---	470	4,800	500	5,400	3,600	<0.099
8/17/2015[c]	---	---	---	---	---	470	5,000	520	5,800	3,870	<0.100
8/17/2015[c]	---	---	---	---	---	480	5,100	580	6,100	4,000	<0.097
8/17/2015[c]	---	---	---	---	---	480	5,200	580	6,300	4,100	<0.099
9/1/2015[c]	---	---	---	---	---	670	7,000	850	8,700	6,900	<0.097
9/1/2015[c]	---	---	---	---	---	930	12,000	1,500	14,000	11,400	<0.140
9/1/2015[c]	---	---	---	---	---	890	12,000	2,300	20,000	14,300	<0.140
10/6/2015	0.0067	0.43	21	---	---	960	14,000	3,100	25,000	15,900	<200
11/10/2015	0.0028	0.30	21	---	860	---	9,100	1,800	15,000	9,400	<97
12/10/2016	0.004	0.41	21	---	580	---	6,400	1,200	10,000	7,600	<120
1/4/2016[c]	0.0059	0.27	22	---	750	---	9,600	2,400	20,000	13,500	<220
2/4/2016[c]	0.0038	0.58	21	---	2,000	---	16,000	2,600	29,000	19,300	<610
3/3/2016[c]	0.004	0.64	21	---	1,200	---	11,000	3,000	27,000	27,500	<130
4/5/2016	0.033	0.49	21	---	400	---	3,900	5,500	7,300	4,600	<63
5/13/2016	0.0034	0.50	21	---	290	---	2,200	300	4,300	810	<23
6/7/2016	0.0065	0.32	21	---	150	---	1,000	25 J	1,100	117 J	<36
7/7/2016	0.014	0.48	21	---	170	---	1,000	220	2,500	1,630	<51
8/2/2016	0.0047	0.54	21	---	260	---	1,900	720	5,000	7,400	<22
9/7/2016	0.0066	0.53	21	---	250	---	1,600	680	3,800	5,000	<21
10/13/2016	0.0096	0.67	21	---	250	---	2,700	680	3,800	5,200	<36
11/1/2016	0.0025	0.62	21	---	260	---	1,600	540	3,800	4,600	<40

Table 4. Extracted Vapor Analytical Results[a]

SFPP Norwalk Pump Station, Norwalk, California

	ASTM D-1946			EPA TO-3		SCAQMD 25.1	EPA TO-15 (VOCs)[b]				
Date Sampled	Methane (%v)	Carbon Dioxide (%v)	Oxygen and Argon (%v)	TPH-g (ppmv)	TVOC (ppmv)	TGNMOC (ppmv)	Benzene (ppbv)	Ethylbenzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	MTBE (ppbv)
SVE system was offline for installation of new RTO from November 1, 2016 to June 6, 2017.											
6/7/2017	0.029	1.1	21	--	190	--	960	220	1,200	1,170	<42
7/13/2017	0.055	1.3	20	---	550	---	220	1,100	6,600	9,900	<44
8/3/2017	0.013	0.85	21	---	340	--	4,200	750	5,600	7,500	<110
9/12/2017	0.0079	0.89	21	--	290	---	3,000	530	4,600	5,500	510
10/13/2017	0.0091	0.85	21	---	280	--	3,400	540	4,100	5,500	830
11/10/2017	0.0064	0.87	21	---	230	---	3,200	320	2,400	3,050	<19
12/8/2017	0.0040	0.77	21	---	250	---	3,600	350	3,000	3,700	<18

Notes:

[a] Influent vapor samples were collected from the manifold conveying soil vapors extracted from the south-central and southeastern areas.

[b] Other detected VOCs are included in the laboratory analytical reports in Appendix A.

[c] Influent vapor samples were collected after dilution before entrance into the SVE combustion chamber.

%v = percent by volume

<0.5 = not detected at or above the laboratory reporting limit shown

ASTM = ASTM International

EPA = U.S. Environmental Protection Agency

J = Resulting analyte concentration is between the reporting limit and the method detection limit.

MTBE = methyl tertiary butyl ether

ppbv = parts per billion by volume

ppmv = parts per million by volume

SCAQMD = South Coast Air Quality Management District

TGNMOC = total gaseous non-methane organic carbon

TPH-g = total petroleum hydrocarbons quantified as gasoline (C4-C12)

TVOC = total volatile organic compound

VOC = volatile organic compound

Table 5. Groundwater Remediation System Operation Summary

SFPP Norwalk Pump Station, Norwalk, California

System Inspection Date	Groundwater Removed from the South-Central and Southeastern Areas (gallons)	Groundwater Removed from the West Side Barrier Area (gallons)	Total Groundwater Removed (gallons)	Influent TPH-total (TPH-g, TPH-d, TPH-o) Concentration (µg/L)	Estimated Hydrocarbon Mass Removed from the South-Central, Southeastern, and West Side Barrier Areas (pounds)[a]	Product Recovery (gallons)
1996 Totals	1,802,103	0	1,802,103	--	273	4,995
1997 Totals	7,031,533	0	7,031,533	--		2,204
1998 Totals	4,064,700	0	4,064,700	--		856
1999 Totals	3,891,600	2,338,129	6,229,729	--	385	450
2000 Totals	2,290,580	2,454,971	4,745,551	--	295	230
2001 Totals	1,401,473	1,131,700	2,533,173	--	229	0
2002 Totals	1,452,229	2,931,167	4,383,396	--	110	0
2003 Totals	1,607,095	2,281,956	3,889,051	--	65	10
2004 Totals	1,695,361	3,854,470	5,549,831	--	229	0
2005 Totals	1,537,925	4,244,674	5,782,599	--	273	0
2006 Totals	1,699,567	5,089,615	6,789,182	--	684	83
2007 Totals	3,368,481	2,167,724	5,536,205	--		89
2008 Totals[b]	4,283,026	405,954	4,688,980	--	520	0
2009 Totals	2,309,627	0	2,309,627	--	105	0
2010 Totals[c]	3,342,227	2,292	3,344,519	--	363	0
2011 Totals	5,530,317	0	5,530,317	--	585	0
2012 Totals	7,368,318	0	7,368,318	--	699	0
2013 Totals	6,439,733	0	6,439,733	--	568	2
2014 Totals	3,410,427	0	3,410,427	--	2,236	2,335
2015 Totals	4,817,906	0	4,817,906	--	5,959	2,928
2016 Totals	2,428,279	0	2,428,279	--	4,506	242
First Quarter 2017 Totals	1,224,622	0	1,224,622	--	9.6	2
Second Quarter 2017 Totals	800,613	0	800,613	--	73	0
7/1/2017	15,512	0	15,512	68,000	8.8	0
7/2/2017	14,862	0	14,862	68,000	8.4	0
7/3/2017	14,686	0	14,686	68,000	8.3	0
7/4/2017	14,792	0	14,792	68,000	8.4	0
7/5/2017	15,093	0	15,093	68,000	8.6	0
7/6/2017	15,329	0	15,329	68,000	8.7	0
7/7/2017	15,195	0	15,195	68,000	8.6	0
7/8/2017	14,947	0	14,947	68,000	8.5	0
7/9/2017	5,053	0	5,053	68,000	2.9	0
7/10/2017	9,058	0	9,058	68,000	5.1	0
7/11/2017	8,921	0	8,921	68,000	5.1	0
7/12/2017	8,980	0	8,980	68,000	5.1	0
7/13/2017	8,816	0	8,816	68,000	5.0	0

Table 5. Groundwater Remediation System Operation Summary

SFPP Norwalk Pump Station, Norwalk, California

System Inspection Date	Groundwater Removed from the South-Central and Southeastern Areas (gallons)	Groundwater Removed from the West Side Barrier Area (gallons)	Total Groundwater Removed (gallons)	Influent TPH-total (TPH-g, TPH-d, TPH-o) Concentration (µg/L)	Estimated Hydrocarbon Mass Removed from the South-Central, Southeastern, and West Side Barrier Areas (pounds)[a]	Product Recovery (gallons)
7/14/2017	8,612	0	8,612	68,000	4.9	0
7/15/2017	8,565	0	8,565	68,000	4.9	0
7/16/2017	8,546	0	8,546	68,000	4.8	0
7/17/2017	8,297	0	8,297	68,000	4.7	0
7/18/2017	8,440	0	8,440	68,000	4.8	0
7/19/2017	8,307	0	8,307	68,000	4.7	0
7/20/2017	8,743	0	8,743	600	0.04	0
7/21/2017	8,529	0	8,529	600	0.04	0
7/22/2017	8,310	0	8,310	600	0.04	0
7/23/2017	8,339	0	8,339	600	0.04	0
7/24/2017	8,169	0	8,169	600	0.04	0
7/25/2017	4,287	0	4,287	600	0.02	0
7/26/2017	2,995	0	2,995	600	0.01	0
7/27/2017	8,010	0	8,010	600	0.04	0
7/28/2017	7,843	0	7,843	600	0.04	0
7/29/2017	7,504	0	7,504	600	0.04	0
7/30/2017	7,772	0	7,772	600	0.04	0
7/31/2017	7,156	0	7,156	600	0.04	0
8/1/2017	14,521	0	14,521	600	0.07	0
8/2/2017	6,632	0	6,632	600	0.03	0
8/3/2017	7,315	0	7,315	760	0.05	0
8/4/2017	8,474	0	8,474	760	0.05	0
8/5/2017	13,318	0	13,318	760	0.08	0
8/6/2017	13,040	0	13,040	760	0.08	0
8/7/2017	12,819	0	12,819	760	0.08	0
8/8/2017	11,306	0	11,306	760	0.07	0
8/9/2017	9,612	0	9,612	760	0.06	0
8/10/2017	10,403	0	10,403	760	0.07	0
8/11/2017	11,839	0	11,839	760	0.07	0
8/12/2017	11,938	0	11,938	760	0.08	0
8/13/2017	11,905	0	11,905	760	0.08	0
8/14/2017	13,684	0	13,684	760	0.09	0
8/15/2017	13,908	0	13,908	760	0.09	0
8/16/2017	16,595	0	16,595	760	0.11	0
8/17/2017	15,803	0	15,803	760	0.10	0
8/18/2017	15,935	0	15,935	760	0.10	0

Table 5. Groundwater Remediation System Operation Summary

SFPP Norwalk Pump Station, Norwalk, California

System Inspection Date	Groundwater Removed from the South-Central and Southeastern Areas (gallons)	Groundwater Removed from the West Side Barrier Area (gallons)	Total Groundwater Removed (gallons)	Influent TPH-total (TPH-g, TPH-d, TPH-o) Concentration (µg/L)	Estimated Hydrocarbon Mass Removed from the South-Central, Southeastern, and West Side Barrier Areas (pounds)[a]	Product Recovery (gallons)
8/19/2017	14,964	0	14,964	760	0.09	0
8/20/2017	15,713	0	15,713	760	0.10	0
8/21/2017	15,373	0	15,373	760	0.10	0
8/22/2017	15,461	0	15,461	760	0.10	0
8/23/2017	15,946	0	15,946	760	0.10	0
8/24/2017	15,862	0	15,862	760	0.10	0
8/25/2017	15,526	0	15,526	760	0.10	0
8/26/2017	1,773	0	1,773	760	0.01	0
8/27/2017	2,200	0	2,200	760	0.01	0
8/28/2017	1,552	0	1,552	760	0.01	0
8/29/2017	1,324	0	1,324	760	0.01	0
8/30/2017	1,028	0	1,028	760	0.01	0
8/31/2017	1,016	0	1,016	760	0.01	0
9/1/2017	1,008	0	1,008	760	0.01	0
9/2/2017	628	0	628	760	0.00	0
9/3/2017	784	0	784	760	0.00	0
9/4/2017	664	0	664	760	0.00	0
9/5/2017	688	0	688	760	0.00	0
9/6/2017	600	0	600	760	0.00	0
9/7/2017	740	0	740	760	0.00	0
9/8/2017	1,184	0	1,184	760	0.01	0
9/9/2017	1,088	0	1,088	760	0.01	0
9/10/2017	1,116	0	1,116	760	0.01	0
9/11/2017	1,020	0	1,020	760	0.01	0
9/12/2017	896	0	896	4,600	0.03	0
9/13/2017	1,064	0	1,064	4,600	0.04	0
9/14/2017	1,132	0	1,132	4,600	0.04	0
9/15/2017	876	0	876	4,600	0.03	0
9/16/2017	1,052	0	1,052	4,600	0.04	0
9/17/2017	640	0	640	4,600	0.02	0
9/18/2017	952	0	952	4,600	0.04	0
9/19/2017	1,512	0	1,512	4,600	0.06	0
9/20/2017	1,296	0	1,296	4,600	0.05	0
9/21/2017	1,616	0	1,616	4,600	0.06	0
9/22/2017	876	0	876	4,600	0.03	0
9/23/2017	1,656	0	1,656	4,600	0.06	0

Table 5. Groundwater Remediation System Operation Summary

SFPP Norwalk Pump Station, Norwalk, California

System Inspection Date	Groundwater Removed from the South-Central and Southeastern Areas (gallons)	Groundwater Removed from the West Side Barrier Area (gallons)	Total Groundwater Removed (gallons)	Influent TPH-total (TPH-g, TPH-d, TPH-o) Concentration (µg/L)	Estimated Hydrocarbon Mass Removed from the South-Central, Southeastern, and West Side Barrier Areas (pounds)[a]	Product Recovery (gallons)
9/24/2017	1,940	0	1,940	4,600	0.07	0
9/25/2017	1,916	0	1,916	4,600	0.07	0
9/26/2017	480	0	480	4,600	0.02	0
9/27/2017	0	0	0	4,600	0.00	0
9/28/2017	0	0	0	4,600	0.00	0
9/29/2017	0	0	0	4,600	0.00	0
9/30/2017	0	0	0	4,600	0.00	0
Third Quarter 2017 Totals	**663,877**	**0**	**663,877**	--	**123**	**0**
10/1/2017	0	0	0	4,600	0.00	0
10/2/2017	0	0	0	4,600	0.00	0
10/3/2017	0	0	0	4,600	0.00	0
10/4/2017	0	0	0	4,600	0.00	0
10/5/2017	0	0	0	4,600	0.00	0
10/6/2017	0	0	0	4,600	0.00	0
10/7/2017	0	0	0	4,600	0.00	0
10/8/2017	0	0	0	4,600	0.00	0
10/9/2017	16,767	0	16,767	4,600	0.64	0
10/10/2017	17,526	0	17,526	2,300	0.34	0
10/11/2017	12,683	0	12,683	2,300	0.24	0
10/12/2017	11,291	0	11,291	2,300	0.22	0
10/13/2017	16,283	0	16,283	2,300	0.31	0
10/14/2017	18,383	0	18,383	2,300	0.35	0
10/15/2017	10,031	0	10,031	2,300	0.19	0
10/16/2017	3,313	0	3,313	2,300	0.06	0
10/17/2017	17,550	0	17,550	2,300	0.34	0
10/18/2017	989	0	989	2,300	0.02	0
10/19/2017	5,051	0	5,051	2,300	0.10	0
10/20/2017	6,874	0	6,874	2,300	0.13	0
10/21/2017	5,624	0	5,624	2,300	0.11	0
10/22/2017	6,666	0	6,666	2,300	0.13	0
10/23/2017	9,481	0	9,481	2,300	0.18	0
10/24/2017	5,384	0	5,384	2,300	0.10	0
10/25/2017	8,954	0	8,954	2,300	0.17	0
10/26/2017	6,794	0	6,794	2,300	0.13	0
10/27/2017	7,006	0	7,006	2,300	0.13	0
10/28/2017	7,237	0	7,237	2,300	0.14	0

Table 5. Groundwater Remediation System Operation Summary

SFPP Norwalk Pump Station, Norwalk, California

System Inspection Date	Groundwater Removed from the South-Central and Southeastern Areas (gallons)	Groundwater Removed from the West Side Barrier Area (gallons)	Total Groundwater Removed (gallons)	Influent TPH-total (TPH-g, TPH-d, TPH-o) Concentration (µg/L)	Estimated Hydrocarbon Mass Removed from the South-Central, Southeastern, and West Side Barrier Areas (pounds)[a]	Product Recovery (gallons)
10/29/2017	7,496	0	7,496	2,300	0.14	0
10/30/2017	7,266	0	7,266	2,300	0.14	0
10/31/2017	7,413	0	7,413	2,300	0.14	0
11/1/2017	7,370	0	7,370	2,300	0.14	0
11/2/2017	10,338	0	10,338	2,300	0.20	0
11/3/2017	14,407	0	14,407	2,300	0.28	0
11/4/2017	14,148	0	14,148	2,300	0.27	0
11/5/2017	13,132	0	13,132	2,300	0.25	0
11/6/2017	12,663	0	12,663	2,300	0.24	0
11/7/2017	11,576	0	11,576	2,300	0.22	0
11/8/2017	14,444	0	14,444	33,000	3.97	0
11/9/2017	11,260	0	11,260	33,000	3.10	0
11/10/2017	8,796	0	8,796	33,000	2.42	0
11/11/2017	8,924	0	8,924	33,000	2.45	0
11/12/2017	8,576	0	8,576	33,000	2.36	0
11/13/2017	8,840	0	8,840	33,000	2.43	0
11/14/2017	9,842	0	9,842	33,000	2.71	0
11/15/2017	10,626	0	10,626	33,000	2.92	0
11/16/2017	10,192	0	10,192	33,000	2.80	0
11/17/2017	10,572	0	10,572	33,000	2.91	0
11/18/2017	9,948	0	9,948	33,000	2.73	0
11/19/2017	10,020	0	10,020	33,000	2.75	0
11/20/2017	10,000	0	10,000	33,000	2.75	0
11/21/2017	12,152	0	12,152	33,000	3.34	0
11/22/2017	14,096	0	14,096	33,000	3.88	0
11/23/2017	15,678	0	15,678	33,000	4.31	0
11/24/2017	15,422	0	15,422	33,000	4.24	0
11/25/2017	10,102	0	10,102	33,000	2.78	0
11/26/2017	2,226	0	2,226	33,000	0.61	0
11/27/2017	3,092	0	3,092	33,000	0.85	0
11/28/2017	9,440	0	9,440	33,000	2.60	0
11/29/2017	11,602	0	11,602	33,000	3.19	0
11/30/2017	11,186	0	11,186	33,000	3.08	0
12/1/2017	10,892	0	10,892	33,000	2.99	0
12/2/2017	10,232	0	10,232	33,000	2.81	0
12/3/2017	9,872	0	9,872	33,000	2.71	0

Table 5. Groundwater Remediation System Operation Summary

SFPP Norwalk Pump Station, Norwalk, California

System Inspection Date	Groundwater Removed from the South-Central and Southeastern Areas (gallons)	Groundwater Removed from the West Side Barrier Area (gallons)	Total Groundwater Removed (gallons)	Influent TPH-total (TPH-g, TPH-d, TPH-o) Concentration (µg/L)	Estimated Hydrocarbon Mass Removed from the South-Central, Southeastern, and West Side Barrier Areas (pounds)[a]	Product Recovery (gallons)
12/4/2017	10,054	0	10,054	33,000	2.76	0
12/5/2017	9,764	0	9,764	33,000	2.68	0
12/6/2017	9,298	0	9,298	33,000	2.56	0
12/7/2017	8,996	0	8,996	33,000	2.47	0
12/8/2017	9,500	0	9,500	33,000	2.61	0
12/9/2017	9,010	0	9,010	33,000	2.48	0
12/10/2017	9,350	0	9,350	33,000	2.57	0
12/11/2017	9,214	0	9,214	33,000	2.53	0
12/12/2017	8,986	0	8,986	33,000	2.47	0
12/13/2017	6,088	0	6,088	33,000	1.67	0
12/14/2017	5,680	0	5,680	33,000	1.56	0
12/15/2017	5,472	0	5,472	4,200	0.19	0
12/16/2017	6,216	0	6,216	4,200	0.22	0
12/17/2017	5,276	0	5,276	4,200	0.18	0
12/18/2017	5,994	0	5,994	4,200	0.21	0
12/19/2017	8,186	0	8,186	4,200	0.29	0
12/20/2017	10,878	0	10,878	4,200	0.38	0
12/21/2017	10,850	0	10,850	4,200	0.38	0
12/22/2017	9,752	0	9,752	4,200	0.34	0
12/23/2017	10,108	0	10,108	4,200	0.35	0
12/24/2017	9,664	0	9,664	4,200	0.34	0
12/25/2017	9,560	0	9,560	4,200	0.33	0
12/26/2017	9,016	0	9,016	4,200	0.32	0
12/27/2017	9,556	0	9,556	4,200	0.33	0
12/28/2017	9,454	0	9,454	4,200	0.33	0

Table 5. Groundwater Remediation System Operation Summary

SFPP Norwalk Pump Station, Norwalk, California

System Inspection Date	Groundwater Removed from the South-Central and Southeastern Areas (gallons)	Groundwater Removed from the West Side Barrier Area (gallons)	Total Groundwater Removed (gallons)	Influent TPH-total (TPH-g, TPH-d, TPH-o) Concentration (µg/L)	Estimated Hydrocarbon Mass Removed from the South-Central, Southeastern, and West Side Barrier Areas (pounds)[a]	Product Recovery (gallons)
12/29/2017	9,402	0	9,402	4,200	0.33	0
12/30/2017	9,568	0	9,568	4,200	0.33	0
12/31/2017	9,566	0	9,566	4,200	0.33	0
Fourth Quarter 2017 Totals	**812,187**	**0**	**812,187**	**--**	**111**	**0**
Cumulative Total	**75,273,806**	**FALSE**	**102,176,458**	**--**	**18,403**	**14,426**

Notes:

[a] Estimated hydrocarbon mass removed (pounds) between 1996 and 2005 is based on concentrations of dissolved BTEX and MTBE in the groundwater influent and volume of groundwater extracted. Estimated hydrocarbon mass removed (pounds) between 2006 and 2011 is based on concentrations of TPH-g and TPH-fp in the groundwater influent and volume of groundwater extracted. Estimated hydrocarbon mass removed (pounds) between 2012 and 2015 is based on concentrations of dissolved TPH-total in the groundwater influent and volume of extracted groundwater.

[b] Groundwater removal in the West Side Barrier area was discontinued in August 2008.

[c] Groundwater extraction from West Side Barrier area wells BW-3 and BW-6 was resumed on May 14, 2010, to evaluate the efficacy of blending water with lower selenium concentrations from these wells with groundwater extracted from the south-central and southeastern areas. Groundwater removal from the West Side Barrier area was discontinued again on June 22, 2010.

-- = not applicable

µg/L = micrograms per liter

BTEX = benzene, toluene, ethylbenzene, and xylenes

MTBE = methyl tertiary butyl ether

TPH-d = total petroleum hydrocarbons quantified as diesel (C13-C22)

TPH-fp = total petroleum hydrocarbons quantified as fuel product (C7-C28)

TPH-g = total petroleum hydrocarbons quantified as gasoline (C4-C12)

TPH-o = total petroleum hydrocarbons quantified as oil (C23-C36)

TPH-total = total petroleum hydrocarbons quantified as gasoline, diesel, and oil (C4-C36)

Table 6. Extracted Groundwater Analytical Results[a]

SFPP Norwalk Pump Station, Norwalk, California

	EPA 8015M					EPA 8260B Volatile Organic Compounds (VOCs)[b]								
Date Sampled	TPH-g (µg/L)	TPH-d (µg/L)	TPH-o (µg/L)	TPH-total (µg/L)	TPH-fp (µg/L)	Benzene (µg/L)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
3/6/1996	--	--	--	--	--	2,600	790	7,200	9,100	---	--	--	--	--
7/23/1998	--	--	--	--	--	750	<10	360	300	---	--	--	--	--
8/27/1998	--	--	--	--	--	1,000	71	530	800	---	--	--	--	--
10/1/1998	--	--	--	--	--	1,200	<10	1,400	1,680	---	--	--	--	--
11/19/1998	--	--	--	--	--	1,600	140	2,600	2,900	---	--	--	--	--
12/17/1998	--	--	--	--	--	4,500	380	4,500	3,900	---	--	--	--	--
1/28/1999	--	--	--	--	--	520	79	660	840	---	--	--	--	--
3/25/1999	--	--	--	--	--	540	160	1,800	4,100	---	--	--	--	--
4/2/1999	--	--	--	--	--	620	76	520	1,200	---	--	--	--	--
4/15/1999	--	--	--	--	--	1,400	99	800	1,480	---	--	--	--	--
5/6/1999	--	--	--	--	--	1,340	180	1,240	1,730	---	--	--	--	--
6/3/1999	--	--	--	--	--	3,410	343	2,240	2,770	---	--	--	--	--
8/5/1999	--	--	--	--	--	3,200	780	5,400	5,200	---	--	--	--	--
9/23/1999	--	--	--	--	--	2,700	130	1,200	720	---	--	--	--	--
9/30/1999	--	--	--	--	--	1,300	77	480	560	---	--	--	--	--
10/13/1999	--	--	--	--	--	1,400	100	660	720	---	--	--	--	--
11/4/1999	--	--	--	--	--	3,000	500	5,600	4,500	---	--	--	--	--
12/9/1999	--	--	--	--	--	4,500	280	1,400	1,480	---	--	--	--	--
1/13/2000	--	--	--	--	--	9,000	7,600	14,000	44,000	---	--	--	--	--
2/11/2000	--	--	--	--	--	2,300	<100	1,200	1,240	3,100	--	--	--	--
3/10/2000	--	--	--	--	--	380	20	110	430	740	--	--	--	--
4/13/2000	--	--	--	--	--	1,300	550	450	920	970	--	--	--	--
6/2/2000	--	--	--	--	--	840	56	240	980	920	--	--	--	--
6/15/2000	--	--	--	--	--	1,600	82	900	990	2,700	--	--	--	--
8/3/2000	--	--	--	--	--	1,900	410	3,500	4,400	2,700	--	--	--	--
8/28/2000	--	--	--	--	--	620	33	200	380	1,800	--	--	--	--
9/20/2000	--	--	--	--	--	460	<20	73	255	1,300	--	--	--	--
10/25/2000	--	--	--	--	--	20	<20	<20	216	6,700	--	--	--	--
11/15/2000	--	--	--	--	--	560	24	210	490	3,700	--	--	--	--
3/22/2001	--	--	--	--	--	3,800	360	3,900	3,160	5,500	--	--	--	--
4/30/2001	--	--	--	--	--	4,100	710	5,800	5,600	8,300	--	--	--	--
5/23/2001	--	--	--	--	--	3,400	160	1,100	1,070	3,900	--	--	--	--
6/22/2001	--	--	--	--	--	1,700	85	680	680	2,200	--	--	--	--
7/16/2001	--	--	--	--	--	2,300	130	1,100	1,350	2,100	--	--	--	--
9/5/2001	--	--	--	--	--	1,500	170	1,200	1,890	1,100	--	--	--	--

Table 6. Extracted Groundwater Analytical Results[a]

SFPP Norwalk Pump Station, Norwalk, California

	EPA 8015M					EPA 8260B Volatile Organic Compounds (VOCs)[b]								
Date Sampled	TPH-g (µg/L)	TPH-d (µg/L)	TPH-o (µg/L)	TPH-total (µg/L)	TPH-fp (µg/L)	Benzene (µg/L)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
1/23/2002	--	--	--	--	--	<0.5	<1	<1	<2	2	--	--	--	--
2/28/2002	--	--	--	--	--	<0.5	<1	<1	<2	96	--	--	--	--
3/25/2002	--	--	--	--	--	<0.5	<1	<1	<2	87	--	--	--	--
5/1/2002	--	--	--	--	--	1,900	31	190	480	1,100	--	--	--	--
5/17/2002	--	--	--	--	--	1,400	50	180	970	1,000	--	--	--	--
6/4/2002	--	--	--	--	--	2,700	57	280	530	1,300	--	--	--	--
7/18/2002	--	--	--	--	--	3,800	66	530	1,160	330	--	--	--	--
8/8/2002	--	--	--	--	--	4,800	49	610	1,290	460	--	--	--	--
9/3/2002	--	--	--	--	--	260	<5	5	71	600	--	--	--	--
10/18/2002	--	--	--	--	--	1,200	70	490	820	570	--	--	--	--
11/26/2002	--	--	--	--	--	1,300	68	130	590	860	--	--	--	--
12/27/2002	--	--	--	--	--	1	<1	<1	<2	58	--	--	--	--
1/30/2003	--	--	--	--	--	<0.5	<1	<1	<2	37	--	--	--	--
2/26/2003	--	--	--	--	--	4	<1	<1	4	140	--	--	--	--
3/17/2003	--	--	--	--	--	2,800	23	170	480	570	--	--	--	--
4/30/2003	--	--	--	--	--	3,700	350	2,200	4,600	490	--	--	--	--
6/13/2003	--	--	--	--	--	1,200	17	120	510	740	--	--	--	--
6/19/2003	--	--	--	--	--	680	<10	35	239	680	--	--	--	--
7/3/2003	--	--	--	--	--	2,600	160	610	2,290	450	--	--	--	--
7/25/2003	--	--	--	--	--	300	6	3	39	230	--	--	--	--
8/20/2003	--	--	--	--	--	830	19	130	350	290	--	--	--	--
9/11/2003	--	--	--	--	--	270	<10	<10	46	420	--	--	--	--
10/16/2003	--	--	--	--	--	380	<10	<10	121	490	--	--	--	--
11/17/2003	--	--	--	--	--	93	6	22	106	200	--	--	--	--
12/19/2003	--	--	--	--	--	300	27	110	1,010	62	--	--	--	--
1/30/2004	--	--	--	--	--	700	140	740	1,740	22	--	--	--	--
2/17/2004	--	--	--	--	--	300	47	440	1,150	19	--	--	--	--
3/8/2004	--	--	--	--	--	52	<5.0	10	149	23	--	--	--	--
3/21/2004	--	--	--	--	--	420	11	29	318	120	--	--	--	--
6/28/2004	--	--	--	--	--	740	26	46	337	81	--	--	--	--
7/30/2004	--	--	--	--	--	660	18	68	280	87	--	--	--	--
8/27/2004	--	--	--	--	--	1,500	47	140	530	77	--	--	--	--
9/28/2004	--	--	--	--	--	400	10	32	252	64	--	--	--	--
10/15/2004	--	--	--	--	--	950	31	130	316	64	--	--	--	--
11/12/2004	--	--	--	--	--	2,100	1,500	390	15,800	3,000	--	--	--	--
12/10/2004	--	--	--	--	--	700	320	1,100	3,900	110	--	--	--	--

Table 6. Extracted Groundwater Analytical Results[a]

SFPP Norwalk Pump Station, Norwalk, California

	EPA 8015M					EPA 8260B Volatile Organic Compounds (VOCs)[b]								
Date Sampled	TPH-g (µg/L)	TPH-d (µg/L)	TPH-o (µg/L)	TPH-total (µg/L)	TPH-fp (µg/L)	Benzene (µg/L)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
1/28/2005	--	--	--	--	--	460	140	520	2,260	610	--	--	--	--
2/25/2005	--	--	--	--	--	5,700	200	650	1,560	1,300	--	--	--	--
3/22/2005	--	--	--	--	--	<5	<10	<10	26	1,000	--	--	--	--
4/21/2005	--	--	--	--	--	680	8	21	108	420	--	--	--	--
5/20/2005	--	--	--	--	--	6	<5	9	50	<5	--	--	--	--
6/28/2005	--	--	--	--	--	450	80	690	1,030	1,600	--	--	--	--
7/27/2005	--	--	--	--	--	2,000	170	1,700	5,000	1,200	--	--	--	--
8/31/2005	--	--	--	--	--	660	34	320	670	220	--	--	--	--
9/28/2005	--	--	--	--	--	1,800	310	2,800	4,700	360	--	--	--	--
10/26/2005	--	--	--	--	--	940	330	1,800	3,600	530	--	--	--	--
11/30/2005	--	--	--	--	--	900	170	900	2,790	760	--	--	--	--
12/20/2005	--	--	--	--	--	2,500	350	2,600	4,100	2,300	--	--	--	--
7/11/2007	--	--	--	--	--	4,800	130	890	1,040	690	--	--	--	--
8/7/2007	14,000	--	--	--	11,000	5,400	140	1,100	770	540	--	--	--	--
9/25/2007	12,000	--	--	--	30,000	3,400	310	1,600	2,390	540	--	--	--	--
10/16/2007	8,900	--	--	--	8,400	3,400	94	520	660	390	--	--	--	--
11/2/2007	44,000	--	--	--	6,500	3,200	130	860	1,160	570	--	--	--	--
11/30/2007	6,000	--	--	--	5,200	1,800	48	170	490	450	--	--	--	--
12/21/2007	7,200	--	--	--	4,200	2,100	41	170	430	750	--	--	--	--
1/4/2008	4,300	--	--	--	7,200	3,300	49	300	540	620	--	--	--	--
1/18/2008	11,000	--	--	--	2,200	3,600	140	650	850	620	--	--	--	--
2/1/2008	8,700	--	--	--	5,700	3,600	100	440	930	560	--	--	--	--
3/4/2008	7,200	--	--	--	4,900	3,900	120	510	770	620	--	--	--	--
4/8/2008	8,100	--	--	--	10,000	2,800	96	280	580	640	--	--	--	--
5/6/2008	5,300	--	--	--	2,800	2,900	76	190	328	430	--	--	--	--
6/3/2008	8,400	--	--	--	6,800	3,700	110	450	480	320	--	--	--	--
7/2/2008	9,200	--	--	--	4,300[c]	4,500	75	620	650	400	--	--	--	--
8/19/2008	4,000	--	--	--	6,600	2,600	57	76	215	450	--	--	--	--
9/5/2008	160	--	--	--	<500	<12	<25	<25	<25	<25	--	--	--	--
10/7/2008	<100	--	--	--	<500	0.36 J	<1.0	<1.0	1.59	1.7	--	--	--	--
11/4/2008	12,000	--	--	--	660,000	2,500	140	220	760	160	--	--	--	--
12/4/2008	1,300	--	--	--	1,500	600	8.2	28	73	130	--	--	--	--

Table 6. Extracted Groundwater Analytical Results[a]

SFPP Norwalk Pump Station, Norwalk, California

	EPA 8015M					EPA 8260B Volatile Organic Compounds (VOCs)[b]								
Date Sampled	TPH-g (µg/L)	TPH-d (µg/L)	TPH-o (µg/L)	TPH-total (µg/L)	TPH-fp (µg/L)	Benzene (µg/L)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
1/6/2009	1,500	--	--	--	980	560	23	41	110	320	--	--	--	--
3/6/2009	2,500	--	--	--	1,500	1,100	33	51	114	65	--	--	--	--
4/7/2009	3,100	--	--	--	6,900	1,100	36	230	207	210	--	--	--	--
5/13/2009	690	--	--	--	1,500	120	3.2	14	60	24	--	--	--	--
6/12/2009	150	--	--	--	<500	<0.50	<1.0	<1.0	0.71 J	44	--	--	--	--
7/10/2009	4,500	--	--	--	560	1,500	41	68	175	150	--	--	--	--
8/4/2009	2,000	--	--	--	1,000	1,200	16	18	64	100	--	--	--	--
9/1/2009	4,800	--	--	--	3,500	380	45	25	328	5.4 J	--	--	--	--
10/6/2009	3,900	--	--	--	4,600	3,200	21	15	35	82	--	--	--	--
10/27/2009	1,000	--	--	--	<500	520	4	15	10	180	--	--	--	--
11/3/2009	120	--	--	--	<500	2	0.55 J	0.61 J	3	40	--	--	--	--
11/25/2009	5,700	--	--	--	4,000	3,100	26	13	48	88	--	--	--	--
2/16/2010	8,000	--	--	--	5,900	4,700	110	1,300	800	1,800	--	--	--	--
3/9/2010	7,000	--	--	--	5,900	6,600	110	460	550	410	--	--	--	--
4/20/2010	10,000	--	--	--	11,000	6,000	44	230	174	130	--	--	--	--
5/14/2010	8,500	--	--	--	2,100	3,600	67	380	400	210	--	--	--	--
6/25/2010	4,600	--	--	--	2,600	2,200	61	540	380	170	--	--	--	--
7/20/2010	21,000	--	--	--	21,000	3,400	370	3,000	2,550	2,300	--	--	--	--
8/3/2010	3,400	--	--	--	1,500	1,400	17	140	161	390	--	--	--	--
8/10/2010	5,800	--	--	--	3,400	2,600	40	190	169	140	--	--	--	--
9/14/2010	9,400	--	--	--	10,000	4,900	170	1,100	1,340	380	--	--	--	--
10/12/2010	5,700	--	--	--	1,000	2,200	43	140	138	120	--	--	--	--
11/16/2010	1,100	--	--	--	1,600	290	4	15	78	84	--	--	--	--
12/14/2010	7,100	--	--	--	3,200	2,600	76	200	315	340	--	--	--	--
1/14/2011	7,400	--	--	--	3,500	3,700	56	110	220	280	--	--	--	--
2/8/2011	5,600	--	--	--	3,500	2,400	43	110	190	420	--	--	--	--
3/25/2011	3,100	--	--	--	1,200	1,300	51	92	200	300	--	--	--	--
4/26/2011	1,400	--	--	--	1,200	610	5.8	5.7	20	130	--	--	--	--
5/17/2011	3,300	--	--	--	1,700	3,600	82	180	300	240	--	--	--	--
6/21/2011	1,200	--	--	--	720	860	9.6	31	82	190	2,200	6.6	<0.07	<0.1
7/27/2011	14,000	10,000	44J	--	--[d]	2,800	150	490	2,100	350	2,800	27	<0.07	<0.1
8/26/2011	7,400	--	--	--	57,000	1,400	120	480	1,300	270	1,600	16	<0.07	<0.1
9/23/2011	6,400	--	--	--	2,800	2,800	83.0	160	340	300	1,300	22	<0.07	<0.1
10/25/2011	6,000	--	--	--	2,300	3,000	52	93	200	200	970	20	<0.70	<1.0
11/22/2011	5,900	--	--	--	2,000	3,600	62	140	240	300	2,900	26	<0.07	<0.1
12/20/2011	780	--	--	--	2,000	330	8	14	43	160	1,000	18	<0.07	<0.1

Table 6. Extracted Groundwater Analytical Results[a]

SFPP Norwalk Pump Station, Norwalk, California

	EPA 8015M					EPA 8260B Volatile Organic Compounds (VOCs)[b]								
Date Sampled	TPH-g (µg/L)	TPH-d (µg/L)	TPH-o (µg/L)	TPH-total (µg/L)	TPH-fp (µg/L)	Benzene (µg/L)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
1/10/2012	5,300	--	--	--	1,900	3,400	36	70	170	200	960	26	<0.07	<0.1
2/21/2012	4,900	--	--	--	<13	3,400	19	16	48	120	2,200	21	<0.07	<0.1
3/13/2012	6,100	--	--	--	2,100	2,900	43	79	180	120	1,600	23	<0.07	<0.1
4/27/2012	5,100	--	--	--	2,200	3,800	49	61	150	150	500	38	<0.13	<0.12
5/22/2012	6,800	--	--	--	31,000	2,800	49	140	262	150	690	30	<0.13	<0.12
6/19/2012	5,300	--	--	--	36,000	3,200	45	230	200	220	2,800	33	<0.13	<0.12
7/20/2012	5,600	2,400	210	8,200	--	3,000	71	72	510	170	2,700	26	<0.13	<0.12
8/21/2012	3,600	1,100	140	4,900	--	2,400	26	41	80	110	1,500	22	<0.13	<0.12
9/25/2012	2,100	710	71	2,800	--	1,700	25	35	86	150	690	17	<1.0	<1.0
10/30/2012	2,600	700	74	3,374	--	1,400	15	13	52	54	1,200	14	<0.061	<0.054
11/30/2012	860	8,200	260	9,320	--	1,100	2.4	4.4	12	23	690	<0.038	<0.061	<0.054
12/27/2012	6,200	820	86	7,106	--	2,000	39	76	130	120	1,300	20	<0.061	<0.054
1/15/2013	3,400	14,000	400	17,800	--	800	12	25	130	43	1,200	8.7	<0.061	<0.054
2/12/2013	9,900	3,100	150	13,150	--	2,100	110	440	820	110	330	22	<0.061	<0.054
3/5/2013	3,954	970	80	5,004	--	1,400	21	23	87	63	1,200	15	<0.061	<0.054
3/15/2013	--	--	--	--	--	1,400	25	49	98	74	570	14	<0.061	<0.054
4/16/2013	1,100	1,300	270	2,670	--	370	6	19	56	73	530	17	<0.061	<0.054
5/14/2013	4,300	830	99	5,229	--	2,000	52	98	181	61	270	22	<0.061	<0.054
6/28/2013	2,900	870	150	3,920	--	1,100	18	58	76	92	500	11	<0.061	<0.054
7/16/2013	3,600	1,000	130	4,730	--	870	19	47	140	100	600	14	<0.061	<0.054
8/16/2013	3,800	5,900	530	10,230	--	1,400	13	32	85	77	550	27	<0.061	<0.054
9/24/2013	5,800	12,000	550	18,350	--	990	53	400	630	78	440	20	<0.061	<0.054
10/15/2013	3,300	650	120	4,070	--	1,400	11	37	150	43	250	15	<0.061	<0.054
11/12/2013	5,600	3,500	190	9,290	--	570	99	230	660	89	550	20	<0.061	<0.054
12/13/2013	12,500	14,000	400	26,900	--	560	170	690	1,500	52	220	17	<0.061	<0.054
1/17/2014	5,900	980	130	7,010	--	4,200	13	18	61	89	810	40	<0.061	<0.054
2/11/2014	12,000	63,000	2,500	77,500	--	640	130	560	1,990	45	290	12	<0.061	<0.054
3/21/2014	42,000	77,000	2,000	121,000	--	3,700	440	3,300	3,900	100	360	17	<0.061	<0.054
4/21/2014	100,000	30,000	880	130,000	--	6,000	1,300	9,800	9,000	<0.098	<1.0	12	<0.061	<0.054
5/20/2014	33,000	15,000	470	48,000	--	1,400	570	2,700	5,400	30	<0.40	16	<0.061	<0.054
6/13/2014	77,000	33,000	1,100	110,000	--	7,700	1,900	10,000	13,000	38	<0.40	12	<0.061	<0.054
7/12/2014	28,000	82	<52	28,082	--	2,800	820	3,700	6,800	34	<0.40	18J	<25	<25

The GWTS was down between July 29, 2014 and December 1, 2014 to facilitate processing of the modifications to SCAQMD Permit No. F14166 for the GWTS.

Table 6. Extracted Groundwater Analytical Results[a]

SFPP Norwalk Pump Station, Norwalk, California

	EPA 8015M					EPA 8260B Volatile Organic Compounds (VOCs)[b]								
Date Sampled	TPH-g (µg/L)	TPH-d (µg/L)	TPH-o (µg/L)	TPH-total (µg/L)	TPH-fp (µg/L)	Benzene (µg/L)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
1/15/2015	8,000	5,600	270	13,870	--	2,200	22	140	430	21	390	11	<0.12	<0.11
2/20/2015	120,000	47,000	1,500	170,000	--	3,000	350	1,600	3,000	43	<0.80	17	<0.12	<0.11
3/3/2015	65,000	480,000	15,000	560,000	--	6,600	1,700	9,300	12,000	670	<0.80	11	<0.12	<0.11
4/7/2015	105,000	92,000	2,900	200,000	--	9,000	2,100	18,000	13,000	1,200	<0.80	8.7	<0.12	17
5/19/2015	73,000	90,000	2,400	165,400	--	8,200	1,600	17,000	12,000	380	<0.60	25	<0.078	<0.078
6/2/2015	78,000	89,000	3,100	170,100	--	3,200	530	3,700	7,100	1,100	<0.60	13	<0.078	8.3
7/30/2015	31,000	16,000	570	47,570	--	3,100	720	5,100	6,200	820	<0.60	27	<0.078	6.2
8/6/2015	30,000	17,000	570	37,570	--	2,600	500	3,100	6,200	700	<0.60	16	<0.078	6.4
9/15/2015	50,000	79,000	2,700	129,000	--	3,200	1,800	6,500	14,000	820	<0.60	15	<0.078	7.7
10/8/2015	51,000	55,000	1,800	107,800	--	5,700	1,400	11,000	11,000	680	<0.60	16	<0.078	6.2
11/24/2015	45,000	74,000	2,800	121,800	--	3,400	1,100	7,000	7,800	<0.31	<1.5	16	<0.20	<0.20
12/3/2015	40,000	120,000	4,000	164,000	--	4,800	1,100	7,700	8,300	580	<1.5	19	<0.20	5.9
1/21/2016	88,000	2,500,000	97,000	2,685,000	--	4,200	1,700	10,000	14,000	380	<0.60	12	<0.078	<0.078
2/2/2016	31,000	110,000	4,700	145,700	--	2,600	750	4,600	9,500	430	<0.60	8.6	<0.078	<0.078
4/5/2016	32,000	31,000	1,100	64,100	--	1,500	450	2,200	12,000	390	<3.0	<0.17	<0.39	<0.39
5/3/2016	2,600	20,000	680	23,280	--	990	18	83	260	6.0	100	7.1	<0.039	<0.039
6/14/2016	1,900	4,400	280	6,580	--	290	21	110	400	8.6	<5.0	6.00	<1.0	<1.0
The GWTS was down between June 24 and September 9, 2016, to facilitate installation of the new DAF/OWS.														
9/20/2016	32	230	130	390	--	<0.036	0.18 J	0.080 J	2.6	2.2	150	10	<0.039	<0.039
10/21/2016	10,000	9,300	360	20,000	--	320	320	1,100	2,700	5.1	<0.30	5.3	<0.039	<0.039
11/8/2016	1,100	1,500	130	2,800	--	2.5	<0.036	2.6	160	2.4	66	9.1	<0.039	<0.039
12/27/2016	140	390	130	660	--	1.2	<0.042	<0.042	2.0 J	1.4	2200	8.7	<0.039	<0.039

Table 6. Extracted Groundwater Analytical Results[a]

SFPP Norwalk Pump Station, Norwalk, California

	EPA 8015M					EPA 8260B Volatile Organic Compounds (VOCs)[b]								
Date Sampled	TPH-g (µg/L)	TPH-d (µg/L)	TPH-o (µg/L)	TPH-total (µg/L)	TPH-fp (µg/L)	Benzene (µg/L)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
1/19/2017	190	340	120	640	--	6.9	0.24 J	0.15 J	<1.5	2.4	2300	8.1	<0.15	<0.12
2/3/2017	390	490	170	1,000	--	4.2	0.89 J	3.5	30	3.5	1700	5.1	<0.15	<0.12
3/3/2017	790	320	78	1,200	--	180	5	1.7 J	24	4.2	620	3.0	<0.15	<0.12
4/7/2017	1,200	780	140	2,100	--	740	21	23	87	7.5	120	4.8	<0.15	<0.12
5/4/2017	20	300	100	430	--	0.18 J	<0.036	0.12 J	<1.5	1.4	320	<0.017	<0.039	<0.039
6/20/2017	11,000	54,000	3,000	68,000	--	1,400	100	400	2,300	15	<18	8.1 J	<1.5	<1.2
7/20/2017	17 J	400	180	600	--	<1.0	<1.0	<2.0	<2.0	1.2	38	4.2	<1.0	<1.0
8/3/2017	39 J	410	310	760	--	<1.0	<1.0	<2.0	<2.0	1.3	25	4.2	<1.0	<1.0
9/20/2017	940	2,400	1,300	4,600	--	<1.0	0.15 J	0.17 J	4.4	0.59	5.4	0.70 J	<1.0	<1.0
10/10/2017	860	1,200	240	2,300	--	<1.0	5.2	13	120	3.7	26	6.5	<1.0	<1.0
11/8/2017	4,000	27,000	2,000	33,000	--	24	6.7	8.7	690	70	<5.0	8.8	<1.0	<1.0
12/15/2017	1,400	2,300	500	4,200	--	6.0	1.6	5.9	52	120	200	<1.0	<1.0	<1.0

Notes:

[a] Influent samples were collected from the manifold conveying groundwater extracted from the south-central and southeastern areas.

[b] Other detected VOCs are included in the laboratory analytical reports in Appendix A.

[c] TPH-fp result from extracted groundwater sample collected on July 10, 2008.

[d] The July 27, 2011, sample, and samples collected after July 20, 2012, were analyzed for TPH-g, TPH-d, and TPH-o.

-- = not analyzed

<500 = Not detected at or above the laboratory reporting limit (RL) shown

µg/L = micrograms per liter

DAF = dissolved air flotation

DIPE = di-isopropyl ether

ETBE = ethyl tertiary butyl ether

GWTS = groundwater treatment system

J = Analyte was detected above the laboratory method detection limit and below the laboratory RL

MTBE = methyl tertiary butyl ether

OWS = oil-water separator

SCAQMD = South Coast Air Quality Management District

TAME = tertiary amyl methyl ether

TBA = tertiary butyl alcohol

TPH-d = total petroleum hydrocarbons quantified as diesel (C13-C22)

TPH-fp = total petroleum hydrocarbons quantified as fuel product (C7-C28)

TPH-g = total petroleum hydrocarbons quantified as gasoline (C4-C12)

TPH-o = total petroleum hydrocarbons quantified as oil (C23-C36)

TPH-total = total petroleum hydrocarbons quantified as gasoline, diesel, and oil (C4-C36)

Table 7. Biosparge System Operation Summary

SFPP Norwalk Pump Station, Norwalk, California

System Inspection Date	Cumulative Hours of Operation (hours)	Incremental Hours of Operation (hours)	Incremental Uptime (%)	System Flow[a] (scfm)	BS-01 Sparge Leg Pressure (psi)
1/6/2016	0			60	10
2/16/2016	899	899	91.9	500	13
2/23/2016	1,071	172	99.1	500	14
2/29/2016	1,192	121	85.1	500	13
3/1/2016	1,214	22	98.5	500	13
3/8/2016	1,381	167	99.9	500	14
3/10/2016	1,426	45	98.5	500	14
3/22/2016	1,432	6	2.0	240	7
3/31/2016	1,524	92	42.5	180	8
First Quarter 2016 Totals	1,524	1,524	74.7	--	--
4/5/2016	1,644	120	99.2	120	7
4/15/2016	1,645	1	0.4	120	8
4/19/2016	1,735	90	99.4	240	9
4/25/2016	1,856	121	84.6	120	8
4/26/2016	1,881	25	87.7	240	8
4/29/2016	1,955	74	100.0	240	7
5/10/2016	1,955	0	0.0	240	8
5/17/2016	2,123	168	99.8	240	6
5/19/2016	2,140	17	36.9	120	5
5/24/2016	2,254	114	94.4	360	6
5/31/2016	2,422	168	98.7	360	7
6/7/2016	2,591	169	100.0	420	7
6/14/2016	2,754	163	95.3	420	8
6/21/2016	2,906	152	92.7	420	8
6/24/2016	2,982	76	99.6	420	8
Second Quarter 2016 Totals	2,982	1,458	71.5	--	--

Table 7. Biosparge System Operation Summary

SFPP Norwalk Pump Station, Norwalk, California

System Inspection Date	Cumulative Hours of Operation (hours)	Incremental Hours of Operation (hours)	Incremental Uptime (%)	System Flow[a] (scfm)	BS-01 Sparge Leg Pressure (psi)
7/1/2016	2,982	0	0.0	120	5
7/7/2016	3,121	139	97.9	250	8
7/12/2016	3,242	121	100.0	420	5
7/19/2016	3,410	168	97.1	420	8
7/26/2016	3,575	165	99.8	420	8
8/2/2016	3,744	169	99.6	425	8
8/11/2016	3,931	187	88.0	240	7
8/16/2016	3,961	30	24.7	220	8
8/24/2016	4,033	72	36.5	120	4
8/25/2016	4,053	20	89.9	220	8
8/26/2016	4,067	14	66.7	78	5
8/30/2016	4,157	90	96.8	300	9
9/6/2016	4,303	146	84.5	85	5
9/13/2016	4,440	137	81.7	400	8
9/20/2016	4,611	171	100.0	586	14
9/27/2016	4,775	164	100.0	559	13
Third Quarter 2016 Totals	4,775	1,793	78.7	--	--
10/7/2016	4,776	1	0.4	110	4
10/8/2016	4,797	21	98.7	170	6
10/11/2016	4,866	69	99.9	420	11
10/13/2016	4,916	50	99.9	563	15
10/18/2016	4,965	49	42.1	120	8
10/25/2016	5,133	168	100.0	585	14
11/1/2016	5,302	169	99.8	598	14
Fourth Quarter 2016 Totals	5,302	527	62.7	--	--
2016 Totals	**5,302**	**5,302**	**--**	**--**	**--**

Table 7. Biosparge System Operation Summary

SFPP Norwalk Pump Station, Norwalk, California

System Inspection Date	Cumulative Hours of Operation (hours)	Incremental Hours of Operation (hours)	Incremental Uptime (%)	System Flow[a] (scfm)	BS-01 Sparge Leg Pressure (psi)
First Quarter 2017 Totals	5,302	0	--	--	--
6/27/2017	5,302	0	0.0	220	6
6/30/2017	5,368	66	22.0	207	7
Second Quarter 2017 Totals	5,368	66	--	--	--
7/5/2017	5,490	122	92.7	300	9
7/10/2017	5,610	120	100.0	290	8
7/13/2017	5,679	69	95.8	421	11
7/20/2017	5,850	171	100.0	526	14
7/25/2017	5,971	121	100.0	694	14
8/3/2017	6,183	212	94.4	544	13
8/8/2017	6,302	119	99.1	545	15
8/15/2017	6,417	115	68.8	550	14
8/22/2017	6,588	171	100.0	541	14
8/29/2017	6,753	165	99.1	544	14
9/7/2017	6,826	73	33.1	240	7
9/12/2017	6,941	115	100.0	747	14
9/18/2017	7,065	124	85.2	240	7
9/19/2017	7,089	24	100.0	218	7
9/26/2017	7,255	166	99.3	544	15
Third Quarter 2017 Totals	7,255	1,887	89.1	--	--

Table 7. Biosparge System Operation Summary

SFPP Norwalk Pump Station, Norwalk, California

System Inspection Date	Cumulative Hours of Operation (hours)	Incremental Hours of Operation (hours)	Incremental Uptime (%)	System Flow[a] (scfm)	BS-01 Sparge Leg Pressure (psi)
10/6/2017	7,260	5	2.1	260	7
10/10/2017	7,354	94	97.9	521	15
10/12/2017	7,397	43	89.6	556	15
10/16/2017	7,482	85	88.5	250	6
11/2/2017	7,485	3	0.7	260	8
11/7/2017	7,604	119	99.2	549	15
11/21/2017	7,652	48	14.3	280	10
11/28/2017	7,751	99	58.9	594	15
12/5/2017	7,914	163	97.0	705	15
12/8/2017	7,964	50	69.4	697	14
12/12/2017	8,081	117	100.0	774	13
12/19/2017	8,247	166	98.8	782	14
1/2/2018	8,580	333	99.1	755	14
Fourth Quarter 2017 Totals	**8,580**	**1,325**	56.5		
Cumulative Totals	**8,580**	--	**49.2**	--	**--**

Notes:

[a] Estimated system flow based on header flowmeter

-- = not applicable or not available

psi = pounds per square inch

scfm = standard cubic feet per minute

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
GMW-9	4/30/2007	74.44	26.71	---	---	47.73	Secor
	11/12/2007	74.44	27.32	27.04	0.28	47.34	Secor
	8/8/2008	74.44	28.01	27.96	0.05	46.47	Envent
	10/16/2008	74.44	28.36	28.35	0.01	46.09	Envent
	12/17/2008	74.44	27.61	---	---	46.83	Envent
	1/15/2009	74.44	28.91	---	---	45.53	Envent
	3/27/2009	74.44	29.04	---	---	45.40	Envent
	4/21/2009	74.44	28.16	---	---	46.28	Envent
	7/21/2009	74.44	28.31	---	---	46.13	Envent
	10/19/2009	74.44	NM	---	---	NC	Blaine Tech
	5/24/2010	74.44	30.47	---	---	43.97	Blaine Tech
	5/28/2010	74.44	30.35	---	---	44.09	Blaine Tech
	10/4/2010	74.44	30.30	---	---	44.14	Blaine Tech
	1/10/2011	74.44	32.02	---	---	42.42	Blaine Tech
	4/11/2011	74.44	25.41	---	---	49.03	Blaine Tech
	7/11/2011	74.44	NM	---	---	NC	
	10/10/2011	74.44	28.91	---	---	45.53	Blaine Tech
	4/16/2012	74.44	31.15	---	---	43.29	Blaine Tech
	7/9/2012	---	31.64	---	---	NC	Blaine Tech
	10/15/2012	77.16	31.82	---	---	45.34	Blaine Tech
	1/14/2013	77.16	31.88	---	---	45.28	Blaine Tech
	4/8/2013	77.16	31.83	---	---	45.33	Blaine Tech
	10/7/2013	77.16	35.30	31.25	4.05	45.02	Blaine Tech
	4/14/2014	77.16	37.66	31.65	6.01	44.19	Blaine Tech
	5/5/2014	77.16	37.81	31.76	6.05	44.07	Nieto & Sons
	5/12/2014	77.16	37.39	31.83	5.56	44.11	Nieto & Sons
	5/20/2014	77.16	37.70	33.85	3.85	42.46	Nieto & Sons
	5/27/2014	77.16	32.41	28.84	3.57	47.53	Nieto & Sons
	6/4/2014	77.16	33.20	---	---	43.96	Nieto & Sons
	6/10/2014	77.16	37.51	32.77	4.74	43.35	Nieto & Sons
	7/3/2014	77.16	39.26	32.59	6.67	43.10	Nieto & Sons
	7/8/2014	77.16	38.59	32.45	6.14	43.36	Blaine Tech
	7/18/2014	77.16	37.15	32.73	4.42	43.46	Blaine Tech
	7/24/2014	77.16	37.78	32.48	5.30	43.51	Blaine Tech
	8/1/2014	77.16	36.72	32.30	4.42	43.89	Blaine Tech
	8/8/2014	77.16	36.55	32.26	4.29	43.96	Blaine Tech
	8/13/2014	77.16	36.25	32.33	3.92	43.97	Blaine Tech
	8/19/2014	77.16	36.04	32.38	3.66	43.97	Blaine Tech
	8/29/2014	77.16	36.23	32.33	3.90	43.97	Blaine Tech
	9/5/2014	77.16	36.26	32.35	3.91	43.95	Blaine Tech
	9/11/2014	77.16	36.27	32.33	3.94	43.96	Blaine Tech
	9/18/2014	77.16	36.42	32.37	4.05	43.90	Blaine Tech
	9/26/2014	77.16	36.39	32.35	4.04	43.92	Blaine Tech
	10/1/2014	77.16	36.11	32.42	3.69	43.93	Blaine Tech
	10/6/2014	77.16	35.99	32.42	3.57	43.95	Blaine Tech
	10/14/2014	77.16	36.24	32.34	3.90	43.96	Blaine Tech
	10/23/2014	77.16	36.32	32.35	3.97	43.94	Blaine Tech
	10/27/2014	77.16	36.04	32.42	3.62	43.94	Blaine Tech
	11/3/2014	77.16	36.40	32.35	4.05	43.92	Blaine Tech
	11/10/2014	77.16	36.32	32.41	3.91	43.89	Blaine Tech
	11/18/2014	77.16	36.28	32.43	3.85	43.88	Blaine Tech
	11/25/2014	77.16	36.21	32.49	3.72	43.85	Blaine Tech
	12/3/2014	77.16	36.18	32.43	3.75	43.90	Blaine Tech
	12/12/2014	77.16	36.58	32.74	3.84	43.58	Blaine Tech
	12/19/2014	77.16	37.05	32.76	4.29	43.46	Blaine Tech
	3/6/2015	77.16	39.40	33.13	6.27	42.65	Kinder Morgan
	4/20/2015	77.16	36.98	32.99	3.99	43.29	Blaine Tech
	10/20/2015	77.16	34.61	34.37	0.24	42.74	Kinder Morgan

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	3/14/2016	77.16	36.10	---	---	41.06	Blaine Tech
	4/11/2016	77.16	36.20	---	---	40.96	Blaine Tech
	6/30/2016	77.16	31.02	---	---	46.14	Kinder Morgan
	8/22/2016	77.16	37.27	---	---	39.89	Kinder Morgan
	10/3/2016	77.16	38.02	---	---	39.14	Blaine Tech
	3/7/2017	77.16	35.13	---	---	42.03	CH2M
	4/17/2017	77.16	33.32	---	---	43.84	Blaine Tech
	10/2/2017	77.16	38.43	---	---	38.73	Blaine Tech
GMW-10	4/30/2007	74.67	25.90	---	---	48.77	Secor
	11/12/2007	74.67	25.02	25.82	0.83	50.33	Secor
	4/14/2008	74.67	25.38	25.44	0.06	49.34	Secor
	10/13/2008	74.67	24.16	---	---	50.51	Stantec
	4/20/2009	74.67	24.46	---	---	50.21	Blaine Tech
	10/19/2009	74.67	27.20	---	---	47.47	Blaine Tech
	5/24/2010	74.67	26.72	---	---	47.95	Blaine Tech
	5/28/2010	74.67	26.70	---	---	47.97	Blaine Tech
	10/4/2010	74.67	27.15	---	---	47.52	Blaine Tech
	4/11/2011	74.67	25.21	---	---	49.46	Blaine Tech
	10/10/2011	74.67	27.75	---	---	46.92	Blaine Tech
	4/27/2012	74.67	28.47	---	---	46.20	Blaine Tech
	7/9/2012	74.67	NM	---	---	NC	Blaine Tech
	10/15/2012	74.67	29.15	29.02	0.13	45.63	Blaine Tech
	4/8/2013	74.67	33.64	28.12	5.52	45.53	Blaine Tech
	9/26/2013	73.35	36.15	29.25	6.90	42.82	Blaine Tech
	10/7/2013	73.35	31.85	29.32	2.53	43.56	Blaine Tech
	4/14/2014	73.35	29.43	29.01	0.42	44.26	Blaine Tech
	8/19/2014	73.35	29.80	29.53	0.27	43.77	Blaine Tech
	8/29/2014	73.35	29.68	29.25	0.43	44.02	Blaine Tech
	9/26/2014	73.35	29.98	29.23	0.75	43.98	Blaine Tech
	10/1/2014	73.35	29.98	29.19	0.79	44.01	Blaine Tech
	10/6/2014	73.35	30.01	29.16	0.85	44.03	Blaine Tech
	10/14/2014	73.35	30.01	29.18	0.83	44.02	Blaine Tech
	10/23/2014	73.35	30.17	29.15	1.02	44.01	Blaine Tech
	10/27/2014	73.35	30.19	29.12	1.07	44.03	Blaine Tech
	11/3/2014	73.35	30.25	29.13	1.12	44.01	Blaine Tech
	11/10/2014	73.35	29.85	29.28	0.57	43.96	Blaine Tech
	11/18/2014	73.35	29.95	29.28	0.67	43.95	Blaine Tech
	11/25/2014	73.35	30.00	29.27	0.73	43.94	Blaine Tech
	12/3/2014	73.35	30.18	29.27	0.91	43.91	Blaine Tech
	12/12/2014	73.35	30.81	29.45	1.36	43.65	Blaine Tech
	12/19/2014	73.35	30.51	30.35	0.16	42.97	Blaine Tech
	4/20/2015	73.35	34.99	28.42	6.57	43.71	Blaine Tech
	7/17/2015	73.35	36.10	29.41	6.69	42.70	Blaine Tech
	10/20/2015	73.35	32.96	31.02	1.94	41.97	Kinder Morgan
	3/16/2016	73.35	34.47	33.42	1.05	39.74	Kinder Morgan
	4/11/2016	73.35	33.70	32.10	1.60	40.95	Blaine Tech
	6/29/2016	73.35	33.02	---	---	40.33	Blaine Tech
	8/22/2016	73.35	33.82	32.93	0.89	40.26	Blaine Tech
	10/3/2016	73.35	35.10	33.65	1.45	39.43	Blaine Tech
	3/8/2017	73.35	32.75	---	---	40.60	CH2M
	04/17/17	73.35	31.15	---	---	42.20	Blaine Tech
	10/2/2017	73.35	33.48	---	---	39.87	Blaine Tech
GMW-22	4/30/2007	74.17	25.79	---	---	48.38	Secor
	11/12/2007	74.17	26.45	25.91	0.54	48.16	Stantec
	8/12/2008	74.17	26.70	---	---	47.47	Envent
	10/31/2008	74.17	28.25	27.04	1.21	46.91	Envent
	11/4/2008	74.17	26.97	---	---	47.20	Envent
	12/17/2008	74.17	26.65	---	---	47.52	Envent

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	1/15/2009	74.17	27.18	---	---	46.99	Envent
	3/27/2009	74.17	27.86	---	---	46.31	Envent
	4/21/2009	74.17	27.30	27.20	0.10	46.95	Envent
	7/21/2009	74.17	27.70	---	---	46.47	Envent
	10/19/2009	74.17	NM	---	---	NC	Blaine Tech
	11/6/2009	74.17	28.12	---	---	46.05	Kinder Morgan
	9/3/2010	74.17	28.36	25.10	3.26	48.47	Kinder Morgan
	10/4/2010	74.17	27.65	---	---	46.52	Blaine Tech
	4/11/2011	74.17	26.45	---	---	47.72	Blaine Tech
	10/10/2011	74.17	29.68	---	---	44.49	Blaine Tech
	4/16/2012	74.17	31.15	---	---	43.02	Blaine Tech
	7/9/2012	---	NM	---	---	NC	Blaine Tech
	10/15/2012	77.24	31.05	---	---	46.19	Blaine Tech
	4/8/2013	77.24	31.92	---	---	45.32	Blaine Tech
	10/7/2013	77.24	34.28	31.65	2.63	45.10	Blaine Tech
	4/14/2014	77.24	35.59	32.30	3.29	44.33	Blaine Tech
	5/6/2014	77.24	35.87	32.35	3.52	44.24	Nieto & Sons
	5/12/2014	77.24	35.76	32.28	3.48	44.32	Nieto & Sons
	5/20/2014	77.24	37.90	32.70	5.20	43.58	Nieto & Sons
	5/27/2014	77.24	36.34	32.71	3.63	43.86	Nieto & Sons
	6/4/2014	77.24	33.36	---	---	43.88	Nieto & Sons
	6/10/2014	77.24	36.74	32.82	3.92	43.69	Nieto & Sons
	7/3/2014	77.24	37.66	32.91	4.75	43.45	Nieto & Sons
	7/8/2014	77.24	36.70	32.79	3.91	43.73	Blaine Tech
	7/18/2014	77.24	36.68	32.77	3.91	43.75	Blaine Tech
	7/24/2014	77.24	36.79	32.62	4.17	43.85	Blaine Tech
	8/1/2014	77.24	35.82	32.44	3.38	44.17	Blaine Tech
	8/8/2014	77.24	35.72	32.44	3.28	44.19	Blaine Tech
	8/13/2014	77.24	35.68	32.45	3.23	44.19	Blaine Tech
	8/19/2014	77.24	35.64	32.45	3.19	44.20	Blaine Tech
	8/29/2014	77.24	35.65	32.44	3.21	44.21	Blaine Tech
	9/5/2014	77.24	35.73	32.46	3.27	44.18	Blaine Tech
	9/11/2014	77.24	35.78	32.47	3.31	44.16	Blaine Tech
	9/18/2014	77.24	35.85	32.49	3.36	44.13	Blaine Tech
	9/26/2014	77.24	35.85	32.46	3.39	44.15	Blaine Tech
	10/1/2014	77.24	35.76	32.45	3.31	44.18	Blaine Tech
	10/6/2014	77.24	35.72	32.44	3.28	44.19	Blaine Tech
	10/14/2014	77.24	35.75	32.42	3.33	44.20	Blaine Tech
	10/23/2014	77.24	35.84	32.43	3.41	44.18	Blaine Tech
	10/27/2014	77.24	35.74	32.41	3.33	44.21	Blaine Tech
	11/3/2014	77.24	35.89	32.45	3.44	44.15	Blaine Tech
	11/10/2014	77.24	35.94	32.45	3.49	44.14	Blaine Tech
	11/18/2014	77.24	35.97	32.48	3.49	44.11	Blaine Tech
	11/25/2014	77.24	35.97	32.51	3.46	44.09	Blaine Tech
	12/3/2014	77.24	35.84	32.45	3.39	44.16	Blaine Tech
	12/12/2014	77.24	36.44	32.65	3.79	43.89	Blaine Tech
	12/19/2014	77.24	36.80	34.71	2.09	42.14	Blaine Tech
	4/20/2015	77.24	36.64	32.84	3.80	43.70	Blaine Tech
	7/24/2015	77.24	39.80	33.70	6.10	42.41	Northstar
	10/20/2015	77.24	36.10	34.92	1.18	42.10	Kinder Morgan
	3/16/2016	77.24	39.73	37.61	2.12	39.24	Kinder Morgan
	4/11/2016	77.24	38.59	35.50	3.09	41.17	Blaine Tech
	6/30/2016	77.24	36.55	---	---	40.69	Blaine Tech
	10/3/2016	77.24	37.70	---	---	39.54	Blaine Tech
	4/17/2017	77.24	34.47	---	---	42.77	Blaine Tech
	10/2/2017	77.24	38.45	---	---	38.79	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
GMW-24	4/30/2007	74.04	27.07	---	---	46.97	Secor
	11/12/2007	74.04	27.50	27.46	0.04	46.57	Stantec
	8/12/2008	74.04	NM	---	---	NC	Envent
	8/19/2008	74.04	29.34	28.24	1.10	45.58	Envent
	10/17/2008	74.04	30.88	29.90	0.98	43.94	Envent
	10/21/2008	74.04	29.64	28.30	1.34	45.47	Envent
	12/18/2008	74.04	29.04	---	---	45.00	Envent
	1/15/2009	74.04	30.56	29.80	0.76	44.09	Envent
	3/20/2009	74.04	31.28	---	---	42.76	Envent
	3/27/2009	74.04	30.45	---	---	43.59	Envent
	4/21/2009	74.04	29.91	---	---	44.13	Envent
	7/21/2009	74.04	32.78	---	---	41.26	Envent
	10/19/2009	74.04	NM	---	---	NC	Blaine Tech
	2/4/2010	74.04	29.67	29.40	0.27	44.59	Kinder Morgan
	6/22/2010	74.04	29.47	---	---	44.57	Blaine Tech
	9/3/2010	74.04	29.90	---	---	44.14	Kinder Morgan
	10/4/2010	74.04	29.50	---	---	44.54	Blaine Tech
	4/11/2011	74.04	28.21	---	---	45.83	Blaine Tech
	10/10/2011	74.04	28.78	---	---	45.26	Blaine Tech
	4/16/2012	74.04	30.49	30.31	0.18	43.69	Blaine Tech
	7/9/2012	---	NM	---	---	NC	Blaine Tech
	10/15/2012	77.48	31.34	---	---	46.14	Blaine Tech
	4/8/2013	77.48	NM	---	---	NC	Blaine Tech
	6/14/2013	77.48	33.35	32.40	0.95	44.89	Blaine Tech
	10/7/2013	77.48	35.42	31.61	3.81	45.11	Blaine Tech
	4/14/2014	77.48	37.74	32.01	5.73	44.32	Blaine Tech
	5/5/2014	77.48	37.81	32.09	5.72	44.25	Nieto & Sons
	5/12/2014	77.48	37.52	32.14	5.38	44.26	Nieto & Sons
	5/20/2014	77.48	37.39	32.21	5.18	44.23	Nieto & Sons
	5/27/2014	77.48	37.95	32.90	5.05	43.57	Nieto & Sons
	6/4/2014	77.48	37.00	32.70	4.30	43.92	Nieto & Sons
	6/10/2014	77.48	37.85	32.98	4.87	43.53	Nieto & Sons
	7/3/2014	77.48	39.60	33.04	6.56	43.13	Nieto & Sons
	7/8/2014	77.48	38.67	32.89	5.78	43.43	Blaine Tech
	7/18/2014	77.48	38.64	32.86	5.78	43.46	Blaine Tech
	7/24/2014	77.48	38.27	32.82	5.45	43.57	Blaine Tech
	8/1/2014	77.48	37.00	32.55	4.45	44.04	Blaine Tech
	8/8/2014	77.48	36.97	32.51	4.46	44.08	Blaine Tech
	8/13/2014	77.48	36.82	32.54	4.28	44.08	Blaine Tech
	8/19/2014	77.48	36.92	32.55	4.37	44.06	Blaine Tech
	8/29/2014	77.48	36.92	32.51	4.41	44.09	Blaine Tech
	9/5/2014	77.48	36.97	32.55	4.42	44.05	Blaine Tech
	9/11/2014	77.48	37.99	32.57	5.42	43.83	Blaine Tech
	9/18/2014	77.48	36.89	32.60	4.29	44.02	Blaine Tech
	9/26/2014	77.48	36.86	32.58	4.28	44.04	Blaine Tech
	10/1/2014	77.48	36.64	32.61	4.03	44.06	Blaine Tech
	10/6/2014	77.48	36.93	32.92	4.01	43.76	Blaine Tech
	10/14/2014	77.48	36.92	32.88	4.04	43.79	Blaine Tech
	10/23/2014	77.48	37.00	32.90	4.10	43.76	Blaine Tech
	10/27/2014	77.48	36.82	32.91	3.91	43.79	Blaine Tech
	11/3/2014	77.48	37.01	32.99	4.02	43.69	Blaine Tech
	11/10/2014	77.48	37.33	33.95	3.38	42.85	Blaine Tech
	11/18/2014	77.48	36.96	33.01	3.95	43.68	Blaine Tech
	11/25/2014	77.48	36.91	33.55	3.36	43.26	Blaine Tech
	12/3/2014	77.48	36.87	32.99	3.88	43.71	Blaine Tech
	12/12/2014	77.48	37.36	33.25	4.11	43.41	Blaine Tech
	12/19/2014	77.48	37.75	33.31	4.44	43.28	Blaine Tech
	3/10/2015	77.48	36.25	---	---	41.23	Kinder Morgan

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	4/20/2015	77.48	36.29	33.82	2.47	43.17	Blaine Tech
	7/24/2015	77.48	39.80	33.70	6.10	42.56	Blaine Tech
	10/20/2015	77.48	35.44	---	---	42.04	Kinder Morgan
	3/16/2016	77.48	38.83	---	---	38.65	Kinder Morgan
	4/11/2016	77.48	37.10	---	---	40.38	Blaine Tech
	6/29/2016	77.48	38.20	---	---	39.28	Blaine Tech
	8/22/2016	77.48	38.40	---	---	39.08	Blaine Tech
	10/3/2016	77.48	38.70	---	---	39.44	Blaine Tech
	4/17/2017	77.48	35.64	35.09	0.55	42.28	Blaine Tech
	10/2/2017	77.48	39.33	---	---	38.15	Blaine Tech
GMW-25	4/30/2007	74.29	26.60	---	---	47.69	Secor
	11/12/2007	74.29	27.30	27.25	0.05	47.03	Stantec
	8/12/2008	74.29	27.81	---	---	46.48	Envent
	10/17/2008	74.29	28.26	---	---	46.03	Envent
	12/18/2008	74.29	29.01	---	---	45.28	Envent
	1/15/2009	74.29	28.62	---	---	45.67	Envent
	3/24/2009	74.29	28.79	---	---	45.50	Envent
	4/21/2009	74.29	28.35	---	---	45.94	Envent
	7/21/2009	74.29	29.80	---	---	44.49	Envent
	10/19/2009	74.29	30.28	---	---	44.01	Blaine Tech
	6/22/2010	74.29	31.64	---	---	42.65	Blaine Tech
	10/4/2010	74.29	29.25	---	---	45.04	Blaine Tech
	4/11/2011	74.29	26.21	---	---	48.08	Blaine Tech
	10/10/2011	74.29	30.02	---	---	44.27	Blaine Tech
	4/16/2012	74.29	31.30	---	---	42.99	Blaine Tech
	7/9/2012	---	NM	---	---	NC	Blaine Tech
	10/15/2012	78.14	31.88	---	---	46.26	Blaine Tech
	4/8/2013	78.14	32.11	---	---	46.03	Blaine Tech
	10/7/2013	78.14	33.23	33.10	0.13	45.01	Blaine Tech
	4/14/2014	78.14	37.40	33.00	4.40	44.13	Blaine Tech
	5/5/2014	78.14	37.51	33.06	4.45	44.06	Nieto & Sons
	5/12/2014	78.14	34.97	33.73	1.24	44.12	Nieto & Sons
	5/20/2014	78.14	36.75	34.30	2.45	43.28	Nieto & Sons
	5/27/2014	78.14	34.64	34.44	0.20	43.65	Nieto & Sons
	6/4/2014	78.14	35.00	---	---	43.14	Nieto & Sons
	6/10/2014	78.14	36.67	34.18	2.49	43.39	Nieto & Sons
	7/3/2014	78.14	34.21	---	---	43.93	Nieto & Sons
	7/24/2014	78.14	34.29	---	---	43.85	Blaine Tech
	8/1/2014	78.14	35.02	33.99	1.03	43.91	Blaine Tech
	8/8/2014	78.14	34.54	34.06	0.48	43.97	Blaine Tech
	8/14/2014	78.14	34.48	34.06	0.42	43.98	Blaine Tech
	8/19/2014	78.14	34.51	34.07	0.44	43.97	Blaine Tech
	8/29/2014	78.14	34.65	33.96	0.69	44.02	Blaine Tech
	9/18/2014	78.14	35.21	34.01	1.20	43.85	Blaine Tech
	9/26/2014	78.14	34.87	34.06	0.81	43.89	Blaine Tech
	10/1/2014	78.14	34.92	33.98	0.94	43.94	Blaine Tech
	10/6/2014	78.14	34.93	33.99	0.94	43.93	Blaine Tech
	10/14/2014	78.14	35.10	33.91	1.19	43.96	Blaine Tech
	10/23/2014	78.14	35.34	33.91	1.43	43.90	Blaine Tech
	10/27/2014	78.14	34.78	33.95	0.83	44.00	Blaine Tech
	11/3/2014	78.14	34.92	33.98	0.94	43.94	Blaine Tech
	11/10/2014	78.14	35.12	34.02	1.10	43.87	Blaine Tech
	11/18/2014	78.14	34.90	34.11	0.79	43.85	Blaine Tech
	11/25/2014	78.14	35.07	34.07	1.00	43.84	Blaine Tech
	12/3/2014	78.14	35.10	33.98	1.12	43.90	Blaine Tech
	12/12/2014	78.14	35.22	34.30	0.92	43.63	Blaine Tech
	12/19/2014	78.14	35.05	34.50	0.55	43.51	Blaine Tech
	4/20/2015	78.14	35.19	34.47	0.72	43.50	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	6/25/2015	78.14	36.35	35.40	0.95	42.52	Blaine Tech
	10/20/2015	78.14	35.40	35.38	0.02	42.76	Kinder Morgan
	3/16/2016	78.14	38.99	---	---	39.15	Kinder Morgan
	4/12/2016	78.14	37.15	---	---	40.99	Kinder Morgan
	6/29/2016	78.14	38.40	---	---	39.74	Blaine Tech
	8/22/2016	78.14	38.44	---	---	39.70	Blaine Tech
	10/3/2016	78.14	38.70	---	---	39.44	Blaine Tech
	4/17/2017	78.14	35.23	---	---	42.91	Blaine Tech
	10/2/2017	78.14	39.22	---	---	38.92	Blaine Tech
GMW-36	3/12/2007	74.53	24.29	---	---	50.24	Secor
	4/30/2007	74.53	24.40	---	---	50.13	Secor
	8/28/2007	74.53	24.31	---	---	50.22	Stantec
	11/12/2007	74.53	24.86	24.85	0.01	49.68	Stantec
	2/19/2008	74.53	25.50	---	---	49.03	Stantec
	4/14/2008	74.53	24.61	---	---	49.92	Stantec
	8/8/2008	74.53	26.20	26.14	0.06	48.38	Envent
	10/16/2008	74.77	26.11	26.09	0.02	48.68	Envent
	12/18/2008	74.53	28.70	28.65	0.05	45.87	Envent
	1/15/2009	74.53	27.73	27.45	0.28	47.02	Envent
	2/20/2009	74.53	26.39	26.35	0.04	48.17	Envent
	2/23/2009	74.53	26.13	25.80	0.33	48.66	Blaine Tech
	3/24/2009	74.53	29.83	---	---	44.70	Envent
	4/20/2009	74.53	25.63	25.59	0.04	48.93	Blaine Tech
	7/17/2009	74.53	27.40	---	---	47.13	Envent
	7/20/2009	74.53	25.90	---	---	48.63	Blaine Tech
	7/21/2009	74.53	26.03	---	---	48.50	Envent
	7/22/2009	74.53	25.90	---	---	48.63	Blaine Tech
	10/19/2009	74.53	26.56	26.45	0.11	48.06	Blaine Tech
	2/4/2010	74.53	26.93	26.80	0.13	47.70	Kinder Morgan
	3/15/2010	74.53	26.80	---	---	47.73	Blaine Tech
	4/16/2010	74.53	26.90	---	---	47.63	Blaine Tech
	5/24/2010	74.53	25.96	25.90	0.06	48.62	Blaine Tech
	5/28/2010	74.53	25.94	25.88	0.06	48.64	Blaine Tech
	6/22/2010	74.53	25.94	25.91	0.03	48.61	Blaine Tech
	7/12/2010	74.53	NM	---	---	NC	
	8/12/2010	74.53	NM	---	---	NC	
	9/20/2010	74.53	NM	---	---	NC	
	10/4/2010	74.53	26.90	---	---	47.63	
	10/24/2010	74.53	26.90	---	---	47.63	Blaine Tech
	11/23/2010	74.53	27.35	27.10	0.25	47.38	Blaine Tech
	12/22/2010	74.53	28.35	26.84	1.51	47.39	Blaine Tech
	1/10/2011	74.53	29.10	27.70	1.40	46.55	Blaine Tech
	2/24/2011	74.53	NM	---	---	NC	Blaine Tech
	3/23/2011	74.53	NM	---	---	NC	Blaine Tech
	4/12/2011	74.53	26.98	25.05	1.93	49.09	Blaine Tech
	5/13/2011	74.53	NM	---	---	NC	Blaine Tech
	6/22/2011	74.53	NM	---	---	NC	
	7/11/2011	74.53	NM	---	---	NC	
	8/19/2011	74.53	NM	---	---	NC	
	9/22/2011	74.53	NM	---	---	NC	
	10/10/2011	74.53	25.96	---	---	48.57	Blaine Tech
	11/28/2011	74.53	NM	---	---	NC	
	12/2/2011	74.53	26.71	---	---	47.82	Kinder Morgan
	12/21/2011	74.53	28.17	---	---	46.36	Blaine Tech
	1/9/2012	74.53	27.26	---	---	47.27	Blaine Tech
	2/23/2012	74.53	27.85	---	---	46.68	Blaine Tech
	3/28/2012	74.53	NM	---	---	NC	Blaine Tech
	4/16/2012	74.53	27.34	---	---	47.19	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	5/25/2012	74.53	NM	---	---	NC	Blaine Tech
	6/15/2012	---	33.27	---	---	NC	Blaine Tech
	7/9/2012	---	33.71	---	---	NC	Blaine Tech
	8/29/2012	---	NM	---	---	NC	Blaine Tech
	9/26/2012	---	NM	---	---	NC	Blaine Tech
	10/15/2012	76.66	32.11	---	---	44.55	Blaine Tech
	11/29/2012	76.66	33.93	31.68	2.25	44.53	Blaine Tech
	12/26/2012	76.66	34.86	30.36	4.50	45.40	Blaine Tech
	1/14/2013	76.66	34.12	30.42	3.70	45.50	Blaine Tech
	2/20/2013	76.66	NM	---	---	NC	Blaine Tech
	4/10/2013	76.66	32.42	29.75	2.67	46.38	Blaine Tech
	10/7/2013	76.66	34.65	30.72	3.93	45.15	Blaine Tech
	4/25/2014	76.66	34.71	31.12	3.59	44.82	Blaine Tech
	5/20/2014	76.66	34.95	31.50	3.45	44.47	Nieto & Sons
	5/27/2014	76.66	34.53	31.29	3.24	44.72	Nieto & Sons
	6/4/2014	76.66	34.93	31.50	3.43	44.47	Nieto & Sons
	8/13/2014	76.66	34.86	31.27	3.59	44.67	Blaine Tech
	8/19/2014	76.66	34.20	31.39	2.81	44.71	Blaine Tech
	8/29/2014	76.66	34.31	31.32	2.99	44.74	Blaine Tech
	9/5/2014	76.66	34.35	31.37	2.98	44.69	Blaine Tech
	9/11/2014	76.66	35.00	31.23	3.77	44.68	Blaine Tech
	9/18/2014	76.66	34.42	31.50	2.92	44.58	Blaine Tech
	9/26/2014	76.66	34.15	31.48	2.67	44.65	Blaine Tech
	10/1/2014	76.66	33.51	31.61	1.90	44.67	Blaine Tech
	10/6/2014	76.66	33.29	31.63	1.66	44.70	Blaine Tech
	10/14/2014	76.66	33.48	31.55	1.93	44.72	Blaine Tech
	10/23/2014	76.66	33.64	31.57	2.07	44.68	Blaine Tech
	10/27/2014	76.66	33.02	31.79	1.23	44.62	Blaine Tech
	11/3/2014	76.66	33.75	31.57	2.18	44.65	Blaine Tech
	11/18/2014	76.66	33.17	31.75	1.42	44.63	Blaine Tech
	11/25/2014	76.66	33.13	31.86	1.27	44.55	Blaine Tech
	12/3/2014	76.66	32.93	31.75	1.18	44.67	Blaine Tech
	4/20/2015	76.66	33.64	32.20	1.44	44.17	Blaine Tech
	10/21/2015	76.66	33.55	33.16	0.39	43.42	Blaine Tech
	4/12/2016	76.66	34.30	34.03	0.27	42.58	Kinder Morgan
	10/3/2016	76.66	35.05	34.65	0.40	41.93	Blaine Tech
	3/9/2017	76.66	33.45	---	---	43.21	CH2M
	4/17/2017	76.66	32.96	---	---	43.70	Blaine Tech
	10/2/2017	76.66	34.10	---	---	42.56	Blaine Tech
GMW-O-11	4/30/2007	74.17	23.91	23.90	0.01	50.27	Secor
	11/12/2007	74.17	24.40	---	---	49.77	Stantec
	8/15/2008	74.17	29.30	---	---	44.87	Envent
	10/17/2008	74.17	24.45	---	---	49.72	Envent
	12/19/2008	74.17	24.85	---	---	49.32	Envent
	1/15/2009	74.17	26.87	24.38	2.49	49.29	Envent
	2/24/2009	74.17	24.31	24.21	0.10	49.94	Envent
	3/27/2009	74.17	31.08	---	---	43.09	Envent
	4/21/2009	74.17	25.36	25.34	0.02	48.83	Envent
	7/21/2009	74.17	26.18	---	---	47.99	Envent
	10/19/2009	74.17	NM	---	---	NC	Blaine Tech
	11/6/2009	74.17	26.33	26.18	0.15	47.96	Kinder Morgan
	10/4/2010	74.17	30.00	---	---	44.17	Blaine Tech
	4/13/2011	74.17	24.19	---	---	49.98	Blaine Tech
	10/10/2011	74.17	24.38	---	---	49.79	Blaine Tech
	4/16/2012	74.17	NM	---	---	NC	Blaine Tech
	7/9/2012	74.17	NM	---	---	NC	Blaine Tech
	10/15/2012	74.17	28.12	---	---	46.05	Blaine Tech
	4/8/2013	74.17	NM	---	---	NC	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	9/24/2013	74.17	31.25	28.15	3.10	45.40	Blaine Tech
	10/7/2013	74.17	31.19	27.69	3.50	45.78	Blaine Tech
	4/25/2014	74.17	28.96	28.62	0.34	45.48	Blaine Tech
	9/5/2014	74.17	31.13	27.89	3.24	45.63	Blaine Tech
	9/11/2014	74.17	31.12	27.85	3.27	45.67	Blaine Tech
	9/18/2014	74.17	31.22	27.85	3.37	45.65	Blaine Tech
	9/26/2014	74.17	31.34	27.91	3.43	45.57	Blaine Tech
	10/1/2014	74.17	31.19	27.84	3.35	45.66	Blaine Tech
	10/6/2014	74.17	32.19	27.84	4.35	45.46	Blaine Tech
	10/14/2014	74.17	31.18	28.85	2.33	44.85	Blaine Tech
	10/23/2014	74.17	31.34	27.85	3.49	45.62	Blaine Tech
	10/27/2014	74.17	31.28	28.89	2.39	44.80	Blaine Tech
	11/3/2014	74.17	32.34	27.83	4.51	45.44	Blaine Tech
	11/10/2014	74.17	31.46	27.97	3.49	45.50	Blaine Tech
	11/18/2014	74.17	31.41	27.88	3.53	45.58	Blaine Tech
	11/25/2014	74.17	31.48	27.87	3.61	45.58	Blaine Tech
	12/3/2014	74.17	33.34	29.95	3.39	43.54	Blaine Tech
	12/12/2014	74.17	33.25	29.08	4.17	44.26	Blaine Tech
	12/19/2014	74.17	32.52	28.09	4.43	45.19	Blaine Tech
	4/22/2015	74.17	31.54	28.10	3.44	45.38	Blaine Tech
	10/22/2015	74.17	33.08	29.23	3.85	44.17	Kinder Morgan
	3/16/2016	74.17	33.39	33.16	0.23	40.96	Kinder Morgan
	4/12/2016	74.17	33.33	33.12	0.21	41.01	Kinder Morgan
	6/30/2016	74.17	31.50	---	---	42.67	Kinder Morgan
	8/22/2016	74.17	32.75	32.74	0.01	41.43	Kinder Morgan
	10/3/2016	74.17	32.72	32.71	0.01	41.46	Kinder Morgan
	3/24/2017	74.17	31.50	30.45	1.05	43.51	CH2M
	4/17/2017	74.17	30.12	29.96	0.16	44.18	Blaine Tech
	10/2/2017	74.17	33.54	---	---	40.63	Blaine Tech
GMW-O-12	4/30/2007	73.49	22.81	---	---	50.68	Secor
	11/12/2007	73.49	23.13	---	---	50.36	Stantec
	4/14/2008	73.49	23.36	---	---	50.13	Stantec
	10/13/2008	73.49	24.20	---	---	49.29	Stantec
	4/20/2009	73.49	24.21	---	---	49.28	Blaine Tech
	10/19/2009	73.49	25.08	---	---	48.41	Blaine Tech
	5/24/2010	73.49	24.80	---	---	48.69	Blaine Tech
	5/28/2010	73.49	24.74	---	---	48.75	Blaine Tech
	10/4/2010	73.49	25.31	25.20	0.11	48.27	Blaine Tech
	1/10/2011	73.49	26.42	26.32	0.10	47.15	Blaine Tech
	4/11/2011	73.49	24.04	---	---	49.45	Blaine Tech
	7/11/2011	73.49	NM	---	---	NC	
	10/10/2011	73.49	24.68	---	---	48.81	Blaine Tech
	1/9/2012	73.49	25.12	---	---	48.37	Blaine Tech
	4/16/2012	73.49	25.40	---	---	48.09	Blaine Tech
	7/9/2012	73.49	26.96	---	---	46.53	Blaine Tech
	10/15/2012	73.49	25.48	25.44	0.04	48.04	Blaine Tech
	1/14/2013	73.49	25.62	25.58	0.04	47.90	Blaine Tech
	4/8/2013	73.49	26.60	26.51	0.09	46.96	Blaine Tech
	9/24/2013	73.49	27.90	27.74	0.16	45.72	Blaine Tech
	10/7/2013	73.49	27.34	27.28	0.06	46.20	Blaine Tech
	4/14/2014	73.49	30.34	26.80	3.54	45.96	Blaine Tech
	5/6/2014	73.49	30.93	26.74	4.19	45.89	Nieto & Sons
	5/12/2014	73.49	30.81	26.82	3.99	45.85	Nieto & Sons
	5/20/2014	73.49	31.78	27.32	4.46	45.26	Nieto & Sons
	5/27/2014	73.49	33.04	26.78	6.26	45.43	Nieto & Sons
	6/4/2014	73.49	33.00	27.75	5.25	44.66	Nieto & Sons
	6/10/2014	73.49	34.53	26.81	7.72	45.10	Nieto & Sons
	7/3/2014	73.49	34.27	26.94	7.33	45.05	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	7/8/2014	73.49	33.87	26.87	7.00	45.19	Blaine Tech
	7/18/2014	73.49	33.36	27.07	6.29	45.13	Blaine Tech
	7/24/2014	73.49	33.00	26.98	6.02	45.28	Blaine Tech
	8/1/2014	73.49	31.80	26.83	4.97	45.64	Blaine Tech
	8/8/2014	73.49	31.26	26.91	4.35	45.69	Blaine Tech
	8/13/2014	73.49	31.18	26.88	4.30	45.73	Blaine Tech
	8/19/2014	73.49	31.01	26.86	4.15	45.78	Blaine Tech
	8/29/2014	73.49	31.03	26.89	4.14	45.75	Blaine Tech
	9/5/2014	73.49	31.19	26.88	4.31	45.73	Blaine Tech
	9/18/2014	73.49	31.30	26.82	4.48	45.75	Blaine Tech
	9/26/2014	73.49	31.33	26.89	4.44	45.69	Blaine Tech
	10/1/2014	73.49	31.21	26.85	4.36	45.75	Blaine Tech
	10/6/2014	73.49	31.20	29.84	1.36	43.37	Blaine Tech
	10/14/2014	73.49	31.14	26.86	4.28	45.75	Blaine Tech
	10/23/2014	73.49	31.30	26.85	4.45	45.73	Blaine Tech
	10/27/2014	73.49	31.28	26.90	4.38	45.69	Blaine Tech
	11/3/2014	73.49	32.30	26.84	5.46	45.53	Blaine Tech
	11/10/2014	73.49	31.45	26.91	4.54	45.65	Blaine Tech
	11/18/2014	73.49	32.34	26.90	5.44	45.47	Blaine Tech
	11/25/2014	73.49	31.57	27.87	3.70	44.86	Blaine Tech
	12/3/2014	73.49	33.87	28.81	5.06	43.64	Blaine Tech
	12/19/2014	73.49	32.78	26.97	5.81	45.33	Blaine Tech
	4/20/2015	73.49	33.35	26.91	6.44	45.26	Blaine Tech
	4/22/2015	73.49	33.35	26.91	6.44	45.26	Blaine Tech
	5/21/2015	73.49	34.31	27.35	6.96	44.71	Northstar
	5/29/2015	73.49	34.15	27.24	6.91	44.83	Northstar
	6/2/2015	73.49	34.00	27.27	6.73	44.84	Northstar
	6/5/2015	73.49	34.00	27.50	6.50	44.66	Northstar
	6/12/2015	73.49	33.96	27.35	6.61	44.78	Northstar
	6/19/2015	73.49	33.98	27.58	6.40	44.60	Northstar
	6/26/2015	73.49	33.97	28.15	5.82	44.15	Northstar
	7/2/2015	73.49	33.83	28.20	5.63	44.14	Northstar
	7/7/2015	73.49	33.60	27.93	5.67	44.40	Northstar
	7/17/2015	73.49	33.57	27.85	5.72	44.47	Northstar
	7/24/2015	73.49	33.15	28.25	4.90	44.24	Northstar
	7/29/2015	73.49	33.02	28.10	4.92	44.38	Northstar
	8/11/2015	73.49	33.00	28.90	4.10	43.75	Northstar
	8/18/2015	73.49	32.65	28.23	4.42	44.35	Northstar
	8/28/2015	73.49	32.41	28.17	4.24	44.45	Kinder Morgan
	9/1/2015	73.49	33.18	28.65	4.53	43.91	Kinder Morgan
	9/25/2015	73.49	34.69	28.03	6.66	44.09	Kinder Morgan
	10/16/2015	73.49	34.63	27.83	6.80	44.27	Kinder Morgan
	10/19/2015	73.49	34.65	27.82	6.83	44.27	Blaine Tech
	10/30/2015	73.49	39.38	28.11	11.27	43.07	Kinder Morgan
	3/14/2016	73.49	32.40	31.60	0.80	41.73	Blaine Tech
	4/11/2016	73.49	33.35	26.86	6.49	45.30	Blaine Tech
	6/29/2016	73.49	33.90	33.10	0.80	40.23	Blaine Tech
	8/22/2016	73.49	33.56	31.07	2.49	41.91	Blaine Tech
	10/3/2016	73.49	34.20	31.90	2.30	41.12	Blaine Tech
	4/17/2017	73.49	32.90	28.70	4.20	43.95	Blaine Tech
	10/2/2017	73.49	33.20	32.00	1.20	41.25	Blaine Tech
GMW-O-15	4/30/2007	74.23	23.41	23.30	0.11	50.91	Secor
	11/12/2007	74.23	23.95	23.85	0.10	50.36	Stantec
	4/14/2008	74.23	23.64	---	---	50.59	Stantec
	8/8/2008	74.23	24.60	---	---	49.63	Envent
	8/11/2008	74.23	24.40	24.34	0.06	49.88	Stantec
	10/16/2008	74.23	24.53	---	---	49.70	Envent
	12/18/2008	74.23	24.86	---	---	49.37	Envent

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	1/2/2009	74.23	24.82	---	---	49.41	Envent
	1/15/2009	74.23	26.01	---	---	48.22	Envent
	2/20/2009	74.23	24.80	---	---	49.43	Envent
	2/23/2009	74.23	24.76	24.74	0.02	49.49	Blaine Tech
	3/24/2009	74.23	25.55	---	---	48.68	Envent
	4/20/2009	74.23	24.66	24.61	0.05	49.61	Blaine Tech
	7/17/2009	74.23	25.01	---	---	49.22	Envent
	7/20/2009	74.23	24.99	24.94	0.05	49.28	Blaine Tech
	7/22/2009	74.23	24.99	24.94	0.05	49.28	Blaine Tech
	10/19/2009	74.23	25.55	25.43	0.12	48.78	Blaine Tech
	2/4/2010	74.23	25.50	25.48	0.02	48.75	Kinder Morgan
	3/15/2010	74.23	NM	---	---	NC	
	4/16/2010	74.23	23.10	---	---	51.13	Blaine Tech
	5/24/2010	74.23	25.67	---	---	48.56	Blaine Tech
	5/28/2010	74.23	25.35	---	---	48.88	Blaine Tech
	6/22/2010	74.23	25.81	---	---	48.42	Blaine Tech
	7/12/2010	74.23	NM	---	---	NC	
	8/12/2010	74.23	NM	---	---	NC	
	9/20/2010	74.23	NM	---	---	NC	
	10/4/2010	74.23	25.85	25.80	0.05	48.42	Blaine Tech
	11/23/2010	74.23	NM	---	---	NC	Blaine Tech
	12/22/2010	74.23	26.31	---	---	47.92	Blaine Tech
	1/10/2011	74.23	25.97	---	---	48.26	Blaine Tech
	2/24/2011	74.23	NM	---	---	NC	Blaine Tech
	3/23/2011	74.23	NM	---	---	NC	Blaine Tech
	4/12/2011	74.23	22.55	22.53	0.02	51.70	Blaine Tech
	5/13/2011	74.23	NM	---	---	NC	Blaine Tech
	6/22/2011	74.23	NM	---	---	NC	
	7/11/2011	74.23	NM	---	---	NC	
	8/19/2011	74.23	NM	---	---	NC	
	9/22/2011	74.23	NM	---	---	NC	
	10/10/2011	74.23	23.79	23.22	0.57	50.90	Blaine Tech
	11/28/2011	74.23	NM	---	---	NC	
	12/2/2011	74.23	23.92	23.86	0.06	50.36	Kinder Morgan
	12/21/2011	74.23	31.13	---	---	43.10	Blaine Tech
	1/9/2012	74.23	27.67	---	---	46.56	Blaine Tech
	2/23/2012	74.23	31.82	---	---	42.41	Blaine Tech
	3/28/2012	74.23	30.30	---	---	43.93	Blaine Tech
	4/16/2012	74.23	26.56	26.51	0.05	47.71	Blaine Tech
	5/25/2012	74.23	26.64	---	---	47.59	Blaine Tech
	6/15/2012	74.23	26.93	---	---	47.30	Blaine Tech
	7/9/2012	74.23	25.47	---	---	48.76	Blaine Tech
	8/29/2012	74.23	NM	---	---	NC	Blaine Tech
	9/26/2012	74.23	30.64	---	---	43.59	Blaine Tech
	10/15/2012	74.23	31.82	---	---	42.41	Blaine Tech
	11/29/2012	74.23	NM	---	---	NC	Blaine Tech
	12/26/2012	74.23	27.41	---	---	46.82	Blaine Tech
	1/14/2013	74.23	27.62	---	---	46.61	Blaine Tech
	2/20/2013	74.23	NM	---	---	NC	Blaine Tech
	4/10/2013	74.23	NM	---	---	NC	Blaine Tech
	4/26/2013	74.23	27.90	---	---	46.33	Kinder Morgan
	10/7/2013	74.23	29.03	28.26	0.77	45.82	Blaine Tech
	4/18/2014	74.23	28.40	28.08	0.32	46.09	Blaine Tech
	8/14/2014	74.23	32.59	28.26	4.33	45.10	Blaine Tech
	8/19/2014	74.23	32.34	28.23	4.11	45.18	Blaine Tech
	8/29/2014	74.23	31.84	28.25	3.59	45.26	Blaine Tech
	9/5/2014	74.23	31.91	28.29	3.62	45.22	Blaine Tech
	9/11/2014	74.23	32.16	28.79	3.37	44.77	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	9/18/2014	74.23	32.50	28.23	4.27	45.15	Blaine Tech
	9/26/2014	74.23	32.20	28.27	3.93	45.17	Blaine Tech
	10/1/2014	74.23	31.93	28.28	3.65	45.22	Blaine Tech
	10/6/2014	74.23	31.91	28.27	3.64	45.23	Blaine Tech
	10/14/2014	74.23	31.85	28.29	3.56	45.23	Blaine Tech
	10/23/2014	74.23	32.10	28.30	3.80	45.17	Blaine Tech
	10/27/2014	74.23	31.89	28.30	3.59	45.21	Blaine Tech
	11/18/2014	74.23	31.86	28.39	3.47	45.15	Blaine Tech
	11/25/2014	74.23	32.36	28.35	4.01	45.08	Blaine Tech
	12/3/2014	74.23	31.73	28.36	3.37	45.20	Blaine Tech
	12/12/2014	74.23	32.61	28.54	4.07	44.88	Blaine Tech
	12/19/2014	74.23	32.62	28.37	4.25	45.01	Blaine Tech
	4/20/2015	74.23	31.93	28.82	3.11	44.79	Blaine Tech
	10/19/2015	74.23	31.91	28.89	3.02	44.74	Blaine Tech
	4/12/2016	74.23	29.78	---	---	44.45	Kinder Morgan
	10/3/2016	74.86	31.00	30.92	0.08	43.92	Kinder Morgan
	3/9/2017	74.86	29.94	---	---	44.92	CH2M
	4/17/2017	74.86	29.65	29.52	0.13	45.31	Blaine Tech
	10/2/2017	74.86	31.92	30.33	1.59	44.21	Blaine Tech
GMW-O-18	4/30/2007	74.36	24.21	---	---	50.15	Secor
	11/12/2007	74.36	22.46	---	---	51.90	Secor
	4/14/2008	74.36	24.50	---	---	49.86	Secor
	10/13/2008	74.36	25.46	---	---	48.90	Stantec
	4/20/2009	74.36	25.59	---	---	48.77	Blaine Tech
	10/19/2009	74.36	26.31	---	---	48.05	Blaine Tech
	3/15/2010	74.36	26.54	---	---	47.82	Blaine Tech
	4/16/2010	74.36	24.25	---	---	50.11	Blaine Tech
	5/24/2010	74.36	26.26	---	---	48.10	Blaine Tech
	5/28/2010	74.36	26.03	---	---	48.33	Blaine Tech
	6/22/2010	74.36	26.41	---	---	47.95	
	7/12/2010	74.36	NM	---	---	NC	
	8/12/2010	74.36	NM	---	---	NC	
	9/20/2010	74.36	NM	---	---	NC	
	10/4/2010	74.36	29.95	---	---	44.41	Blaine Tech
	11/16/2010	74.36	NM	---	---	NC	
	12/22/2010	74.36	NM	---	---	NC	
	1/10/2011	74.36	NM	---	---	NC	
	2/24/2011	74.36	NM	---	---	NC	Blaine Tech
	3/23/2011	74.36	NM	---	---	NC	Blaine Tech
	4/12/2011	74.36	NM	---	---	NC	Blaine Tech
	5/13/2011	74.36	NM	---	---	NC	Blaine Tech
	6/22/2011	74.36	NM	---	---	NC	
	7/11/2011	74.36	NM	---	---	NC	
	8/19/2011	74.36	NM	---	---	NC	
	9/22/2011	74.36	NM	---	---	NC	
	10/10/2011	74.36	23.68	---	---	50.68	Blaine Tech
	11/28/2011	74.36	NM	---	---	NC	
	12/2/2011	74.36	24.22	---	---	50.14	Blaine Tech
	12/21/2011	74.36	27.14	---	---	47.22	Blaine Tech
	2/23/2012	74.36	31.18	---	---	43.18	Blaine Tech
	3/28/2012	74.36	NM	---	---	NC	Blaine Tech
	4/16/2012	74.36	27.10	---	---	47.26	Blaine Tech
	5/25/2012	74.36	27.31	---	---	47.05	Blaine Tech
	6/15/2012	74.36	35.13	---	---	39.23	Blaine Tech
	7/9/2012	74.36	29.51	---	---	44.85	Blaine Tech
	8/29/2012	74.36	NM	---	---	NC	Blaine Tech
	9/26/2012	74.36	30.83	---	---	43.53	Blaine Tech
	10/15/2012	74.36	29.73	---	---	44.63	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	11/29/2012	74.36	NM	---	---	NC	Blaine Tech
	12/26/2012	74.36	28.87	---	---	45.49	Blaine Tech
	1/14/2013	74.36	28.92	---	---	45.44	Blaine Tech
	2/20/2013	74.36	NM	---	---	NC	Blaine Tech
	4/10/2013	74.36	28.10	---	---	46.26	Blaine Tech
	10/7/2013	74.36	26.67	---	---	47.69	Blaine Tech
	4/18/2014	74.36	29.43	29.37	0.06	44.98	Blaine Tech
	8/14/2014	74.36	29.87	29.45	0.42	44.83	Blaine Tech
	8/19/2014	74.36	29.97	29.58	0.39	44.70	Blaine Tech
	8/29/2014	74.36	29.77	29.34	0.43	44.93	Blaine Tech
	9/11/2014	74.36	29.96	29.61	0.35	44.68	Blaine Tech
	9/18/2014	74.36	29.95	29.56	0.39	44.72	Blaine Tech
	9/26/2014	74.36	29.97	29.55	0.42	44.73	Blaine Tech
	10/1/2014	74.36	29.90	29.52	0.38	44.76	Blaine Tech
	10/6/2014	74.36	29.94	29.56	0.38	44.72	Blaine Tech
	10/14/2014	74.36	29.94	29.58	0.36	44.71	Blaine Tech
	10/23/2014	74.36	30.00	29.62	0.38	44.66	Blaine Tech
	10/27/2014	74.36	29.95	29.52	0.43	44.75	Blaine Tech
	4/20/2015	74.36	28.53	---	---	45.83	Blaine Tech
	10/19/2015	74.36	30.90	---	---	43.46	Blaine Tech
	4/12/2016	74.36	31.63	---	---	42.73	Blaine Tech
	12/13/2016	74.32	35.95	31.01	4.94	42.32	Blaine Tech
	12/14/2016	74.32	32.60	---	---	41.72	Blaine Tech
	3/6/2017	74.32	33.40	32.60	0.80	41.56	CH2M
	4/17/2017	74.32	31.83	31.80	0.03	42.51	Blaine Tech
	10/2/2017	74.32	31.32	31.30	0.02	43.02	Blaine Tech
GMW-O-20	8/15/2008	73.32	25.90	---	---	47.42	Envent
	10/17/2008	73.32	25.82	---	---	47.50	Envent
	12/19/2008	73.32	27.15	---	---	46.17	Envent
	1/15/2009	73.32	26.53	26.09	0.44	47.15	Envent
	2/24/2009	73.32	27.85	---	---	45.47	Envent
	3/20/2009	73.32	28.81	---	---	44.51	Envent
	3/27/2009	73.32	27.84	---	---	45.48	Envent
	4/21/2009	73.32	28.70	---	---	44.62	Envent
	7/21/2009	73.32	24.10	---	---	49.22	Envent
	10/19/2009	73.32	NM	---	---	NC	Blaine Tech
	11/9/2009	73.32	25.60	25.40	0.20	47.88	Kinder Morgan
	6/22/2010	73.32	24.76	24.66	0.10	48.64	Blaine Tech
	10/4/2010	73.32	31.20	31.10	0.10	42.20	Blaine Tech
	1/10/2011	73.32	26.62	26.48	0.14	46.81	Blaine Tech
	4/11/2011	73.32	23.82	---	---	49.50	Blaine Tech
	7/11/2011	73.32	NM	---	---	NC	
	10/10/2011	73.32	24.05	---	---	49.27	Blaine Tech
	1/9/2012	73.32	24.68	---	---	48.64	Blaine Tech
	4/16/2012	73.32	26.18	---	---	47.14	Blaine Tech
	7/9/2012	73.32	32.92	---	---	40.40	Blaine Tech
	10/15/2012	73.32	32.97	32.95	0.02	40.37	Blaine Tech
	1/14/2013	73.32	32.98	32.93	0.05	40.38	Blaine Tech
	4/8/2013	73.32	29.63	26.46	3.17	46.27	Blaine Tech
	9/24/2013	73.32	31.10	27.20	3.90	45.40	Blaine Tech
	10/7/2013	73.32	32.09	27.06	5.03	45.33	Blaine Tech
	4/25/2014	73.32	28.48	28.40	0.08	44.91	Blaine Tech
	9/18/2014	73.32	30.71	27.72	2.99	45.05	Blaine Tech
	9/26/2014	73.32	30.87	27.75	3.12	44.99	Blaine Tech
	10/1/2014	73.32	30.52	27.65	2.87	45.14	Blaine Tech
	10/6/2014	73.32	30.50	27.66	2.84	45.13	Blaine Tech
	10/14/2014	73.32	30.63	27.62	3.01	45.14	Blaine Tech
	10/23/2014	73.32	30.80	27.70	3.10	45.05	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	10/27/2014	73.32	30.70	27.76	2.94	45.02	Blaine Tech
	11/3/2014	73.32	30.81	27.62	3.19	45.11	Blaine Tech
	11/10/2014	73.32	30.94	27.75	3.19	44.98	Blaine Tech
	11/18/2014	73.32	30.91	27.65	3.26	45.07	Blaine Tech
	11/25/2014	73.32	30.95	27.65	3.30	45.06	Blaine Tech
	12/3/2014	73.32	32.56	27.83	4.73	44.61	Blaine Tech
	12/19/2014	73.32	31.72	27.93	3.79	44.69	Blaine Tech
	4/22/2015	73.32	32.25	27.98	4.27	44.55	Blaine Tech
	10/22/2015	73.32	31.36	29.38	1.98	43.57	Kinder Morgan
	3/16/2016	73.32	32.54	---	---	40.78	Kinder Morgan
	4/12/2016	73.32	32.48	---	---	40.84	Kinder Morgan
	6/29/2016	73.32	32.50	---	---	40.82	Blaine Tech
	8/22/2016	73.32	32.18	---	---	41.14	Blaine Tech
	10/3/2016	73.32	33.12	---	---	40.20	Blaine Tech
	3/23/2017	73.32	30.35	---	---	42.97	CH2M
	4/17/2017	73.32	29.70	---	---	43.62	Blaine Tech
	10/2/2017	73.32	33.03	---	---	40.29	Blaine Tech
GMW-O-21	12/28/2007	71.43	27.67	---	---	43.76	Geomatrix
	8/15/2008	73.94	NM	---	---	NC	Envent
	10/17/2008	71.43	26.00	---	---	45.43	Envent
	12/19/2008	71.43	24.82	---	---	46.61	Envent
	3/27/2009	71.43	26.41	---	---	45.02	Envent
	7/21/2009	71.43	24.88	---	---	46.55	Envent
	10/19/2009	71.43	NM	---	---	NC	Blaine Tech
	11/9/2009	71.43	25.02	---	---	46.41	Kinder Morgan
	10/4/2010	71.43	25.40	---	---	46.03	Blaine Tech
	4/13/2011	71.43	23.72	---	---	47.71	Blaine Tech
	10/10/2011	71.43	24.65	---	---	46.78	Blaine Tech
	4/16/2012	71.43	NM	---	---	NC	Blaine Tech
	7/9/2012	71.43	NM	---	---	NC	Blaine Tech
	10/15/2012	71.43	32.50	---	---	38.93	Blaine Tech
	4/8/2013	71.43	NM	---	---	NC	Blaine Tech
	9/25/2013	71.43	29.25	---	---	42.18	Blaine Tech
	10/7/2013	71.43	NM	---	---	NC	Blaine Tech
	4/14/2014	71.43	28.65	28.61	0.04	42.81	Blaine Tech
	9/5/2014	71.43	29.61	28.78	0.83	42.48	Blaine Tech
	9/26/2014	71.43	29.85	28.77	1.08	42.44	Blaine Tech
	10/1/2014	71.43	29.79	28.64	1.15	42.56	Blaine Tech
	10/6/2014	71.43	29.40	28.72	0.68	42.57	Blaine Tech
	10/27/2014	71.43	29.75	28.93	0.82	42.34	Blaine Tech
	11/10/2014	71.43	29.98	28.95	1.03	42.27	Blaine Tech
	11/18/2014	71.43	30.05	28.92	1.13	42.28	Blaine Tech
	11/25/2014	71.43	29.73	28.85	0.88	42.40	Blaine Tech
	12/12/2014	71.43	30.61	29.02	1.59	42.09	Blaine Tech
	12/19/2014	71.43	30.62	29.04	1.58	42.07	Blaine Tech
	4/20/2015	71.43	30.15	28.99	1.16	42.21	Blaine Tech
	6/10/2015	71.43	31.00	30.70	0.30	40.67	Blaine Tech
	7/2/2015	71.43	32.30	29.88	2.42	41.07	Northstar
	7/7/2015	71.43	30.65	30.06	0.59	41.25	Northstar
	7/17/2015	71.43	30.40	30.10	0.30	41.27	Northstar
	7/29/2015	71.43	30.40	30.10	0.30	41.27	Northstar
	8/11/2015	71.43	31.00	30.70	0.30	40.67	Northstar
	10/19/2015	71.43	31.43	31.20	0.23	40.18	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	3/14/2016	71.43	33.20	33.17	0.03	38.25	Blaine Tech
	4/11/2016	71.43	32.17	31.84	0.33	39.52	Blaine Tech
	6/29/2016	71.43	33.03	32.83	0.20	38.56	Blaine Tech
	8/22/2016	71.43	33.72	---	---	37.71	Blaine Tech
	10/3/2016	71.43	33.45	---	---	37.98	Blaine Tech
	4/17/2017	71.43	30.48	---	---	40.95	Blaine Tech
	10/2/2017	71.43	33.45	---	---	37.98	Blaine Tech
GMW-O-23	8/14/2007	73.63	23.33	---	---	50.30	Geomatrix
	8/21/2007	73.63	23.31	---	---	50.32	Geomatrix
	8/28/2007	73.63	23.00	---	---	50.63	Stantec
	9/11/2007	73.63	23.42	---	---	50.21	Geomatrix
	10/5/2007	73.63	27.79	---	---	45.84	Geomatrix
	11/2/2007	73.63	25.15	---	---	48.48	Geomatrix
	11/13/2007	73.63	23.90	---	---	49.73	Stantec
	12/28/2007	73.63	24.91	---	---	48.72	Geomatrix
	8/15/2008	73.63	26.28	---	---	47.35	Envent
	10/17/2008	73.63	27.16	---	---	46.47	Envent
	12/19/2008	73.63	27.60	---	---	46.03	Envent
	1/15/2009	73.63	27.54	---	---	46.09	Envent
	2/24/2009	73.63	26.19	---	---	47.44	Envent
	3/27/2009	73.63	23.74	---	---	49.89	Envent
	4/21/2009	73.63	27.30	---	---	46.33	Envent
	10/19/2009	73.63	NM	---	---	NC	Blaine Tech
	11/9/2009	73.63	27.50	---	---	46.13	Kinder Morgan
	6/22/2010	73.63	32.10	---	---	41.53	Blaine Tech
	10/4/2010	73.63	25.92	---	---	47.71	Blaine Tech
	1/10/2011	73.63	27.45	---	---	46.18	Blaine Tech
	4/11/2011	73.63	25.03	---	---	48.60	Blaine Tech
	7/11/2011	73.63	NM	---	---	NC	
	10/10/2011	73.63	25.25	---	---	48.38	Blaine Tech
	1/9/2012	73.63	25.91	---	---	47.72	Blaine Tech
	4/16/2012	73.63	27.38	---	---	46.25	Blaine Tech
	7/9/2012	73.63	27.41	---	---	46.22	Blaine Tech
	10/15/2012	73.63	26.48	---	---	47.15	Blaine Tech
	1/14/2013	73.63	29.35	---	---	44.28	Blaine Tech
	4/8/2013	73.63	29.81	27.74	2.07	45.48	Blaine Tech
	9/23/2013	73.63	29.90	---	---	43.73	Blaine Tech
	10/7/2013	73.63	32.86	28.30	4.56	44.42	Blaine Tech
	4/25/2014	73.63	29.81	29.66	0.15	43.94	Blaine Tech
	9/5/2014	73.63	32.57	28.76	3.81	44.11	Blaine Tech
	9/11/2014	73.63	32.94	28.63	4.31	44.14	Blaine Tech
	9/18/2014	73.63	32.80	28.65	4.15	44.15	Blaine Tech
	9/26/2014	73.63	32.87	28.70	4.17	44.10	Blaine Tech
	10/1/2014	73.63	32.56	28.75	3.81	44.12	Blaine Tech
	10/6/2014	73.63	32.50	28.73	3.77	44.15	Blaine Tech
	10/14/2014	73.63	32.75	28.20	4.55	44.52	Blaine Tech
	10/23/2014	73.63	32.80	28.69	4.11	44.12	Blaine Tech
	10/27/2014	73.63	32.51	28.80	3.71	44.09	Blaine Tech
	11/3/2014	73.63	32.82	29.68	3.14	43.32	Blaine Tech
	11/10/2014	73.63	32.80	28.78	4.02	44.05	Blaine Tech
	11/18/2014	73.63	32.78	29.78	3.00	43.25	Blaine Tech
	11/25/2014	73.63	32.64	28.78	3.86	44.08	Blaine Tech
	12/3/2014	73.63	33.25	28.94	4.31	43.83	Blaine Tech
	12/12/2014	73.63	32.58	29.33	3.25	43.65	Blaine Tech
	12/19/2014	73.63	32.71	29.37	3.34	43.59	Blaine Tech
	3/17/2015	73.63	30.40	30.00	0.40	43.55	Kinder Morgan
	4/22/2015	73.63	33.08	30.36	2.72	42.73	Blaine Tech
	10/22/2015	73.63	32.82	30.46	2.36	42.70	Kinder Morgan

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	3/16/2016	73.63	34.43	---	---	39.20	Kinder Morgan
	4/12/2016	73.63	32.59	---	---	41.04	Kinder Morgan
	6/29/2016	73.63	33.90	---	---	39.73	Blaine Tech
	8/22/2016	73.63	33.89	---	---	39.74	Blaine Tech
	10/3/2016	73.63	34.90	---	---	38.73	Blaine Tech
	3/23/2017	73.63	31.65	---	---	41.98	CH2M
	4/17/2017	73.63	30.88	---	---	42.75	Blaine Tech
	10/2/2017	73.63	34.70	---	---	38.93	Blaine Tech
GMW-SF-9	4/21/2009	73.00	24.19	---	---	48.81	Envent
	5/24/2010	73.00	28.31	---	---	44.69	Blaine Tech
	5/28/2010	73.00	28.37	---	---	44.63	Blaine Tech
	10/4/2010	73.00	25.28	---	---	47.72	Blaine Tech
	4/11/2011	73.00	23.90	---	---	49.10	Blaine Tech
	10/10/2011	73.00	24.70	---	---	48.30	Blaine Tech
	4/16/2012	73.00	26.99	---	---	46.01	Blaine Tech
	7/9/2012	73.00	NM	---	---	NC	Blaine Tech
	10/15/2012	73.05	34.21	---	---	38.84	Blaine Tech
	1/14/2013	73.05	34.32	---	---	38.73	Blaine Tech
	4/10/2013	73.05	27.37	---	---	45.68	Blaine Tech
	8/14/2014	73.05	29.35	28.37	0.98	44.48	Blaine Tech
	8/19/2014	73.05	28.46	28.44	0.02	44.61	Blaine Tech
	8/29/2014	73.05	29.32	28.31	1.01	44.54	Blaine Tech
	9/5/2014	73.05	29.33	28.29	1.04	44.55	Blaine Tech
	9/11/2014	73.05	29.49	28.47	1.02	44.38	Blaine Tech
	9/18/2014	73.05	28.95	28.91	0.04	44.13	Blaine Tech
	9/26/2014	73.05	28.93	28.59	0.34	44.39	Blaine Tech
	4/20/2015	73.05	29.01	---	---	44.04	Blaine Tech
	10/21/2015	73.05	29.69	---	---	43.36	Blaine Tech
	3/6/2017	73.05	28.88	---	---	44.17	CH2M
GMW-SF-10	4/21/2009	75.77	27.10	---	---	48.67	Envent
	10/4/2010	75.77	28.03	---	---	47.74	Blaine Tech
	4/11/2011	75.77	26.80	---	---	48.97	Blaine Tech
	10/10/2011	75.77	27.60	---	---	48.17	Blaine Tech
	4/16/2012	75.77	28.81	---	---	46.96	Blaine Tech
	7/9/2012	75.77	NM	---	---	NC	Blaine Tech
	10/15/2012	75.77	29.88	---	---	45.89	Blaine Tech
	4/8/2013	75.77	DRY	---	---	NC	Blaine Tech
GWR-3	4/30/2007	74.93	27.97	---	---	46.96	Secor
	11/12/2007	74.93	27.90	---	---	47.03	Stantec
	10/17/2008	74.93	29.88	---	---	45.05	Envent
	12/17/2008	74.93	19.71	---	---	55.22	Envent
	1/15/2009	74.93	29.27	29.26	0.26	45.88	Envent
	3/27/2009	74.93	27.18	---	---	47.75	Envent
	4/21/2009	74.93	29.97	---	---	44.96	Envent
	7/21/2009	74.93	28.77	---	---	46.16	Envent
	10/19/2009	74.93	NM	---	---	NC	Blaine Tech
	10/4/2010	74.93	30.67	---	---	44.26	Blaine Tech
	4/11/2011	74.93	29.94	---	---	44.99	Blaine Tech
	10/10/2011	74.93	29.22	---	---	45.71	Blaine Tech
	4/16/2012	74.93	29.56	---	---	45.37	Blaine Tech
	7/9/2012	---	NM	---	---	NC	Blaine Tech
	10/15/2012	77.6	31.21	---	---	46.39	Blaine Tech
	4/8/2013	77.6	29.21	29.18	0.03	48.41	Blaine Tech
	10/7/2013	77.6	36.20	31.67	4.53	45.16	Blaine Tech
	4/14/2014	77.6	38.80	32.23	6.57	44.25	Blaine Tech
	5/5/2014	77.6	38.81	32.31	6.50	44.18	Nieto & Sons
	5/12/2014	77.6	36.34	32.77	3.57	44.22	Nieto & Sons
	5/27/2014	77.6	36.11	33.20	2.91	43.91	Nieto & Sons

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	6/4/2014	77.6	34.57	31.61	2.96	45.49	Nieto & Sons
	8/8/2014	77.6	37.92	33.38	4.54	43.45	Blaine Tech
	8/13/2014	77.6	35.38	33.18	2.20	44.05	Blaine Tech
	8/19/2014	77.6	35.28	33.25	2.03	44.00	Blaine Tech
	8/29/2014	77.6	35.72	33.12	2.60	44.04	Blaine Tech
	9/5/2014	77.6	35.68	33.19	2.49	43.99	Blaine Tech
	9/11/2014	77.6	36.05	33.04	3.01	44.05	Blaine Tech
	9/18/2014	77.60	35.34	33.27	2.07	43.98	Blaine Tech
	9/26/2014	77.60	35.25	33.24	2.01	44.02	Blaine Tech
	10/1/2014	77.60	36.44	34.01	2.43	43.18	Blaine Tech
	10/6/2014	77.60	34.71	33.33	1.38	44.04	Blaine Tech
	10/14/2014	77.60	35.15	33.20	1.95	44.07	Blaine Tech
	10/23/2014	77.60	35.36	33.20	2.16	44.03	Blaine Tech
	10/27/2014	77.60	34.68	33.49	1.19	43.91	Blaine Tech
	11/3/2014	77.60	35.43	33.18	2.25	44.04	Blaine Tech
	11/10/2014	77.60	35.02	33.32	1.70	43.99	Blaine Tech
	11/18/2014	77.60	35.05	33.34	1.71	43.97	Blaine Tech
	11/25/2014	77.60	35.04	33.36	1.68	43.95	Blaine Tech
	12/3/2014	77.60	34.95	33.34	1.61	43.99	Blaine Tech
	12/12/2014	77.60	35.11	33.64	1.47	43.71	Blaine Tech
	12/19/2014	77.60	35.55	33.67	1.88	43.61	Blaine Tech
	4/20/2015	77.60	37.25	33.34	3.91	43.60	Blaine Tech
	7/24/2015	77.60	41.30	33.95	7.35	42.40	Northstar
	8/12/2015	77.60	37.03	34.42	2.61	42.74	Northstar
	10/20/2015	77.60	35.98	34.65	1.33	42.72	Blaine Tech
	3/16/2016	77.60	38.60	---	---	39.00	Kinder Morgan
	4/11/2016	77.60	36.90	---	---	40.70	Blaine Tech
	6/29/2016	77.60	37.77	---	---	39.83	Blaine Tech
	8/22/2016	77.60	38.24	---	---	39.36	Blaine Tech
	10/3/2016	77.60	39.20	39.15	0.05	38.44	Blaine Tech
	3/7/2017	77.60	35.62	---	---	41.98	CH2M
	4/17/2017	77.60	34.88	--	--	42.72	Blaine Tech
	10/2/2017	77.60	38.92	---	---	38.68	Blaine Tech
MW-18 (MID)	4/30/2007	75.67	29.77	---	---	45.90	Secor
	11/12/2007	75.67	30.23	---	---	45.44	Secor
	4/14/2008	75.67	30.45	---	---	45.22	Secor
	10/13/2008	75.67	31.15	---	---	44.52	Stantec
	4/20/2009	75.67	31.49	---	---	44.18	Blaine Tech
	10/19/2009	75.67	32.62	---	---	43.05	Blaine Tech
	5/24/2010	75.67	32.26	---	---	43.41	Blaine Tech
	5/28/2010	75.67	32.17	---	---	43.50	Blaine Tech
	10/4/2010	75.67	32.30	---	---	43.37	Blaine Tech
	4/11/2011	75.67	31.28	---	---	44.39	Blaine Tech
	10/10/2011	75.67	31.51	---	---	44.16	Blaine Tech
	4/16/2012	75.67	31.75	---	---	43.92	Blaine Tech
	7/9/2012	75.67	NM	---	---	NC	Blaine Tech
	10/15/2012	75.67	33.41	---	---	42.26	Blaine Tech
	4/8/2013	75.67	30.68	---	---	44.99	Blaine Tech
	10/7/2013	75.67	35.33	---	---	40.34	Blaine Tech
	4/14/2014	75.67	35.40	---	---	40.27	Blaine Tech
	10/27/2014	75.67	35.81	---	---	39.86	Blaine Tech
	4/20/2015	75.67	36.29	---	---	39.38	Blaine Tech
	10/19/2015	75.67	36.99	---	---	38.68	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	3/14/2016	75.67	40.70	---	---	34.97	Blaine Tech
	4/11/2016	75.67	38.89	---	---	36.78	Blaine Tech
	6/29/2016	75.67	39.94	---	---	35.73	Blaine Tech
	8/22/2016	75.67	40.14	---	---	35.53	Blaine Tech
	10/3/2016	75.67	40.93	---	---	34.74	Blaine Tech
	4/17/2017	75.67	37.50	---	---	38.17	Blaine Tech
	10/2/2017	75.67	40.26	---	---	35.41	Blaine Tech
MW-O-1	4/30/2007	75.48	24.10	23.98	0.12	51.48	Secor
	8/14/2007	75.48	25.31	23.78	1.53	51.39	Geomatrix
	8/21/2007	75.48	23.84	23.58	0.26	51.85	Geomatrix
	8/28/2007	75.48	23.07	23.06	0.01	52.42	Stantec
	9/11/2007	75.48	23.86	23.48	0.38	51.92	Geomatrix
	10/5/2007	75.48	24.67	---	---	50.81	Geomatrix
	11/2/2007	75.48	24.25	---	---	51.23	Geomatrix
	11/12/2007	75.48	24.27	24.25	0.02	51.23	Stantec
	12/28/2007	75.48	25.54	25.51	0.03	49.96	Geomatrix
	8/15/2008	75.48	NM	---	---	NC	Envent
	8/19/2008	75.48	25.18	25.13	0.05	50.34	Envent
	10/17/2008	75.48	25.30	---	---	50.18	Envent
	12/19/2008	75.48	26.31	---	---	49.17	Envent
	1/15/2009	75.48	25.84	---	---	49.64	Envent
	4/21/2009	75.48	25.41	---	---	50.07	Envent
	10/19/2009	75.48	26.30	---	---	49.18	Blaine Tech
	10/4/2010	75.48	26.90	---	---	48.58	Blaine Tech
	4/11/2011	75.48	25.59	---	---	49.89	Blaine Tech
	10/10/2011	75.48	26.52	---	---	48.96	Blaine Tech
	4/16/2012	75.48	27.25	---	---	48.23	Blaine Tech
	7/9/2012	75.48	NM	---	---	NC	Blaine Tech
	10/15/2012	75.48	28.94	---	---	46.54	Blaine Tech
	4/8/2013	75.48	28.81	---	---	46.67	Blaine Tech
	10/7/2013	75.48	29.21	---	---	46.27	Blaine Tech
	4/14/2014	75.48	29.82	---	---	45.66	Blaine Tech
	10/27/2014	75.48	29.92	---	---	45.56	Blaine Tech
	4/20/2015	75.48	30.39	---	---	45.09	Blaine Tech
	10/27/2015	75.48	27.67	---	---	47.81	Blaine Tech
	3/14/2016	75.48	DRY	---	---	NC	Blaine Tech
	4/11/2016	75.48	DRY	---	---	NC	Blaine Tech
	6/29/2016	75.48	DRY	---	---	NC	Blaine Tech
	8/22/2016	75.48	DRY	---	---	NC	Blaine Tech
	10/3/2016	75.48	DRY	---	---	NC	Blaine Tech
	4/17/2017	75.48	DRY	---	---	NC	Blaine Tech
	10/2/2017	75.48	DRY	---	---	NC	Blaine Tech
MW-O-2	4/30/2007	74.31	22.53	---	---	51.78	Secor
	11/12/2007	71.90	23.10	---	---	48.80	Stantec
	8/15/2008	71.90	NM	---	---	NC	Envent
	10/17/2008	71.90	24.85	---	---	47.05	Envent
	12/19/2008	71.90	25.51	---	---	46.39	Envent
	3/27/2009	71.90	25.22	---	---	46.68	Envent
	4/21/2009	71.90	NM	---	---	NC	Envent
	7/21/2009	71.90	23.63	---	---	48.27	Envent
	10/19/2009	71.90	NM	---	---	NC	Blaine Tech
	11/9/2009	71.90	25.39	---	---	46.51	Kinder Morgan
	10/4/2010	71.90	26.05	---	---	45.85	Blaine Tech
	4/13/2011	71.9	23.31	---	---	48.59	Blaine Tech
	10/10/2011	71.9	27.53	---	---	44.37	Blaine Tech
	1/9/2012	71.9	28.13	---	---	43.77	Blaine Tech
	4/16/2012	71.9	NM	---	---	NC	Blaine Tech
	7/9/2012	71.9	26.53	---	---	45.37	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	10/15/2012	71.9	26.89	---	---	45.01	Blaine Tech
	1/14/2013	71.9	26.93	---	---	44.97	Blaine Tech
	4/8/2013	71.9	NM	---	---	NC	Blaine Tech
	6/6/2013	71.9	28.99	---	---	42.91	Blaine Tech
	10/7/2013	71.9	29.06	---	---	42.84	Blaine Tech
	4/14/2014	71.9	29.36	---	---	42.54	Blaine Tech
	10/27/2014	71.9	29.81	29.65	0.16	42.22	Blaine Tech
	4/20/2015	71.9	30.94	29.34	1.60	42.24	Blaine Tech
	5/21/2015	71.9	32.50	27.31	5.19	43.55	Northstar
	5/29/2015	71.9	31.52	30.20	1.32	41.44	Northstar
	6/5/2015	71.9	31.45	30.57	0.88	41.15	Northstar
	6/12/2015	71.9	31.05	30.60	0.45	41.21	Northstar
	6/19/2015	71.9	31.10	30.90	0.20	40.96	Northstar
	6/26/2015	71.9	31.66	31.37	0.29	40.47	Northstar
	10/19/2015	71.9	32.39	30.53	1.86	41.00	Blaine Tech
	3/14/2016	71.9	35.49	34.86	0.63	36.91	Blaine Tech
	4/11/2016	71.9	33.03	32.54	0.49	39.26	Blaine Tech
	6/30/2016	71.9	34.20	---	---	37.70	Kinder Morgan
	8/22/2016	71.9	33.93	---	---	37.97	Kinder Morgan
	10/3/2016	71.9	34.30	34.22	0.08	37.66	Blaine Tech
	4/17/2017	71.9	30.91	30.85	0.06	41.04	Blaine Tech
	10/2/2017	71.9	34.67	---	---	37.23	Blaine Tech
MW-SF-1	3/12/2007	78.93	28.71	---	---	50.22	Secor
	4/30/2007	78.93	28.44	---	---	50.49	Secor
	8/28/2007	78.93	27.94	---	---	50.99	Stantec
	11/12/2007	78.93	28.76	---	---	50.17	Stantec
	2/19/2008	78.93	29.50	---	---	49.43	Stantec
	4/14/2008	78.93	29.16	---	---	49.77	Stantec
	8/11/2008	78.93	29.75	---	---	49.18	Stantec
	10/13/2008	78.93	29.86	---	---	49.07	Stantec
	2/23/2009	78.93	30.00	---	---	48.93	Blaine Tech
	4/20/2009	78.93	29.97	---	---	48.96	Blaine Tech
	7/20/2009	78.93	30.98	---	---	47.95	Blaine Tech
	7/22/2009	78.93	30.98	---	---	47.95	Blaine Tech
	10/19/2009	78.93	31.11	---	---	47.82	Blaine Tech
	3/15/2010	78.93	31.74	---	---	47.19	Blaine Tech
	5/24/2010	78.93	30.79	---	---	48.14	Blaine Tech
	5/28/2010	78.93	30.57	---	---	48.36	Blaine Tech
	6/22/2010	78.93	30.84	---	---	48.09	Blaine Tech
	7/12/2010	78.93	30.51	---	---	48.42	Blaine Tech
	10/4/2010	78.93	30.88	---	---	48.05	Blaine Tech
	1/10/2011	78.93	32.51	---	---	46.42	Blaine Tech
	4/11/2011	78.93	29.87	---	---	49.06	Blaine Tech
	7/11/2011	78.93	29.84	---	---	49.09	Blaine Tech
	10/10/2011	78.93	29.60	---	---	49.33	Blaine Tech
	1/9/2012	78.93	31.25	---	---	47.68	Blaine Tech
	4/16/2012	78.93	32.59	---	---	46.34	Blaine Tech
	7/9/2012	78.93	31.24	---	---	47.69	Blaine Tech
	10/15/2012	78.93	32.23	---	---	46.70	Blaine Tech
	1/14/2013	78.93	33.88	---	---	45.05	Blaine Tech
	4/8/2013	78.93	33.38	---	---	45.55	Blaine Tech
	10/7/2013	78.93	37.14	31.72	5.42	46.13	Blaine Tech
	4/14/2014	78.93	37.40	32.69	4.71	45.30	Blaine Tech
	5/6/2014	78.93	39.99	32.82	7.17	44.68	Nieto & Sons
	5/12/2014	78.93	37.31	33.55	3.76	44.63	Nieto & Sons
	5/20/2014	78.93	37.10	34.60	2.50	43.83	Nieto & Sons
	5/27/2014	78.93	36.62	34.30	2.32	44.17	Nieto & Sons
	6/4/2014	78.93	35.98	35.27	0.71	43.52	Nieto & Sons

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	6/10/2014	78.93	36.91	34.48	2.43	43.96	Nieto & Sons
	7/3/2014	78.93	36.72	34.71	2.01	43.82	Nieto & Sons
	7/8/2014	78.93	36.60	34.45	2.15	44.05	Blaine Tech
	7/18/2014	78.93	35.18	34.77	0.41	44.08	Blaine Tech
	7/24/2014	78.93	35.30	34.62	0.68	44.17	Blaine Tech
	8/1/2014	78.93	34.74	34.44	0.30	44.43	Blaine Tech
	8/14/2014	78.93	34.75	34.41	0.34	44.45	Blaine Tech
	8/19/2014	78.93	34.66	34.37	0.29	44.50	Blaine Tech
	8/29/2014	78.93	35.65	35.38	0.27	43.50	Blaine Tech
	9/18/2014	78.93	34.85	34.49	0.36	44.37	Blaine Tech
	9/26/2014	78.93	34.78	34.45	0.33	44.41	Blaine Tech
	10/1/2014	78.93	34.77	34.41	0.36	44.45	Blaine Tech
	10/6/2014	78.93	34.78	34.42	0.36	44.44	Blaine Tech
	10/14/2014	78.93	34.65	34.41	0.24	44.47	Blaine Tech
	10/23/2014	78.93	34.84	34.45	0.39	44.40	Blaine Tech
	10/27/2014	78.93	34.80	34.43	0.37	44.43	Blaine Tech
	11/10/2014	78.93	34.91	34.51	0.40	44.34	Blaine Tech
	11/18/2014	78.93	34.80	34.43	0.37	44.43	Blaine Tech
	11/25/2014	78.93	34.53	34.51	0.02	44.42	Blaine Tech
	12/12/2014	78.93	35.18	34.78	0.40	44.07	Blaine Tech
	12/19/2014	78.93	35.34	34.88	0.46	43.96	Blaine Tech
	4/20/2015	78.93	34.89	34.48	0.41	44.37	Blaine Tech
	5/19/2015	78.93	38.45	34.55	3.90	43.60	Northstar
	5/29/2015	78.93	36.36	35.22	1.14	43.48	Northstar
	6/5/2015	78.93	36.50	35.43	1.07	43.29	Northstar
	6/12/2015	78.93	35.80	35.41	0.39	43.44	Northstar
	6/19/2015	78.93	36.02	35.42	0.60	43.39	Northstar
	6/26/2015	78.93	36.60	36.45	0.15	42.45	Northstar
	10/19/2015	78.93	36.35	35.53	0.82	43.24	Blaine Tech
	11/17/2015	78.93	35.65	---	---	43.28	Kinder Morgan
	3/14/2016	78.93	40.40	---	---	38.53	Blaine Tech
	4/11/2016	78.93	37.96	---	---	40.97	Blaine Tech
	6/29/2016	78.93	39.05	---	---	39.88	Blaine Tech
	8/22/2016	78.93	39.04	---	---	39.87	Blaine Tech
	10/3/2016	78.93	39.20	---	---	39.73	Blaine Tech
	4/17/2017	78.93	35.75	---	---	43.18	Blaine Tech
	10/2/2017	78.93	39.98	---	---	38.95	Blaine Tech
MW-SF-2	4/30/2007	78.45	28.35	28.34	0.01	50.11	Secor
	11/12/2007	78.45	29.18	28.71	0.47	49.65	Stantec
	8/12/2008	78.45	31.11	---	---	47.34	Envent
	10/17/2008	78.45	31.55	31.50	0.05	46.94	Envent
	12/18/2008	78.53	32.75	32.55	0.20	45.94	Envent
	1/15/2009	78.53	30.84	30.57	0.27	47.91	Envent
	3/24/2009	78.53	28.85	---	---	49.68	Envent
	4/21/2009	78.53	29.98	---	---	48.55	Envent
	7/21/2009	78.53	29.85	---	---	48.68	Envent
	10/19/2009	78.53	NM	---	---	NC	Blaine Tech
	12/9/2009	78.53	31.45	---	---	47.08	Kinder Morgan
	10/4/2010	78.53	30.96	30.75	0.21	47.74	Blaine Tech
	1/10/2011	78.53	32.62	32.50	0.12	46.01	Blaine Tech
	4/11/2011	78.53	29.83	---	---	48.70	Blaine Tech
	7/11/2011	78.53	NM	---	---	NC	
	10/10/2011	78.53	29.82	---	---	48.71	Blaine Tech
	1/9/2012	78.53	30.52	---	---	48.01	Blaine Tech
	4/16/2012	78.53	31.28	---	---	47.25	Blaine Tech
	7/9/2012	78.53	33.18	---	---	45.35	Blaine Tech
	10/15/2012	78.53	32.11	---	---	46.42	Blaine Tech
	1/14/2013	78.53	33.59	---	---	44.94	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	4/8/2013	78.53	33.32	---	---	45.21	Blaine Tech
	10/7/2013	78.53	34.58	33.08	1.50	45.15	Blaine Tech
	4/14/2014	78.53	37.50	33.27	4.23	44.41	Blaine Tech
	5/6/2014	78.53	37.71	33.24	4.47	44.40	Nieto & Sons
	5/12/2014	78.53	37.53	33.34	4.19	44.35	Nieto & Sons
	5/20/2014	78.53	37.62	33.51	4.11	44.20	Nieto & Sons
	5/27/2014	78.53	38.24	33.77	4.47	43.87	Nieto & Sons
	6/4/2014	78.53	34.63	---	---	43.90	Nieto & Sons
	6/10/2014	78.53	38.49	34.00	4.49	43.63	Nieto & Sons
	8/8/2014	78.53	36.23	33.82	2.41	44.23	Blaine Tech
	8/13/2014	78.53	36.75	33.59	3.16	44.31	Blaine Tech
	8/19/2014	78.53	36.90	33.60	3.30	44.27	Blaine Tech
	8/29/2014	78.53	37.11	33.53	3.58	44.28	Blaine Tech
	9/5/2014	78.53	37.09	33.51	3.58	44.30	Blaine Tech
	9/11/2014	78.53	37.12	33.51	3.61	44.30	Blaine Tech
	9/18/2014	78.53	36.89	33.60	3.29	44.27	Blaine Tech
	9/26/2014	78.53	37.28	33.54	3.74	44.24	Blaine Tech
	10/1/2014	78.53	37.18	33.56	3.62	44.25	Blaine Tech
	10/6/2014	78.53	37.16	33.59	3.57	44.23	Blaine Tech
	10/14/2014	78.53	37.15	33.64	3.51	44.19	Blaine Tech
	10/23/2014	78.53	37.24	33.61	3.63	44.19	Blaine Tech
	10/27/2014	78.53	37.04	33.54	3.50	44.29	Blaine Tech
	11/3/2014	78.53	37.14	33.55	3.59	44.26	Blaine Tech
	11/10/2014	78.53	37.33	33.56	3.77	44.22	Blaine Tech
	11/18/2014	78.53	37.21	33.64	3.57	44.18	Blaine Tech
	11/25/2014	78.53	37.40	33.69	3.71	44.10	Blaine Tech
	12/3/2014	78.53	37.16	33.60	3.56	44.22	Blaine Tech
	12/12/2014	78.53	38.05	33.91	4.14	43.79	Blaine Tech
	12/19/2014	78.53	38.40	33.95	4.45	43.69	Blaine Tech
	4/20/2015	78.53	36.15	34.73	1.42	43.52	Blaine Tech
	6/25/2015	78.53	38.95	35.57	3.38	42.28	Blaine Tech
	10/21/2015	78.53	36.32	36.13	0.19	42.36	Kinder Morgan
	3/16/2016	78.53	39.27	---	---	39.26	Kinder Morgan
	4/11/2016	78.53	37.47	---	---	41.06	Blaine Tech
	6/29/2016	78.53	38.08	---	---	40.45	Blaine Tech
	8/22/2016	78.53	38.83	---	---	39.70	Blaine Tech
	10/3/2016	78.53	39.60	---	---	38.93	Blaine Tech
	3/10/2017	78.53	36.47	---	---	42.06	CH2M
	4/17/2017	78.53	35.78	---	---	42.75	Blaine Tech
	10/2/2017	78.53	39.68	---	---	38.85	Blaine Tech
MW-SF-3	4/30/2007	77.62	27.72	27.45	0.27	50.12	Secor
	11/12/2007	77.62	29.34	28.28	1.06	49.13	Stantec
	8/12/2008	77.62	30.30	29.05	1.25	48.32	Envent
	10/17/2008	77.62	29.45	---	---	48.17	Envent
	12/18/2008	78.12	31.08	30.82	0.26	47.25	Envent
	1/15/2009	78.12	29.96	29.94	0.02	48.18	Envent
	3/20/2009	78.12	31.10	---	---	47.02	Envent
	3/24/2009	78.12	27.82	---	---	50.30	Envent
	4/21/2009	78.12	29.51	29.50	0.01	48.62	Envent
	7/21/2009	78.12	30.07	---	---	48.05	Envent
	10/19/2009	78.12	NM	---	---	NC	Blaine Tech
	11/6/2009	78.12	30.37	30.35	0.02	47.77	Kinder Morgan
	12/9/2009	78.12	30.53	---	---	47.59	Kinder Morgan
	9/3/2010	78.12	30.97	30.42	0.55	47.59	Kinder Morgan
	10/4/2010	78.12	30.88	30.30	0.58	47.70	Blaine Tech
	4/12/2011	78.12	29.44	---	---	48.68	Blaine Tech
	10/10/2011	78.12	30.75	---	---	47.37	Blaine Tech
	4/16/2012	78.12	NM	---	---	NC	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	7/9/2012	78.12	NM	---	---	NC	Blaine Tech
	10/15/2012	78.12	32.47	---	---	45.65	Blaine Tech
	5/24/2013	78.12	33.35	32.51	0.84	45.44	Blaine Tech
	9/25/2013	78.12	34.40	---	---	43.72	Blaine Tech
	10/7/2013	78.12	NM	---	---	NC	Blaine Tech
	11/14/2013	78.12	33.26	---	---	44.86	Blaine Tech
	4/18/2014	78.12	33.72	33.62	0.10	44.48	Blaine Tech
	8/8/2014	78.12	34.07	33.71	0.36	44.34	Blaine Tech
	10/14/2014	78.12	34.55	33.92	0.63	44.07	Blaine Tech
	10/23/2014	78.12	34.57	33.94	0.63	44.05	Blaine Tech
	10/27/2014	78.12	34.49	33.85	0.64	44.14	Blaine Tech
	11/10/2014	78.12	34.65	33.94	0.71	44.04	Blaine Tech
	11/18/2014	78.12	34.62	33.88	0.74	44.09	Blaine Tech
	11/25/2014	78.12	34.22	33.94	0.28	44.12	Blaine Tech
	12/12/2014	78.12	34.89	34.38	0.51	43.64	Blaine Tech
	12/19/2014	78.12	35.04	34.43	0.61	43.57	Blaine Tech
	4/20/2015	78.12	34.52	---	---	43.60	Blaine Tech
	10/21/2015	78.12	35.18	---	---	42.94	Kinder Morgan
	3/14/2016	78.12	39.43	39.40	0.03	38.71	Blaine Tech
	4/11/2016	78.12	37.17	---	---	40.95	Blaine Tech
	6/30/2016	78.12	38.28	---	---	39.84	Kinder Morgan
	8/22/2016	78.12	38.33	---	---	39.79	Kinder Morgan
	10/3/2016	78.12	39.40	---	---	38.72	Kinder Morgan
	3/8/2017	78.12	35.75	---	---	42.37	CH2M
	4/17/2017	78.12	35.15	---	---	42.97	Blaine Tech
	10/2/2017	78.12	39.20	---	---	38.92	Blaine Tech
MW-SF-4	3/12/2007	79.38	30.01	29.41	0.60	49.85	Secor
	4/30/2007	79.38	29.96	29.11	0.85	50.10	Secor
	8/14/2007	79.38	30.34	28.38	1.96	50.60	Geomatrix
	8/28/2007	79.38	29.95	28.30	1.65	50.74	Stantec
	9/11/2007	79.38	29.98	28.43	1.55	50.63	Geomatrix
	10/5/2007	79.38	30.68	28.85	1.83	50.15	Geomatrix
	10/12/2007	79.38	30.27	29.96	0.31	49.36	Geomatrix
	10/19/2007	79.38	30.28	---	---	49.10	Geomatrix
	10/26/2007	79.38	30.52	---	---	48.86	Geomatrix
	11/2/2007	79.38	30.68	---	---	48.70	Geomatrix
	11/12/2007	79.38	29.70	29.69	0.01	49.69	Stantec
	12/21/2007	79.38	30.69	---	---	48.69	Geomatrix
	2/19/2008	79.38	30.22	---	---	49.16	Stantec
	3/21/2008	79.38	30.07	---	---	49.31	Envent
	4/14/2008	79.38	29.95	---	---	49.43	Stantec
	8/8/2008	79.38	30.51	---	---	48.87	Envent
	8/11/2008	79.38	30.57	---	---	48.81	Stantec
	10/16/2008	79.38	30.77	---	---	48.61	Envent
	1/15/2009	79.38	31.14	---	---	48.24	Envent
	2/20/2009	79.38	30.84	---	---	48.54	Envent
	2/23/2009	79.38	30.96	---	---	48.42	Blaine Tech
	4/20/2009	79.38	30.02	29.94	0.08	49.42	Blaine Tech
	4/28/2009	79.38	30.78	---	---	48.60	Envent
	7/17/2009	79.38	31.85	---	---	47.53	Envent
	7/20/2009	79.38	31.65	31.61	0.04	47.76	Blaine Tech
	7/22/2009	79.38	31.65	31.61	0.04	47.76	Blaine Tech
	10/19/2009	79.38	31.93	31.90	0.03	47.47	Blaine Tech
	3/15/2010	79.38	31.95	31.91	0.04	47.46	Blaine Tech
	5/24/2010	79.38	31.60	---	---	47.78	Blaine Tech
	5/28/2010	79.38	26.40	---	---	52.98	Blaine Tech
	6/22/2010	79.38	31.63	---	---	47.75	Blaine Tech
	7/12/2010	79.38	31.37	---	---	48.01	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	10/4/2010	79.38	31.81	---	---	47.57	Blaine Tech
	1/10/2011	79.38	32.99	---	---	46.39	Blaine Tech
	4/11/2011	79.38	30.85	---	---	48.53	Blaine Tech
	7/11/2011	79.38	30.35	---	---	49.03	Blaine Tech
	10/10/2011	79.38	NM	---	---	NC	Blaine Tech
	1/9/2012	79.38	32.07	---	---	47.31	Blaine Tech
	4/16/2012	79.38	33.35	---	---	46.03	Blaine Tech
	7/9/2012	79.38	32.11	---	---	47.27	Blaine Tech
	10/15/2012	79.38	34.04	---	---	45.34	Blaine Tech
	1/14/2013	79.38	34.52	---	---	44.86	Blaine Tech
	4/8/2013	79.38	DRY	---	---	NC	Blaine Tech
	10/7/2013	79.38	DRY	---	---	NC	Blaine Tech
	4/25/2014	79.38	40.03	34.23	5.80	43.96	Blaine Tech
	5/6/2014	79.38	39.78	33.91	5.87	44.27	Nieto & Sons
	5/12/2014	79.38	37.02	34.64	2.38	44.25	Nieto & Sons
	5/20/2014	79.38	36.60	35.60	1.00	43.58	Nieto & Sons
	5/27/2014	79.38	36.12	35.45	0.67	43.79	Nieto & Sons
	6/4/2014	79.38	36.54	35.91	0.63	43.34	Nieto & Sons
	6/10/2014	79.38	37.02	35.38	1.64	43.66	Nieto & Sons
	7/3/2014	79.38	36.98	35.63	1.35	43.47	Nieto & Sons
	7/8/2014	79.38	36.78	35.34	1.44	43.74	Blaine Tech
	7/18/2014	79.38	35.88	35.55	0.33	43.76	Blaine Tech
	7/24/2014	79.38	35.98	35.42	0.56	43.85	Blaine Tech
	8/1/2014	79.38	35.57	35.30	0.27	44.02	Blaine Tech
	8/14/2014	79.38	35.42	35.23	0.19	44.11	Blaine Tech
	8/19/2014	79.38	35.36	35.21	0.15	44.14	Blaine Tech
	8/29/2014	79.38	35.32	35.20	0.12	44.16	Blaine Tech
	9/18/2014	79.38	35.55	35.30	0.25	44.03	Blaine Tech
	9/26/2014	79.38	35.56	35.30	0.26	44.03	Blaine Tech
	10/1/2014	79.38	35.56	35.24	0.32	44.07	Blaine Tech
	10/6/2014	79.38	35.48	35.22	0.26	44.11	Blaine Tech
	10/14/2014	79.38	35.33	35.20	0.13	44.15	Blaine Tech
	10/23/2014	79.38	35.51	35.22	0.29	44.10	Blaine Tech
	10/27/2014	79.38	35.54	35.25	0.29	44.07	Blaine Tech
	11/18/2014	79.38	35.56	35.25	0.31	44.07	Blaine Tech
	11/25/2014	79.38	35.66	35.32	0.34	43.99	Blaine Tech
	12/12/2014	79.38	35.81	35.58	0.23	43.75	Blaine Tech
	12/19/2014	79.38	35.75	35.62	0.13	43.73	Blaine Tech
	4/20/2015	79.38	37.78	35.29	2.49	43.58	Blaine Tech
	5/19/2015	79.38	39.22	35.28	3.94	43.29	Northstar
	5/29/2015	79.38	37.10	35.80	1.30	43.31	Northstar
	6/5/2015	79.38	36.85	36.15	0.70	43.09	Northstar
	6/12/2015	79.38	36.55	36.15	0.40	43.15	Northstar
	6/19/2015	79.38	36.68	36.42	0.26	42.91	Northstar
	6/26/2015	79.38	37.23	36.96	0.27	42.36	Northstar
	10/19/2015	79.38	38.12	36.25	1.87	42.75	Blaine Tech
	11/17/2015	79.38	37.83	35.98	1.85	43.02	Kinder Morgan
	3/14/2016	79.38	40.80	---	---	38.58	Kinder Morgan
	4/11/2016	79.38	37.76	---	---	41.62	Blaine Tech
	6/29/2016	79.38	39.54	---	---	39.84	Blaine Tech
	8/22/2016	79.38	39.76	---	---	39.62	Blaine Tech
	10/3/2016	79.38	41.05	---	---	38.33	Blaine Tech
	4/17/2017	79.38	36.67	---	---	42.71	Blaine Tech
	10/2/2017	79.38	40.07	---	---	39.31	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
MW-SF-5	4/30/2007	79.74	29.54	---	---	50.20	Secor
	8/21/2007	79.74	28.36	---	---	51.38	Geomatrix
	8/28/2007	79.74	28.84	---	---	50.90	Stantec
	10/5/2007	79.74	29.50	---	---	50.24	Geomatrix
	11/2/2007	79.74	31.50	---	---	48.24	Geomatrix
	11/12/2007	79.74	29.93	---	---	49.81	Stantec
	12/21/2007	79.74	31.00	---	---	48.74	Geomatrix
	4/14/2008	79.74	30.20	---	---	49.54	Stantec
	8/11/2008	79.74	30.85	---	---	48.89	Stantec
	10/13/2008	79.74	30.93	---	---	48.81	Stantec
	4/20/2009	79.74	30.99	---	---	48.75	Blaine Tech
	10/19/2009	79.74	NM	---	---	NC	Blaine Tech
	5/24/2010	79.74	31.55	---	---	48.19	Blaine Tech
	5/28/2010	79.74	31.44	---	---	48.30	Blaine Tech
	6/22/2010	79.74	31.57	---	---	48.17	Blaine Tech
	10/4/2010	79.74	31.39	---	---	48.35	Blaine Tech
	1/10/2011	79.74	33.80	---	---	45.94	Blaine Tech
	4/11/2011	79.74	31.03	---	---	48.71	Blaine Tech
	7/11/2011	79.74	NM	---	---	NC	
	10/10/2011	79.74	31.28	---	---	48.46	Blaine Tech
	1/9/2012	79.74	32.12	---	---	47.62	Blaine Tech
	4/16/2012	79.74	33.30	---	---	46.44	Blaine Tech
	7/9/2012	79.74	34.45	---	---	45.29	Blaine Tech
	10/15/2012	79.74	33.28	---	---	46.46	Blaine Tech
	1/14/2013	79.74	33.37	---	---	46.37	Blaine Tech
	4/8/2013	79.74	34.28	---	---	45.46	Blaine Tech
	10/7/2013	79.74	34.58	---	---	45.16	Blaine Tech
	4/14/2014	79.74	35.33	---	---	44.41	Blaine Tech
	10/27/2014	79.74	35.48	---	---	44.26	Blaine Tech
	4/20/2015	79.74	36.05	---	---	43.69	Blaine Tech
	10/19/2015	79.74	36.82	---	---	42.92	Blaine Tech
	3/14/2016	79.74	DRY	---	---	NC	Blaine Tech
	4/11/2016	79.74	DRY	---	---	NC	Blaine Tech
	6/29/2016	79.74	DRY	---	---	NC	Blaine Tech
	8/22/2016	79.74	DRY	---	---	NC	Blaine Tech
	10/3/2016	79.74	DRY	---	---	NC	Blaine Tech
	4/17/2017	79.74	36.88	---	---	42.86	Blaine Tech
	10/2/2017	79.74	DRY	---	---	NC	Blaine Tech
MW-SF-6	4/30/2007	79.96	27.44	27.20	0.24	52.71	Secor
	11/12/2007	79.96	27.14	---	---	52.82	Stantec
	8/12/2008	79.96	29.82	---	---	50.14	Envent
	10/17/2008	79.96	29.75	---	---	50.21	Envent
	12/18/2008	76.8	30.73	---	---	46.07	Envent
	1/15/2009	76.8	31.35	---	---	45.45	Envent
	3/24/2009	76.80	30.50	---	---	46.30	Envent
	4/21/2009	76.80	28.45	---	---	48.35	Envent
	7/21/2009	76.80	27.22	---	---	49.58	Envent
	10/19/2009	76.80	NM	---	---	NC	Blaine Tech
	11/6/2009	76.80	29.10	---	---	47.70	Kinder Morgan
	12/9/2009	76.80	31.35	---	---	45.45	Kinder Morgan
	10/4/2010	76.80	29.09	---	---	47.71	Blaine Tech
	1/10/2011	76.80	30.87	---	---	45.93	Blaine Tech
	4/11/2011	76.80	28.16	---	---	48.64	Blaine Tech
	7/11/2011	76.80	NM	---	---	NC	
	10/10/2011	76.80	28.21	---	---	48.59	Blaine Tech
	1/9/2012	76.80	29.03	---	---	47.77	Blaine Tech
	4/16/2012	76.80	29.66	---	---	47.14	Blaine Tech
	7/9/2012	76.80	31.46	---	---	45.34	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	10/15/2012	76.80	31.44	---	---	45.36	Blaine Tech
	1/14/2013	76.80	31.53	---	---	45.27	Blaine Tech
	4/8/2013	76.80	30.21	28.81	1.40	47.71	Blaine Tech
	10/7/2013	76.80	NM	---	---	NC	Blaine Tech
	11/14/2013	76.80	31.90	---	---	44.90	Blaine Tech
	4/18/2014	76.80	33.30	32.15	1.15	44.42	Blaine Tech
	8/8/2014	76.8	34.50	33.31	1.19	43.25	Blaine Tech
	8/13/2014	76.8	32.95	32.54	0.41	44.18	Blaine Tech
	8/19/2014	76.8	32.87	32.62	0.25	44.13	Blaine Tech
	8/29/2014	76.8	32.79	32.56	0.23	44.19	Blaine Tech
	9/5/2014	76.8	32.81	32.59	0.22	44.17	Blaine Tech
	9/18/2014	76.8	32.95	32.65	0.30	44.09	Blaine Tech
	9/26/2014	76.8	32.94	32.61	0.33	44.12	Blaine Tech
	10/1/2014	76.8	32.91	32.60	0.31	44.14	Blaine Tech
	10/6/2014	76.8	32.90	32.61	0.29	44.13	Blaine Tech
	10/14/2014	76.8	33.72	33.60	0.12	43.18	Blaine Tech
	10/23/2014	76.8	34.57	33.94	0.63	42.73	Blaine Tech
	10/27/2014	76.8	32.92	32.58	0.34	44.15	Blaine Tech
	11/18/2014	76.8	32.99	32.62	0.37	44.11	Blaine Tech
	11/25/2014	76.8	32.66	32.58	0.08	44.20	Blaine Tech
	12/12/2014	76.8	33.45	33.07	0.38	43.65	Blaine Tech
	12/19/2014	76.8	33.60	33.15	0.45	43.56	Blaine Tech
	4/20/2015	76.8	33.23	33.11	0.12	43.67	Blaine Tech
	10/21/2015	76.8	34.28	---	---	42.52	Kinder Morgan
	3/14/2016	76.8	38.10	38.08	0.02	38.72	Blaine Tech
	4/11/2016	76.8	35.83	---	---	40.97	Blaine Tech
	6/29/2016	76.8	36.89	---	---	39.91	Blaine Tech
	8/22/2016	76.8	37.11	---	---	39.69	Blaine Tech
	10/3/2016	76.8	38.45	---	---	38.35	Blaine Tech
	4/17/2017	76.8	34.03	---	---	42.77	Blaine Tech
	10/2/2017	76.8	37.89	---	---	38.91	Blaine Tech
MW-SF-9	4/30/2007	74.1	22.66	---	---	51.44	Secor
	8/14/2007	74.1	28.73	28.61	0.12	45.47	Geomatrix
	8/21/2007	74.1	26.55	---	---	47.55	Geomatrix
	8/28/2007	74.1	20.55	---	---	53.55	Stantec
	9/11/2007	74.1	19.40	---	---	54.70	Geomatrix
	10/5/2007	74.1	26.84	---	---	47.26	Geomatrix
	11/2/2007	74.1	22.76	---	---	51.34	Geomatrix
	11/12/2007	74.1	22.96	---	---	51.14	Stantec
	12/21/2007	74.1	24.05	---	---	50.05	Geomatrix
	4/14/2008	74.1	24.23	---	---	49.87	Stantec
	10/13/2008	74.1	24.83	---	---	49.27	Stantec
	4/20/2009	74.10	25.27	---	---	48.83	Blaine Tech
	10/19/2009	74.10	26.45	---	---	47.65	Blaine Tech
	5/24/2010	74.10	25.80	---	---	48.30	Blaine Tech
	5/28/2010	74.10	25.66	---	---	48.44	Blaine Tech
	6/22/2010	74.10	25.84	---	---	48.26	Blaine Tech
	10/4/2010	74.10	26.10	---	---	48.00	Blaine Tech
	1/10/2011	74.10	27.41	---	---	46.69	Blaine Tech
	4/11/2011	74.10	24.16	---	---	49.94	Blaine Tech
	7/11/2011	74.10	NM	---	---	NC	
	10/10/2011	74.10	25.02	---	---	49.08	Blaine Tech
	1/9/2012	74.10	25.98	---	---	48.12	Blaine Tech
	4/16/2012	74.10	25.92	---	---	48.18	Blaine Tech
	7/9/2012	74.10	26.44	---	---	47.66	Blaine Tech
	10/15/2012	74.10	NM	---	---	NC	Blaine Tech
	4/8/2013	74.10	DRY	---	---	NC	Blaine Tech
	6/6/2013	74.10	28.53	---	---	45.57	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	10/7/2013	74.10	28.95	---	---	45.15	Blaine Tech
	4/25/2014	74.10	34.75	27.95	6.80	44.89	Blaine Tech
	5/5/2014	74.10	37.81	31.76	6.05	41.22	Nieto & Sons
	5/12/2014	74.10	32.32	29.11	3.21	44.40	Nieto & Sons
	5/20/2014	74.10	30.75	29.95	0.80	44.00	Nieto & Sons
	5/27/2014	74.1	38.08	32.32	5.76	40.71	Nieto & Sons
	6/4/2014	74.1	32.19	28.61	3.58	44.83	Nieto & Sons
	6/10/2014	74.1	36.27	28.85	7.42	43.88	Nieto & Sons
	7/3/2014	74.1	39.26	32.59	6.67	40.28	Nieto & Sons
	7/8/2014	74.1	36.40	28.60	7.80	44.06	Blaine Tech
	7/18/2014	74.1	31.04	29.66	1.38	44.18	Blaine Tech
	7/24/2014	74.1	31.15	29.85	1.30	44.01	Blaine Tech
	8/1/2014	74.1	30.25	29.85	0.40	44.18	Blaine Tech
	8/14/2014	74.1	30.13	29.82	0.31	44.22	Blaine Tech
	8/19/2014	74.1	30.08	29.85	0.23	44.21	Blaine Tech
	8/29/2014	74.1	30.10	29.81	0.29	44.24	Blaine Tech
	9/5/2014	74.1	30.13	29.84	0.29	44.21	Blaine Tech
	9/11/2014	74.1	29.49	28.47	1.02	45.44	Blaine Tech
	9/18/2014	74.1	30.29	29.90	0.39	44.13	Blaine Tech
	9/26/2014	74.1	30.25	29.84	0.41	44.18	Blaine Tech
	10/1/2014	74.1	30.24	29.84	0.40	44.19	Blaine Tech
	10/6/2014	74.1	30.24	29.83	0.41	44.19	Blaine Tech
	10/14/2014	74.1	30.12	29.81	0.31	44.23	Blaine Tech
	10/23/2014	74.1	30.27	29.85	0.42	44.17	Blaine Tech
	10/27/2014	74.1	30.29	29.89	0.40	44.14	Blaine Tech
	11/18/2014	74.1	30.35	29.86	0.49	44.15	Blaine Tech
	11/25/2014	74.1	30.42	29.91	0.51	44.10	Blaine Tech
	12/12/2014	74.1	30.65	30.10	0.55	43.90	Blaine Tech
	12/19/2014	74.1	30.80	30.13	0.67	43.85	Blaine Tech
	4/20/2015	74.1	36.69	27.67	9.02	44.76	Blaine Tech
	5/19/2015	74.1	35.68	26.83	8.85	45.63	Blaine Tech
	5/21/2015	74.1	32.50	27.31	5.19	45.83	Northstar
	5/29/2015	74.1	32.95	30.10	2.85	43.47	Northstar
	6/2/2015	74.1	31.67	30.45	1.22	43.42	Northstar
	6/5/2015	74.10	31.85	30.60	1.25	43.27	Northstar
	6/12/2015	74.10	31.28	30.75	0.53	43.25	Northstar
	6/19/2015	74.10	31.30	31.00	0.30	43.04	Northstar
	6/26/2015	74.10	31.20	29.50	1.70	44.29	Northstar
	8/11/2015	74.10	36.90	29.90	7.00	42.90	Northstar
	8/18/2015	74.10	35.19	30.25	4.94	42.94	Northstar
	8/28/2015	74.10	31.60	30.75	0.85	43.19	Kinder Morgan
	9/1/2015	74.10	31.78	30.90	0.88	43.04	Kinder Morgan
	10/16/2015	74.10	31.60	31.09	0.51	42.92	Blaine Tech
	10/19/2015	74.10	31.44	31.04	0.40	42.99	Kinder Morgan
	10/30/2015	74.10	32.60	32.06	0.54	41.94	Kinder Morgan
	11/17/2015	74.10	31.71	31.68	0.03	42.41	Kinder Morgan
	3/14/2016	74.10	34.14	---	---	39.96	Blaine Tech
	4/11/2016	74.10	32.89	---	---	41.21	Blaine Tech
	6/29/2016	74.10	34.00	---	---	40.10	Blaine Tech
MW-SF-10	10/17/2008	76.53	27.49	---	---	49.04	Envent
	10/19/2009	76.53	28.61	---	---	47.92	Blaine Tech
	10/4/2010	76.53	28.50	28.36	0.14	48.14	Blaine Tech
	4/11/2011	76.53	27.41	27.37	0.04	49.15	Blaine Tech
	10/10/2011	76.53	27.60	---	---	48.93	Blaine Tech
	4/16/2012	76.53	28.81	---	---	47.72	Blaine Tech
	7/9/2012	76.53	NM	---	---	NC	Blaine Tech
	10/15/2012	76.53	29.27	---	---	47.26	Blaine Tech
	4/8/2013	76.53	DRY	---	---	NC	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	10/7/2013	76.53	DRY	---	---	NC	Blaine Tech
	4/14/2014	76.53	DRY	---	---	NC	Blaine Tech
	10/27/2014	76.53	DRY	---	---	NC	Blaine Tech
	4/20/2015	76.53	DRY	---	---	NC	Blaine Tech
	10/19/2015	76.53	DRY	---	---	NC	Blaine Tech
	3/14/2016	76.53	DRY	---	---	NC	Blaine Tech
	4/11/2016	76.53	DRY	---	---	NC	Blaine Tech
	6/29/2016	76.53	DRY	---	---	NC	Blaine Tech
	8/22/2016	76.53	DRY	---	---	NC	Blaine Tech
	10/3/2016	76.53	DRY	---	---	NC	Blaine Tech
	4/17/2017	76.53	DRY	---	---	NC	Blaine Tech
	10/2/2017	76.53	DRY	---	---	NC	Blaine Tech
MW-SF-11	8/14/2007	78.56	28.58	28.30	0.28	50.20	Geomatrix
	8/21/2007	78.56	28.76	28.63	0.13	49.90	Geomatrix
	8/28/2007	78.56	28.22	---	---	50.34	Stantec
	9/11/2007	78.56	26.90	---	---	51.66	Geomatrix
	10/5/2007	78.56	28.43	---	---	50.13	Geomatrix
	11/2/2007	78.56	29.48	29.38	0.10	49.16	Geomatrix
	11/12/2007	78.56	29.03	---	---	49.53	Stantec
	8/15/2008	78.56	30.13	---	---	48.43	Envent
	10/17/2008	78.56	30.50	---	---	48.06	Envent
	12/18/2008	78.56	29.92	---	---	48.64	Envent
	1/15/2009	78.56	30.32	---	---	48.24	Envent
	3/24/2009	78.56	31.05	---	---	47.51	Envent
	4/21/2009	78.56	30.03	---	---	48.53	Envent
	7/21/2009	78.56	30.89	---	---	47.67	Envent
	10/19/2009	78.56	NM	---	---	NC	Blaine Tech
	11/9/2009	78.56	31.00	---	---	47.56	Kinder Morgan
	9/3/2010	78.56	31.22	---	---	47.34	Kinder Morgan
	10/4/2010	78.56	30.94	---	---	47.62	Blaine Tech
	4/12/2011	78.56	30.82	---	---	47.74	Blaine Tech
	10/10/2011	78.56	30.10	---	---	48.46	Blaine Tech
	4/16/2012	78.56	NM	---	---	NC	Blaine Tech
	7/9/2012	78.56	NM	---	---	NC	Blaine Tech
	10/15/2012	78.56	33.28	---	---	45.28	Blaine Tech
	4/8/2013	78.56	33.11	---	---	45.45	Blaine Tech
	10/7/2013	78.56	33.91	---	---	44.65	Blaine Tech
	4/14/2014	78.56	35.20	34.95	0.25	43.56	Blaine Tech
	5/5/2014	78.56	36.52	33.71	2.81	44.29	Nieto & Sons
	5/12/2014	78.56	35.45	33.87	1.58	44.37	Nieto & Sons
	5/27/2014	78.56	35.38	34.65	0.73	43.76	Nieto & Sons
	6/4/2014	78.56	35.40	35.32	0.08	43.22	Nieto & Sons
	8/8/2014	78.56	36.22	33.11	3.11	44.83	Blaine Tech
	8/13/2014	78.56	36.22	33.47	2.75	44.54	Blaine Tech
	8/19/2014	78.56	36.46	33.94	2.52	44.12	Blaine Tech
	8/29/2014	78.56	36.68	33.83	2.85	44.16	Blaine Tech
	9/5/2014	78.56	36.62	33.80	2.82	44.20	Blaine Tech
	9/11/2014	78.56	37.15	33.78	3.37	44.11	Blaine Tech
	9/18/2014	78.56	36.79	33.93	2.86	44.06	Blaine Tech
	9/26/2014	78.56	36.89	33.88	3.01	44.08	Blaine Tech
	10/1/2014	78.56	34.95	33.32	1.63	44.91	Blaine Tech
	10/6/2014	78.56	36.36	33.95	2.41	44.13	Blaine Tech
	10/14/2014	78.56	36.67	33.86	2.81	44.14	Blaine Tech
	10/23/2014	78.56	36.86	33.86	3.00	44.10	Blaine Tech
	10/27/2014	78.56	36.20	33.99	2.21	44.13	Blaine Tech
	11/3/2014	78.56	36.91	33.84	3.07	44.11	Blaine Tech
	11/18/2014	78.56	36.78	33.95	2.83	44.04	Blaine Tech
	11/25/2014	78.56	36.65	34.03	2.62	44.01	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	12/3/2014	78.56	36.71	33.94	2.77	44.07	Blaine Tech
	12/12/2014	78.56	37.29	34.08	3.21	43.84	Blaine Tech
	12/19/2014	78.56	38.03	34.04	3.99	43.72	Blaine Tech
	3/17/2015	78.56	35.94	35.50	0.44	42.97	Kinder Morgan
	4/20/2015	78.56	38.89	34.86	4.03	42.89	Kinder Morgan
	10/20/2015	78.56	37.42	35.38	2.04	42.77	Kinder Morgan
	3/16/2016	78.56	39.56	---	---	39.00	Kinder Morgan
	4/11/2016	78.56	37.62	---	---	40.94	Blaine Tech
	6/29/2016	78.56	37.06	---	---	41.50	Blaine Tech
	8/22/2016	78.56	39.25	---	---	39.31	Blaine Tech
	10/3/2016	78.56	40.05	---	---	38.51	Blaine Tech
	3/10/2017	78.56	36.56	---	---	42.00	CH2M
	4/17/2017	78.56	35.91	---	---	42.65	Blaine Tech
	10/2/2017	78.56	40.09	---	---	38.47	Blaine Tech
MW-SF-12	8/14/2007	78.07	27.76	---	---	50.31	Geomatrix
	8/21/2007	78.07	27.43	---	---	50.64	Geomatrix
	8/28/2007	78.07	27.58	---	---	50.49	Stantec
	9/11/2007	78.07	27.73	---	---	50.34	Geomatrix
	10/5/2007	78.07	28.06	---	---	50.01	Geomatrix
	11/2/2007	78.07	29.59	---	---	48.48	Geomatrix
	11/12/2007	78.07	28.33	---	---	49.74	Stantec
	8/12/2008	78.07	30.02	---	---	48.05	Envent
	10/17/2008	78.07	30.42	---	---	47.65	Envent
	12/18/2008	78.07	31.55	---	---	46.52	Envent
	1/15/2009	78.07	30.11	---	---	47.96	Envent
	3/24/2009	78.07	29.41	---	---	48.66	Envent
	4/21/2009	78.07	29.52	---	---	48.55	Envent
	7/21/2009	78.07	28.58	---	---	49.49	Envent
	10/19/2009	78.07	NM	---	---	NC	Blaine Tech
	11/4/2009	78.07	30.36	---	---	47.71	Kinder Morgan
	2/4/2010	78.07	29.20	---	---	48.87	Kinder Morgan
	10/4/2010	78.07	30.70	---	---	47.37	Blaine Tech
	4/11/2011	78.07	29.47	---	---	48.60	Blaine Tech
	10/10/2011	78.07	26.60	---	---	51.47	Blaine Tech
	4/16/2012	78.07	31.40	---	---	46.67	Blaine Tech
	7/9/2012	78.07	NM	---	---	NC	Blaine Tech
	10/15/2012	78.07	32.12	---	---	45.95	Blaine Tech
	4/8/2013	78.07	DRY	---	---	NC	Blaine Tech
	10/7/2013	78.07	NM	---	---	NC	Blaine Tech
	4/14/2014	78.07	38.04	32.67	5.37	44.33	Blaine Tech
	5/20/2014	78.07	37.80	32.90	4.90	44.19	Nieto & Sons
	5/27/2014	78.07	33.27	---	---	44.80	Nieto & Sons
	6/4/2014	78.07	32.78	---	---	45.29	Nieto & Sons
	6/10/2014	78.07	33.76	---	---	44.31	Nieto & Sons
	7/3/2014	78.07	NM	33.58	---	NC	Nieto & Sons
	7/24/2014	78.07	NM	33.35	3.97	NC	Blaine Tech
	8/1/2014	78.07	37.20	33.17	4.03	44.09	Blaine Tech
	9/5/2014	78.07	38.52	32.93	5.59	44.02	Blaine Tech
	9/11/2014	78.07	38.56	32.98	5.58	43.97	Blaine Tech
	9/18/2014	78.07	38.25	33.09	5.16	43.95	Blaine Tech
	9/26/2014	78.07	38.03	33.03	5.00	44.04	Blaine Tech
	10/1/2014	78.07	37.82	33.08	4.74	44.04	Blaine Tech
	10/6/2014	78.07	37.63	33.07	4.56	44.09	Blaine Tech
	10/14/2014	78.07	37.56	33.13	4.43	44.05	Blaine Tech
	10/23/2014	78.07	37.56	33.06	4.50	44.11	Blaine Tech
	10/27/2014	78.07	37.40	33.08	4.32	44.13	Blaine Tech
	11/3/2014	78.07	37.48	33.09	4.39	44.10	Blaine Tech
	11/18/2014	78.07	37.44	33.15	4.29	44.06	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	11/25/2014	78.07	37.35	33.21	4.14	44.03	Blaine Tech
	12/3/2014	78.07	37.31	33.12	4.19	44.11	Blaine Tech
	12/12/2014	78.07	37.92	33.45	4.47	43.73	Blaine Tech
	12/19/2014	78.07	38.25	33.50	4.75	43.62	Blaine Tech
	3/17/2015	78.07	36.42	34.05	2.37	43.55	Kinder Morgan
	4/20/2015	78.07	36.42	34.05	2.37	43.55	Blaine Tech
	10/20/2015	78.07	36.78	34.84	1.94	42.84	Kinder Morgan
	3/16/2016	78.07	39.03	---	---	39.04	Kinder Morgan
	4/11/2016	78.07	37.13	---	---	40.94	Blaine Tech
	6/29/2016	78.07	38.34	38.28	0.06	39.78	Blaine Tech
	8/22/2016	78.07	38.60	---	---	39.47	Blaine Tech
	10/3/2016	78.07	39.45	---	---	38.62	Blaine Tech
	3/10/2017	78.07	36.09	---	---	41.98	CH2M
	4/17/2017	78.07	35.12	---	---	42.95	Blaine Tech
	10/2/2017	78.07	39.31	---	---	38.76	Blaine Tech
MW-SF-13	8/14/2007	73.40	22.98	---	---	50.42	Geomatrix
	8/21/2007	73.40	23.11	---	---	50.29	Geomatrix
	8/28/2007	73.40	22.85	---	---	50.55	Stantec
	9/11/2007	73.40	23.10	---	---	50.30	Geomatrix
	10/5/2007	73.40	28.11	---	---	45.29	Geomatrix
	11/2/2007	73.40	25.43	25.41	0.02	47.99	Geomatrix
	11/12/2007	73.40	23.70	---	---	49.70	Stantec
	12/21/2007	73.40	24.45	24.42	0.03	48.97	Geomatrix
	8/15/2008	73.40	27.38	24.11	3.27	48.47	Envent
	10/17/2008	73.40	27.28	24.33	2.95	48.33	Envent
	10/21/2008	73.40	27.14	24.26	2.88	48.42	Envent
	12/17/2008	73.40	26.21	24.70	1.51	48.32	Envent
	1/15/2009	73.40	26.90	24.80	2.10	48.08	Envent
	3/27/2009	73.40	26.46	25.49	0.97	47.67	Envent
	4/21/2009	73.40	24.86	24.78	0.08	48.60	Envent
	7/21/2009	73.40	25.72	25.48	0.24	47.86	Envent
	10/19/2009	73.40	NM	---	---	NC	Blaine Tech
	11/6/2009	73.40	25.72	---	---	47.68	Kinder Morgan
	2/4/2010	73.40	25.43	25.30	0.13	48.07	Kinder Morgan
	9/3/2010	73.40	27.40	25.71	1.69	47.27	Kinder Morgan
	10/4/2010	73.40	26.95	25.92	1.03	47.22	Blaine Tech
	4/12/2011	73.40	24.79	24.78	0.01	48.62	Blaine Tech
	10/10/2011	73.40	26.00	---	---	47.40	Blaine Tech
	4/16/2012	73.40	27.19	---	---	46.21	Blaine Tech
	7/9/2012	73.40	NM	---	---	NC	Blaine Tech
	10/15/2012	73.40	27.01	---	---	46.39	Blaine Tech
	4/8/2013	73.40	27.90	---	---	45.50	Blaine Tech
	10/7/2013	73.40	NM	---	---	NC	Blaine Tech
	11/14/2013	73.40	29.95	28.25	1.70	44.73	Blaine Tech
	4/14/2014	73.40	31.36	28.47	2.89	44.21	Blaine Tech
	5/5/2014	73.40	31.62	28.49	3.13	44.13	Nieto & Sons
	5/12/2014	73.40	30.02	28.88	1.14	44.24	Nieto & Sons
	5/20/2014	73.40	31.10	29.77	1.33	43.30	Nieto & Sons
	5/27/2014	73.40	30.17	29.48	0.69	43.75	Nieto & Sons
	6/4/2014	73.40	30.22	---	---	43.18	Nieto & Sons
	6/10/2014	73.40	30.20	29.76	0.44	43.53	Nieto & Sons
	7/3/2014	73.40	30.49	29.88	0.61	43.37	Nieto & Sons
	7/24/2014	73.40	30.50	29.54	0.96	43.62	Blaine Tech
	8/1/2014	73.40	29.82	29.25	0.57	44.01	Blaine Tech
	8/8/2014	73.40	34.07	33.71	0.36	39.60	Blaine Tech
	8/14/2014	73.40	29.96	29.13	0.83	44.06	Blaine Tech
	8/19/2014	73.40	29.91	29.15	0.76	44.06	Blaine Tech
	8/29/2014	73.40	30.15	29.02	1.13	44.10	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	9/5/2014	73.40	30.19	29.08	1.11	44.04	Blaine Tech
	9/11/2014	73.40	30.66	28.91	1.75	44.05	Blaine Tech
	9/18/2014	73.40	30.41	29.15	1.26	43.94	Blaine Tech
	9/26/2014	73.40	30.18	29.14	1.04	44.00	Blaine Tech
	10/1/2014	73.40	30.38	29.05	1.33	44.02	Blaine Tech
	10/6/2014	73.40	30.10	29.12	0.98	44.04	Blaine Tech
	10/13/2014	73.40	30.28	29.07	1.21	44.03	Blaine Tech
	10/23/2014	73.40	30.72	28.95	1.77	44.01	Blaine Tech
	10/27/2014	73.40	30.21	29.06	1.15	44.05	Blaine Tech
	11/3/2014	73.40	30.62	28.93	1.69	44.05	Blaine Tech
	11/18/2014	73.40	30.54	29.11	1.43	43.93	Blaine Tech
	11/25/2014	73.40	29.48	29.14	0.34	44.18	Blaine Tech
	12/3/2014	73.40	31.02	28.93	2.09	43.95	Blaine Tech
	12/12/2014	73.40	31.05	29.40	1.65	43.59	Blaine Tech
	12/19/2014	73.40	31.11	29.40	1.71	43.57	Blaine Tech
	4/20/2015	73.40	32.44	29.04	3.40	43.51	Blaine Tech
	10/19/2015	73.40	35.16	29.31	5.85	42.63	Blaine Tech
	3/14/2016	73.40	34.72	---	---	38.68	Blaine Tech
	4/11/2016	73.40	32.28	---	---	41.12	Blaine Tech
	6/29/2016	73.40	33.62	---	---	39.78	Blaine Tech
	8/22/2016	73.40	33.66	---	---	39.74	Blaine Tech
	10/3/2016	73.40	34.20	---	---	39.20	Blaine Tech
	3/24/2017	73.40	31.25	---	---	42.15	CH2M
	4/17/2017	73.40	30.40	---	---	43.00	Blaine Tech
	10/2/2017	73,40	34.52	---	---	#VALUE!	Blaine Tech
MW-SF-14	8/14/2007	78.16	27.68	---	---	50.48	Geomatrix
	8/21/2007	78.16	27.60	---	---	50.56	Geomatrix
	8/28/2007	78.16	27.53	---	---	50.63	Stantec
	9/11/2007	78.16	27.66	---	---	50.50	Geomatrix
	10/5/2007	78.16	27.75	---	---	50.41	Geomatrix
	11/2/2007	78.16	29.83	---	---	48.33	Geomatrix
	11/12/2007	78.16	NM	---	---	NC	Secor
	8/15/2008	78.16	29.77	29.24	0.53	48.81	Envent
	10/17/2008	78.16	29.52	29.50	0.02	48.66	Envent
	12/18/2008	78.16	30.62	---	---	47.54	Envent
	1/15/2009	78.16	30.08	---	---	48.08	Envent
	3/24/2009	78.16	29.73	---	---	48.43	Envent
	4/21/2009	78.16	29.61	---	---	48.55	Envent
	7/21/2009	78.16	29.20	---	---	48.96	Envent
	10/19/2009	78.16	NM	---	---	NC	Blaine Tech
	11/6/2009	78.16	30.48	---	---	47.68	Kinder Morgan
	12/9/2009	78.16	30.68	---	---	47.48	Kinder Morgan
	6/22/2010	78.16	26.17	---	---	51.99	Blaine Tech
	10/4/2010	78.16	30.54	---	---	47.62	Blaine Tech
	4/12/2011	78.16	29.55	---	---	48.61	Blaine Tech
	10/10/2011	78.16	29.84	---	---	48.32	Blaine Tech
	4/16/2012	78.16	NM	---	---	NC	Blaine Tech
	7/9/2012	78.16	NM	---	---	NC	Blaine Tech
	10/15/2012	78.16	30.02	---	---	48.14	Blaine Tech
	4/8/2013	78.16	32.75	---	---	45.41	Blaine Tech
	5/24/2013	78.16	32.75	---	---	45.41	Blaine Tech
	9/26/2013	78.16	34.50	34.25	0.25	43.86	Blaine Tech
	10/7/2013	78.16	NM	---	---	NC	Blaine Tech
	11/14/2013	78.16	33.57	33.19	0.38	44.89	Blaine Tech
	4/14/2014	78.16	34.81	33.56	1.25	44.35	Blaine Tech
	8/8/2014	78.16	34.24	33.98	0.26	44.13	Blaine Tech
	10/14/2014	78.16	34.36	33.80	0.56	44.25	Blaine Tech
	10/23/2014	78.16	34.49	34.43	0.06	43.72	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
	10/27/2014	78.16	34.40	33.97	0.43	44.10	Blaine Tech
	11/18/2014	78.16	34.27	34.07	0.20	44.05	Blaine Tech
	4/20/2015	78.16	34.48	---	---	43.68	Blaine Tech
	10/21/2015	78.16	35.25	---	---	42.91	Blaine Tech
	3/14/2016	78.16	36.21	---	---	41.95	Blaine Tech
	4/11/2016	78.16	37.14	---	---	41.02	Blaine Tech
	6/29/2016	78.16	37.36	---	---	40.80	Blaine Tech
	8/22/2016	78.16	DRY	---	---	NC	Blaine Tech
	10/3/2016	78.16	DRY	---	---	NC	Blaine Tech
	4/17/2017	78.16	35.40	---	---	42.76	Blaine Tech
	10/2/2017	78.16	DRY	---	---	NC	Blaine Tech
MW-SF-15	8/14/2007	78.27	27.78	27.75	0.03	50.51	Geomatrix
	8/21/2007	78.27	27.69	27.65	0.04	50.61	Geomatrix
	8/28/2007	78.27	27.65	27.61	0.04	50.65	Stantec
	9/11/2007	78.27	27.62	---	---	50.65	Geomatrix
	10/5/2007	78.27	28.15	---	---	50.12	Geomatrix
	11/2/2007	78.27	30.45	30.20	0.25	48.02	Geomatrix
	11/12/2007	78.27	28.75	---	---	49.52	Stantec
	8/15/2008	78.27	30.12	29.35	0.77	48.77	Envent
	10/17/2008	78.27	30.80	29.44	1.36	48.56	Envent
	10/21/2008	78.27	30.80	29.31	1.49	48.66	Envent
	12/18/2008	78.27	32.11	30.56	1.55	47.40	Envent
	1/15/2009	78.27	31.75	29.70	2.05	48.16	Envent
	3/24/2009	78.27	30.32	29.93	0.39	48.26	Envent
	4/21/2009	78.27	29.96	29.60	0.36	48.60	Envent
	7/21/2009	78.27	30.45	---	---	47.82	Envent
	10/19/2009	78.27	NM	---	---	NC	Blaine Tech
	11/4/2009	78.27	31.10	30.45	0.36	47.46	Kinder Morgan
	12/9/2009	78.27	30.87	---	---	47.40	Kinder Morgan
	10/4/2010	78.27	30.66	30.65	0.01	47.62	Blaine Tech
	4/12/2011	78.27	30.50	29.40	1.10	48.65	Blaine Tech
	10/10/2011	78.27	29.60	---	---	48.67	Blaine Tech
	12/2/2011	78.27	31.40	30.05	1.35	47.95	Blaine Tech
	4/16/2012	78.27	32.48	32.39	0.09	45.86	Blaine Tech
	7/9/2012	78.27	NM	---	---	NC	Blaine Tech
	10/15/2012	78.16	33.04	---	---	45.12	Blaine Tech
	4/8/2013	78.27	33.90	---	---	44.37	Blaine Tech
	5/24/2013	78.27	33.90	---	---	44.37	Blaine Tech
	10/7/2013	78.27	NM	---	---	NC	Blaine Tech
	11/14/2013	78.27	33.41	33.38	0.03	44.88	Blaine Tech
	4/18/2014	78.27	33.85	---	---	44.42	Blaine Tech
	8/8/2014	78.27	34.87	33.96	0.91	44.13	Blaine Tech
	8/13/2014	78.27	34.89	33.95	0.94	44.13	Blaine Tech
	8/19/2014	78.27	34.90	33.94	0.96	44.14	Blaine Tech
	8/29/2014	78.27	35.65	35.38	0.27	42.84	Blaine Tech
	10/27/2014	78.27	35.82	---	---	42.45	Blaine Tech
	4/20/2015	78.27	36.63	34.12	2.51	43.65	Blaine Tech
	10/19/2015	78.27	37.90	34.87	3.03	42.79	Blaine Tech
	11/17/2015	78.27	37.71	35.36	2.35	42.44	Kinder Morgan
	3/14/2016	78.27	39.70	---	---	38.57	Blaine Tech
	4/11/2016	78.27	37.24	---	---	41.03	Blaine Tech
	6/29/2016	78.27	38.70	---	---	39.57	Blaine Tech
	8/22/2016	78.27	38.78	---	---	39.49	Blaine Tech
	10/3/2016	78.27	39.56	---	---	38.71	Blaine Tech
	3/23/2017	78.27	36.10	---	---	42.17	CH2M
	4/17/2017	78.27	35.39	---	---	42.88	Blaine Tech
	10/2/2017	78.27	39.40	---	---	38.87	Blaine Tech

Table 8. Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP Norwalk Pump Station, Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (feet msl)	Measured Depth to Groundwater (feet btoc)	Measured Depth to Product (feet btoc)	Apparent Product Thickness (feet)	Corrected Groundwater Elevation (feet msl)	Gauged By
MW-SF-16	8/14/2007	78.21	27.68	---	---	50.53	Geomatrix
	8/21/2007	78.21	27.33	---	---	50.88	Geomatrix
	8/28/2007	78.21	27.51	---	---	50.70	Stantec
	9/11/2007	78.21	27.59	---	---	50.62	Geomatrix
	10/5/2007	78.21	28.10	---	---	50.11	Geomatrix
	11/2/2007	78.21	29.81	---	---	48.40	Geomatrix
	11/12/2007	78.21	28.40	---	---	49.81	Stantec
	8/15/2008	78.21	29.36	---	---	48.85	Envent
	10/17/2008	78.21	29.51	---	---	48.70	Envent
	12/18/2008	78.21	30.94	---	---	47.27	Envent
	1/15/2009	78.21	30.01	30.00	0.01	48.21	Envent
	3/24/2009	78.21	29.82	---	---	48.39	Envent
	4/21/2009	78.21	29.60	---	---	48.61	Envent
	7/21/2009	78.21	30.36	---	---	47.85	Envent
	10/19/2009	78.21	NM	---	---	NC	Blaine Tech
	11/4/2009	78.21	30.58	---	---	47.63	Kinder Morgan
	2/4/2010	78.21	30.36	---	---	47.85	Kinder Morgan
	9/3/2010	78.21	30.25	---	---	47.96	Kinder Morgan
	10/4/2010	78.21	30.49	---	---	47.72	Blaine Tech
	4/12/2011	78.21	29.52	---	---	48.69	Blaine Tech
	10/10/2011	78.21	29.85	---	---	48.36	Blaine Tech
	4/16/2012	78.21	NM	---	---	NC	Blaine Tech
	7/9/2012	78.21	NM	---	---	NC	Blaine Tech
	10/15/2012	78.21	32.47	---	---	45.74	Blaine Tech
	4/8/2013	78.21	32.97	32.73	0.24	45.43	Blaine Tech
	5/24/2013	78.21	32.97	32.73	0.24	45.43	Blaine Tech
	10/7/2013	78.21	NM	---	---	NC	Blaine Tech
	11/14/2013	78.21	33.80	33.21	0.59	44.88	Blaine Tech
	4/18/2014	78.21	34.20	33.65	0.55	44.45	Blaine Tech
	8/8/2014	78.21	34.06	34.05	0.01	44.16	Blaine Tech
	10/27/2014	78.21	34.25	---	---	43.96	Blaine Tech
	4/20/2015	78.21	34.52	---	---	43.69	Blaine Tech
	6/8/2015	78.21	35.17	35.00	0.17	43.18	Blaine Tech
	10/21/2015	78.21	34.56	---	---	43.65	Kinder Morgan
	3/14/2016	78.21	39.60	---	---	38.61	Blaine Tech
	4/11/2016	78.21	37.15	---	---	41.06	Blaine Tech
	6/29/2016	78.21	38.35	---	---	39.86	Blaine Tech
	8/22/2016	78.21	38.51	---	---	39.70	Blaine Tech
	10/3/2016	78.21	39.35	---	---	38.86	Blaine Tech
	4/17/2017	78.21	35.20	---	---	43.01	Blaine Tech
	10/2/2017	78.21	DRY	---	---	NC	Blaine Tech

Notes:

Corrected groundwater elevations are based on specific gravity data collected during baildown testing, or a default value of 0.8 was used for wells not tested.

--- = not detected or not applicable

DRY = No measurable water observed in the well.

feet btoc = feet below top of casing

feet msl = feet above mean sea level based on National Geodetic Vertical Datum of 1929

NC = not calculated

NM = not measured

Figures

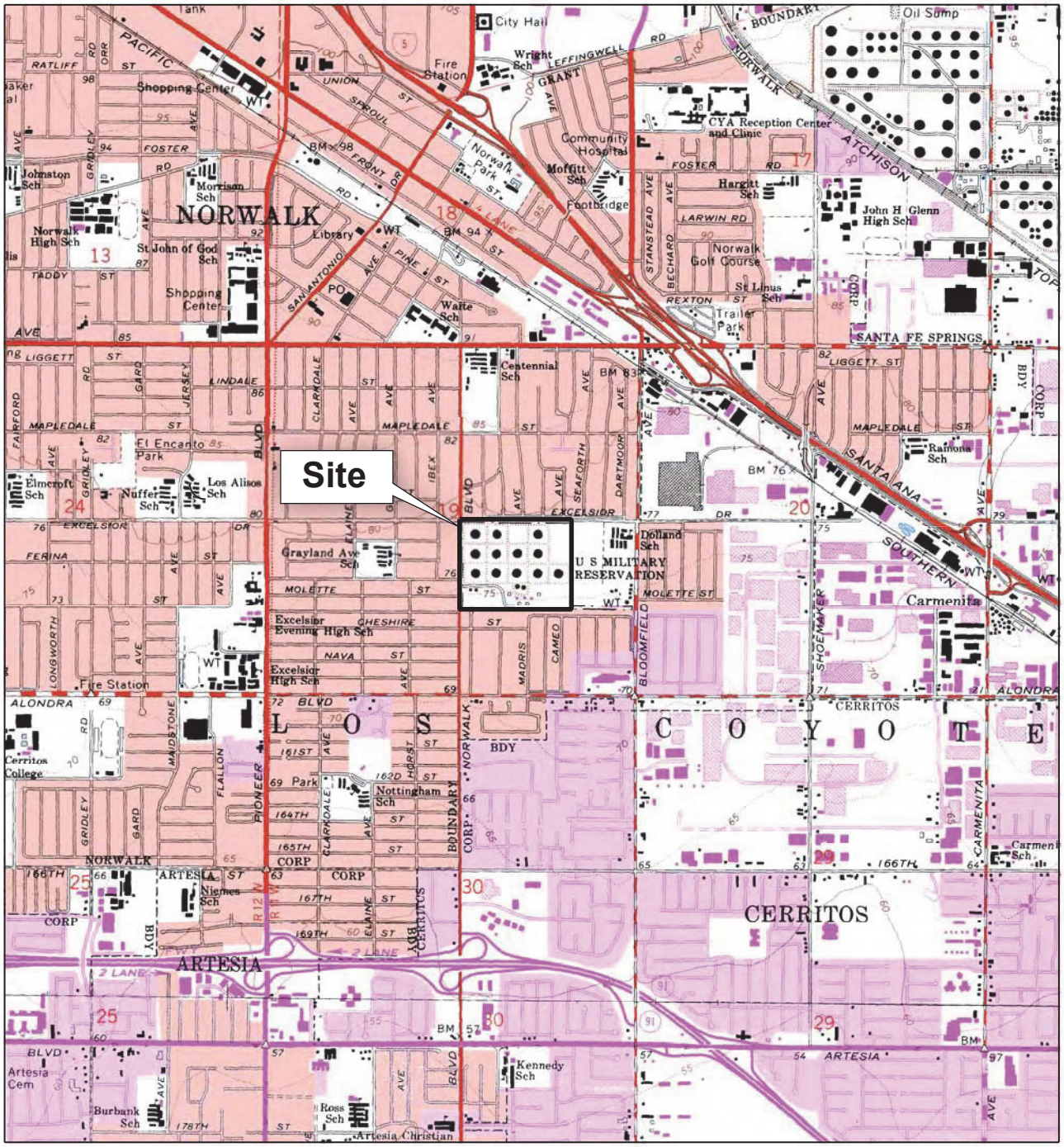
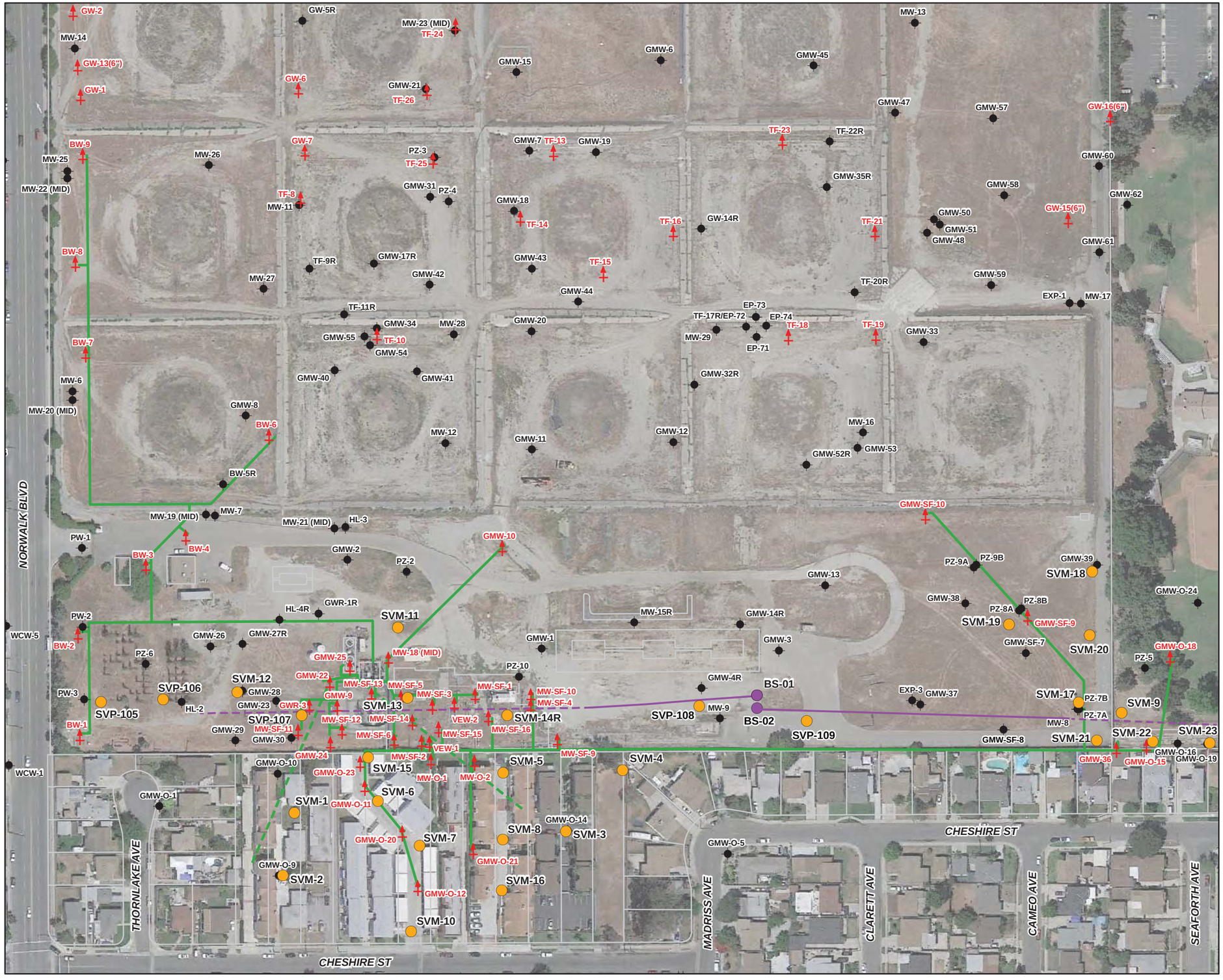


Figure 1
Site Location Map
SFPP Norwalk Pump Station
Norwalk, California

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.



Legend

- Soil Vapor Monitoring Probe
- Horizontal Biosparge Well Entry Point
- 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.

N

0 75 150 300
Feet

1 inch = 150 feet

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

Appendix A
Laboratory Analytical Reports

Air TECHNOLOGY Laboratories, Inc.

October 25, 2017

LA Cert #04140
EPA Methods TO3, TO14A, TO15, 25C/3C, RSK-175
TX Cert T104704450-14-6
EPA Methods TO14A, TO15
UT Cert CA0133332015-3
EPA Methods TO3, TO14A, TO15, RSK-175

CH2M Hill
ATTN: Eric Davis
1000 Wilshire Blvd., Suite 2100
Los Angeles, CA 90017

LABORATORY TEST RESULTS

Project Reference: SFPP Norwalk
Lab Number: I101602-01/04

Enclosed are results for sample(s) received 10/16/17 by Air Technology Laboratories. Samples were received intact. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

- Unless otherwise noted in the report, sample analyses were performed within method performance criteria and meet all requirements of the NELAC Standards.
- The enclosed results relate only to the sample(s).

Preliminary results were e-mailed to Eric Davis and Vladimir Carino 10/25/17.

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Note: The cover letter is an integral part of this analytical report.

I101602-01/04

Air Technology Laboratories, Inc.
18501 Gale Ave. #130
City of Industry, CA 91748
Tel: 626-964-4032
Joann De La Ossa (JDeLaOssa@airtechlabs.com)

CHAIN OF CUSTODY RECORD

DATE: 10/13/17
PAGE: 1 of 1

Section A Required Client Information:		Section B Required Project Information:	Section C Invoice Information:	Section D Sampler Information:
Company:	**CH2M HILL**	Report To: Eric Davis (eric.davis@ch2m.com)	Attention: Eric Davis	Sampler Name: James Dye
	Attention: Eric Davis			
Address:	1000 Wilshire Blvd. Suite 2100	Copy To: Vladimir Carino (vcarino@ch2m.com)	Company Name: CH2M	Sampler Signature:
	Los Angeles, CA 90017			
Email To:	eric.davis@ch2m.com	Purchase Order No.:	Address: 1000 Wilshire Blvd. Suite 2100	Sample Date: 10/13/17
	vcarino@ch2m.com		Los Angeles, CA 90017	
Phone: 404-323-1600	Fax:	Project Name: **SFPP Norwalk**	Project Manager: Joann De La Ossa	

Section E Required Sample Information

ITEM #	SAMPLE ID	LOCATION/ DESCRIPTION	MATRIX	SAMPLE TYPE (G=GRAB C=COMP)	SAMPLING DATE	SAMPLING TIME	TOTAL # OF CONTAINERS	Analysis Test	TO-3 (Total VOCs as Hexane)	TO-15 (VOCs, Target Analytes)	ASTM-D 1946 (O2/Argon, CO2, CH4, N2)	Comments
CONTAINER TYPE												
# OF CONTAINERS												
PRESERVATIVE												
VOLUME (mL)												
1	VEFF-10-13	Effluent (stack)	Vapor	G	10/13/17	1228	1		X	X		Individually Certified 6-Liter SUMMA
2	VEFF-10-13 D	Effluent (stack) (duplicate)	Vapor	G	10/13/17	1228	1		X	X		Individually Certified 6-Liter SUMMA
3	VPOST-10-13	Influent (post-dilution)	Vapor	G	10/13/17	1245	1		X	X		Individually Certified 1-Liter SUMMA
4	VINF-10-13	Influent (pre-dilution)	Vapor	G	10/13/17	1255	1		X	X	X	Batch Certified 1-Liter Summa
5												Target analytes includes Historical VOCs and remaining ATLI list per subcontract
6												
7												
8												
9												
10												
11												
12												

01 02 03 04

Relinquished by (Signature and Printed Name):	Date / Time	Relinquished by (Signature and Printed Name):	Date / Time
	10/13/17 1400	FED EX	10/13/17 1530
Relinquished by (Signature and Printed Name):	Date / Time	Relinquished by (Signature and Printed Name):	Date / Time
FED EX			10/16/17 1208
Relinquished by (Signature and Printed Name):	Date / Time	Relinquished by (Signature and Printed Name):	Date / Time

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

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

Special Instruction:

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

Client: CH2M Hill
Attn: Eric Davis
Project Name: SFPP Norwalk
Project No.: NA
Date Received: 10/16/17
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	I101602-01			I101602-02			I101602-03			I101602-04		
Client Sample I.D.:	VEFF-10-13			VEFF-10-13D			VPOST-10-13			VINF-10-13		
Date/Time Sampled:	10/13/17 12:28			10/13/17 12:28			10/13/17 12:45			10/13/17 12:55		
Date/Time Analyzed:	10/18/17 20:09			10/18/17 20:50			10/18/17 18:08			10/18/17 18:47		
QC Batch No.:	171018MS2A1			171018MS2A1			171018MS2A1			171018MS2A1		
Analyst Initials:	DT			DT			DT			DT		
Dilution Factor:	2.1			2.1			84			84		
ANALYTE	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv
Dichlorodifluoromethane (12)	ND	0.0021	0.00032	ND	0.0021	0.00032	ND	0.084	0.013	ND	0.084	0.013
Chloromethane	ND	0.0042	0.00046	ND	0.0042	0.00046	ND	0.17	0.019	ND	0.17	0.019
1,2-Cl-1,1,2,2-F ethane (114)	ND	0.0021	0.00042	ND	0.0021	0.00042	ND	0.084	0.017	ND	0.084	0.017
Vinyl Chloride	ND	0.0021	0.00034	ND	0.0021	0.00034	ND	0.084	0.014	ND	0.084	0.014
Bromomethane	ND	0.0021	0.00062	ND	0.0021	0.00062	ND	0.084	0.025	ND	0.084	0.025
Chloroethane	ND	0.0021	0.0018	ND	0.0021	0.0018	ND	0.084	0.071	ND	0.084	0.071
Trichlorofluoromethane (11)	ND	0.0021	0.00045	ND	0.0021	0.00045	ND	0.084	0.018	ND	0.084	0.018
1,1-Dichloroethene	ND	0.0021	0.00048	ND	0.0021	0.00048	ND	0.084	0.019	ND	0.084	0.019
Carbon Disulfide	0.11	0.011	0.00050	0.024	0.011	0.00050	0.036 J	0.42	0.020	ND	0.42	0.020
1,1,2-Cl 1,2,2-F ethane (113)	ND	0.0021	0.00057	ND	0.0021	0.00057	ND	0.084	0.023	ND	0.084	0.023
Acetone	0.033	0.011	0.00061	0.023	0.011	0.00061	ND	0.42	0.024	ND	0.42	0.024
Methylene Chloride	ND	0.0021	0.00060	ND	0.0021	0.00060	ND	0.084	0.024	ND	0.084	0.024
t-1,2-Dichloroethene	ND	0.0021	0.00063	ND	0.0021	0.00063	ND	0.084	0.025	ND	0.084	0.025
1,1-Dichloroethane	ND	0.0021	0.00029	ND	0.0021	0.00029	ND	0.084	0.011	ND	0.084	0.011
c-1,2-Dichloroethene	ND	0.0021	0.00041	ND	0.0021	0.00041	ND	0.084	0.016	ND	0.084	0.016
2-Butanone	0.047	0.0021	0.0013	0.041	0.0021	0.0013	0.13	0.084	0.052	ND	0.084	0.052
t-Butyl Methyl Ether (MTBE)	ND	0.0021	0.00047	0.0043	0.0021	0.00047	ND	0.084	0.019	0.83	0.084	0.019
Chloroform	ND	0.0021	0.00029	ND	0.0021	0.00029	ND	0.084	0.012	ND	0.084	0.012
1,1,1-Trichloroethane	ND	0.0021	0.00021	ND	0.0021	0.00021	ND	0.084	0.0084	ND	0.084	0.0084
Carbon Tetrachloride	ND	0.0021	0.00037	ND	0.0021	0.00037	ND	0.084	0.015	ND	0.084	0.015
Benzene	0.025	0.0021	0.00020	0.024	0.0021	0.00020	3.7	0.084	0.0081	3.4	0.084	0.0081
1,2-Dichloroethane	ND	0.0021	0.00016	ND	0.0021	0.00016	ND	0.084	0.0063	ND	0.084	0.0063
Trichloroethene	ND	0.0021	0.00030	ND	0.0021	0.00030	ND	0.084	0.012	ND	0.084	0.012
1,2-Dichloropropane	ND	0.0021	0.00038	ND	0.0021	0.00038	ND	0.084	0.015	ND	0.084	0.015
Bromodichloromethane	ND	0.0021	0.00013	ND	0.0021	0.00013	ND	0.084	0.0051	ND	0.084	0.0051
c-1,3-Dichloropropene	ND	0.0021	0.00025	ND	0.0021	0.00025	ND	0.084	0.010	ND	0.084	0.010
4-Methyl-2-Pentanone	ND	0.0021	0.00014	ND	0.0021	0.00014	ND	0.084	0.0057	ND	0.084	0.0057
Toluene	0.033	0.0021	0.00017	0.030	0.0021	0.00017	4.2	0.084	0.0067	4.1	0.084	0.0067
t-1,3-Dichloropropene	ND	0.0021	0.00022	ND	0.0021	0.00022	ND	0.084	0.0087	ND	0.084	0.0087
1,1,2-Trichloroethane	ND	0.0021	0.00034	ND	0.0021	0.00034	ND	0.084	0.014	ND	0.084	0.014
1,3-Dichloropropane	ND	0.0021	0.00010	ND	0.0021	0.00010	ND	0.084	0.0042	ND	0.084	0.0042
Tetrachloroethene	ND	0.0021	0.00025	ND	0.0021	0.00025	ND	0.084	0.010	ND	0.084	0.010
2-Hexanone	0.0025	0.0021	0.00043	0.0024	0.0021	0.00043	ND	0.084	0.017	ND	0.084	0.017
Dibromochloromethane	ND	0.0021	0.00038	ND	0.0021	0.00038	ND	0.084	0.015	ND	0.084	0.015
1,2-Dibromoethane	ND	0.0021	0.00019	ND	0.0021	0.00019	ND	0.084	0.0077	ND	0.084	0.0077
Chlorobenzene	ND	0.0021	0.00016	ND	0.0021	0.00016	ND	0.084	0.0066	ND	0.084	0.0066
Ethylbenzene	0.0056	0.0021	0.00012	0.0046	0.0021	0.00012	0.50	0.084	0.0048	0.54	0.084	0.0048
p,&m-Xylene	0.037	0.0021	0.00024	0.033	0.0021	0.00024	3.2	0.084	0.0095	3.6	0.084	0.0095
o-Xylene	0.020	0.0021	0.00026	0.017	0.0021	0.00026	1.6	0.084	0.010	1.9	0.084	0.010

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

Client: CH2M Hill
Attn: Eric Davis
Project Name: SFPP Norwalk
Project No.: NA
Date Received: 10/16/17
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	I101602-01			I101602-02			I101602-03			I101602-04		
Client Sample I.D.:	VEFF-10-13			VEFF-10-13D			VPOST-10-13			VINF-10-13		
Date/Time Sampled:	10/13/17 12:28			10/13/17 12:28			10/13/17 12:45			10/13/17 12:55		
Date/Time Analyzed:	10/18/17 20:09			10/18/17 20:50			10/18/17 18:08			10/18/17 18:47		
QC Batch No.:	171018MS2A1			171018MS2A1			171018MS2A1			171018MS2A1		
Analyst Initials:	DT			DT			DT			DT		
Dilution Factor:	2.1			2.1			84			84		
ANALYTE	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv
Styrene	0.0011 J	0.0021	0.00027	0.0010 J	0.0021	0.00027	0.073 J	0.084	0.011	0.090	0.084	0.011
Bromoform	ND	0.0021	0.00012	ND	0.0021	0.00012	ND	0.084	0.0047	ND	0.084	0.0047
Isopropyl benzene	0.0024	0.0021	0.00022	0.0021	0.0021	0.00022	0.054 J	0.084	0.0088	0.064 J	0.084	0.0088
1,1,2,2-Tetrachloroethane	ND	0.0042	0.00013	ND	0.0042	0.00013	ND	0.17	0.0052	ND	0.17	0.0052
Benzyl Chloride	ND	0.0021	0.00039	ND	0.0021	0.00039	ND	0.084	0.015	ND	0.084	0.015
1,2,3-Trichloropropane	ND	0.0021	0.00057	ND	0.0021	0.00057	ND	0.084	0.023	ND	0.084	0.023
n-Propyl Benzene	0.0016 J	0.0021	0.00012	0.00091 J	0.0021	0.00012	0.066 J	0.084	0.0049	0.076 J	0.084	0.0049
4-Ethyl Toluene	0.013	0.0021	0.00013	0.011	0.0021	0.00013	0.63	0.084	0.0053	0.89	0.084	0.0053
1,3,5-Trimethylbenzene	0.0077	0.0042	0.00036	0.0064	0.0042	0.00036	0.37	0.17	0.015	0.52	0.17	0.015
4-Chlorotoluene	ND	0.0021	0.00025	ND	0.0021	0.00025	ND	0.084	0.010	ND	0.084	0.010
tert-Butylbenzene	ND	0.0021	0.00019	ND	0.0021	0.00019	ND	0.084	0.0076	ND	0.084	0.0076
1,2,4-Trimethylbenzene	0.011	0.0042	0.00024	0.0075	0.0042	0.00024	0.32	0.17	0.0096	0.47	0.17	0.0096
sec-Butylbenzene	0.00048 J	0.0021	0.00020	ND	0.0021	0.00020	0.010 J	0.084	0.0082	ND	0.084	0.0082
p-Isopropyltoluene	0.0033	0.0021	0.00027	0.0011 J	0.0021	0.00027	0.012 J	0.084	0.011	0.017 J	0.084	0.011
1,3-Dichlorobenzene	0.0012 J	0.0021	0.00026	0.0012 J	0.0021	0.00026	ND	0.084	0.010	ND	0.084	0.010
1,4-Dichlorobenzene	ND	0.0021	0.00031	ND	0.0021	0.00031	ND	0.084	0.012	ND	0.084	0.012
n-Butylbenzene	ND	0.0021	0.00015	ND	0.0021	0.00015	ND	0.084	0.0062	ND	0.084	0.0062
1,2-Dichlorobenzene	ND	0.0021	0.00026	ND	0.0021	0.00026	ND	0.084	0.010	ND	0.084	0.010
1,2,4-Trichlorobenzene	ND	0.0042	0.00035	ND	0.0042	0.00035	ND	0.17	0.014	ND	0.17	0.014
Hexachlorobutadiene	ND	0.0021	0.00012	ND	0.0021	0.00012	ND	0.084	0.0049	ND	0.084	0.0049
t-Butanol	ND	0.011	0.00040	ND	0.011	0.00040	ND	0.42	0.016	ND	0.42	0.016
n-Hexane	0.057	0.011	0.00028	0.055	0.011	0.00028	11	0.42	0.011	9.5	0.42	0.011
Isopropyl ether	ND	0.011	0.00023	ND	0.011	0.00023	ND	0.42	0.0094	ND	0.42	0.0094
t-Butyl ethyl ether	ND	0.011	0.00042	ND	0.011	0.00042	ND	0.42	0.017	ND	0.42	0.017
2,2-Dichloropropane	ND	0.011	0.00020	ND	0.011	0.00020	ND	0.42	0.0080	ND	0.42	0.0080
t-Amyl methyl ether	ND	0.011	0.00015	ND	0.011	0.00015	ND	0.42	0.0059	ND	0.42	0.0059
1,4-Dioxane	ND	0.011	0.00037	ND	0.011	0.00037	ND	0.42	0.015	ND	0.42	0.015
Naphthalene	0.0048 J	0.011	0.00081	ND	0.011	0.00081	ND	0.42	0.032	ND	0.42	0.032
1,2,3-Trichlorobenzene (TIC)	ND	--	--	ND	--	--	ND	--	--	ND	--	--

MDL = Method Detection Limit
ND= Not Detected (below MDL)
RL = Reporting Limit
J = Trace amount. Analyte concentration between RL and MDL.

Reviewed/Approved By: _____ Date 10-25-17
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

Client: CH2M Hill
Attn: Eric Davis
Project Name: SFPP Norwalk
Project No.: NA
Date Received: 10/16/17
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	METHOD BLANK		
Client Sample I.D.:	-		
Date/Time Sampled:	-		
Date/Time Analyzed:	10/18/17 12:28		
QC Batch No.:	171018MS2A1		
Analyst Initials:	DT		
Dilution Factor:	0.20		

ANALYTE	Result ppmv	RL ppmv	MDL ppmv
Dichlorodifluoromethane (12)	ND	0.00020	0.000031
Chloromethane	ND	0.00040	0.000044
1,2-Cl-1,1,2,2-F ethane (114)	ND	0.00020	0.000040
Vinyl Chloride	ND	0.00020	0.000032
Bromomethane	ND	0.00020	0.000059
Chloroethane	ND	0.00020	0.00017
Trichlorofluoromethane (11)	ND	0.00020	0.000043
1,1-Dichloroethene	ND	0.00020	0.000045
Carbon Disulfide	0.00011 J	0.0010	0.000048
1,1,2-Cl 1,2,2-F ethane (113)	ND	0.00020	0.000054
Acetone	ND	0.0010	0.000058
Methylene Chloride	ND	0.00020	0.000057
t-1,2-Dichloroethene	ND	0.00020	0.000060
1,1-Dichloroethane	ND	0.00020	0.000027
c-1,2-Dichloroethene	ND	0.00020	0.000039
2-Butanone	ND	0.00020	0.00012
t-Butyl Methyl Ether (MTBE)	ND	0.00020	0.000045
Chloroform	ND	0.00020	0.000028
1,1,1-Trichloroethane	ND	0.00020	0.000020
Carbon Tetrachloride	ND	0.00020	0.000035
Benzene	ND	0.00020	0.000019
1,2-Dichloroethane	ND	0.00020	0.000015
Trichloroethene	ND	0.00020	0.000028
1,2-Dichloropropane	ND	0.00020	0.000036
Bromodichloromethane	ND	0.00020	0.000012
c-1,3-Dichloropropene	ND	0.00020	0.000024
4-Methyl-2-Pentanone	ND	0.00020	0.000013
Toluene	ND	0.00020	0.000016
t-1,3-Dichloropropene	ND	0.00020	0.000021
1,1,2-Trichloroethane	ND	0.00020	0.000032
1,3-Dichloropropane	ND	0.00020	0.0000099
Tetrachloroethene	ND	0.00020	0.000024
2-Hexanone	ND	0.00020	0.000041
Dibromochloromethane	ND	0.00020	0.000036
1,2-Dibromoethane	ND	0.00020	0.000018
Chlorobenzene	ND	0.00020	0.000016
Ethylbenzene	ND	0.00020	0.000011
p,&m-Xylene	ND	0.00020	0.000023
o-Xylene	ND	0.00020	0.000024

18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

Client: CH2M Hill
Attn: Eric Davis
Project Name: SFPP Norwalk
Project No.: NA
Date Received: 10/16/17
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	METHOD BLANK		
Client Sample I.D.:	-		
Date/Time Sampled:	-		
Date/Time Analyzed:	10/18/17 12:28		
QC Batch No.:	171018MS2A1		
Analyst Initials:	DT		
Dilution Factor:	0.20		

ANALYTE	Result ppmv	RL ppmv	MDL ppmv
Styrene	ND	0.00020	0.000026
Bromoform	ND	0.00020	0.000011
Isopropyl benzene	ND	0.00020	0.000021
1,1,2,2-Tetrachloroethane	ND	0.00040	0.000012
Benzyl Chloride	ND	0.00020	0.000037
1,2,3-Trichloropropane	ND	0.00020	0.000054
n-Propyl Benzene	ND	0.00020	0.000012
4-Ethyl Toluene	ND	0.00020	0.000013
1,3,5-Trimethylbenzene	ND	0.00040	0.000035
4-Chlorotoluene	ND	0.00020	0.000024
tert-Butylbenzene	ND	0.00020	0.000018
1,2,4-Trimethylbenzene	ND	0.00040	0.000023
sec-Butylbenzene	ND	0.00020	0.000019
p-Isopropyltoluene	ND	0.00020	0.000026
1,3-Dichlorobenzene	ND	0.00020	0.000024
1,4-Dichlorobenzene	ND	0.00020	0.000029
n-Butylbenzene	ND	0.00020	0.000015
1,2-Dichlorobenzene	ND	0.00020	0.000025
1,2,4-Trichlorobenzene	ND	0.00040	0.000033
Hexachlorobutadiene	ND	0.00020	0.000012
t-Butanol	ND	0.0010	0.000038
n-Hexane	ND	0.0010	0.000027
Isopropyl ether	ND	0.0010	0.000022
t-Butyl ethyl ether	ND	0.0010	0.000040
2,2-Dichloropropane	ND	0.0010	0.000019
t-Amyl methyl ether	ND	0.0010	0.000014
1,4-Dioxane	ND	0.0010	0.000035
Naphthalene	ND	0.0010	0.000077
1,2,3-Trichlorobenzene (TIC)	ND	--	--

MDL = Method Detection Limit
ND= Not Detected (below MDL)
RL = Reporting Limit
J = Trace amount. Analyte concentration between RL and MDL.

Reviewed/Approved By: _____ Date 10-25-17
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 171018MS2A1

Matrix: Air

EPA Method TO-14/TO-15

Lab No:	Method Blank		LCS		LCSD						
Date/Time Analyzed:	10/18/17 12:28		10/18/17 11:05		10/18/17 11:46						
Data File ID:	18OCT006.D		18OCT004.D		18OCT005.D						
Analyst Initials:	DT		DT		DT						
Dilution Factor:	0.2		1.0		1.0			Limits			
ANALYTE	Result ppbv	Spike Amount	Result ppbv	% Rec	Result ppbv	% Rec	RPD	Low %Rec	High %Rec	Max. RPD	Pass/ Fail
1,1-Dichloroethene	0.0	10.0	10.8	108	11.1	111	2.4	70	130	30	Pass
Methylene Chloride	0.0	10.0	10.3	103	10.5	105	2.4	70	130	30	Pass
Trichloroethene	0.0	10.0	10.7	107	10.5	105	2.2	70	130	30	Pass
Toluene	0.0	10.0	9.5	95	8.9	89	6.1	70	130	30	Pass
1,1,2,2-Tetrachloroethane	0.0	10.0	9.3	93	9.6	96	3.0	70	130	30	Pass

RPD = Relative Percent Difference

Reviewed/Approved By: _____ Date: 10-25-17

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

Client: CH2M Hill
Attn: Eric Davis
Project Name: SFPP Norwalk
Project No.: NA
Date Received: 10/16/17
Matrix: Air
Reporting Units: ppmv

EPA METHOD TO3

Lab No.:	I101602-01			I101602-02			I101602-03			I101602-04		
Client Sample I.D.:	VEFF-10-13			VEFF-10-13D			VPOST-10-13			VINF-10-13		
Date/Time Sampled:	10/13/17 12:28			10/13/17 12:28			10/13/17 12:45			10/13/17 12:55		
Date/Time Analyzed:	10/19/17 13:31			10/19/17 13:53			10/19/17 15:01			10/19/17 15:24		
QC Batch No.:	171019GC11A2			171019GC11A2			171019GC11A2			171019GC11A2		
Analyst Initials:	AS			AS			AS			AS		
Dilution Factor:	2.1			2.1			8.4			8.4		
ANALYTE	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv
TVOC as Hexane	2.0 J	2.1	0.37	1.7 J	2.1	0.37	300	8.4	1.5	280	8.4	1.5

MDL = Method Detection Limit
ND= Not Detected (below MDL)
RL = Reporting Limit
J = Trace amount. Analyte concentration between RL and MDL.

Reviewed/Approved By: _____ Date 10-25-17
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

QC Batch No: 171019GC11A2
Matrix: Air
Reporting Units: ppmv

EPA METHOD TO3
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	10/19/17 13:09			10/19/17 12:24		10/19/17 12:46					
Analyst Initials:	AS			AS		AS					
Dilution Factor:	1.0			1.0		1.0					
ANALYTE	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	% Rec.	Result ppmv	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
TVOC as Hexane	ND	1.0	0.18	4.38	88	4.38	88	0.0	70	130	25

MDL = Method Detection Limit
ND= Not Detected (below MDL)
RL = Reporting Limit
J = Trace amount. Analyte concentration between RL and MDL.

Reviewed/Approved By: _____ Date 10-25-17

Mark Johnson
Operations Manager

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AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

Client: CH2M Hill
Attn: Eric Davis
Project Name: SFPP Norwalk
Project No.: NA
Date Received: 10/16/17
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	I101602-04		
Client Sample I.D.:	VINF-10-13		
Date/Time Sampled:	10/13/17 12:55		
Date/Time Analyzed:	10/18/17 14:55		
QC Batch No.:	171018GC8A2		
Analyst Initials:	AS		
Dilution Factor:	2.1		

ANALYTE	Result % v/v	RL % v/v	MDL % v/v
Carbon Dioxide	0.85	0.021	0.00089
Oxygen/Argon	21	1.1	0.077
Nitrogen	78	2.1	0.31
Methane	0.0091	0.0021	0.000096

Results normalized including non-methane hydrocarbons
MDL = Method Detection Limit
ND= Not Detected (below MDL)
RL = Reporting Limit
J = Trace amount. Analyte concentration between RL and MDL.

Reviewed/Approved By: _____ Date 10-25-17
Mark Johnson
Operations Manager

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AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

QC Batch No: 171018GC8A2
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK				LCS		LCSD					
Date Analyzed:	10/18/17 12:13				10/18/17 11:29		10/18/17 11:44					
Analyst Initials:	AS				AS		AS					
Dilution Factor:	1.0				1.0		1.0			Limits		
ANALYTE	Result % v/v	RL % v/v	MDL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
Carbon Dioxide	ND	0.010	0.00042	10	9.68	97	9.80	98	1.2	70	130	30
Oxygen/Argon	0.093 J	0.50	0.037	15	15.6	104	15.8	106	1.5	70	130	30
Nitrogen	0.20 J	1.0	0.14	70	70.4	100	71.5	102	1.5	70	130	30
Methane	ND	0.0010	0.000046	0.10	0.116	116	0.117	117	0.8	70	130	30

MDL = Method Detection Limit
ND= Not Detected (below MDL)
RL = Reporting Limit
J = Trace amount. Analyte concentration between RL and MDL.

Reviewed/Approved By: _____ Date 10-25-17
Mark Jol Mark Johnson
Operatio Operations Manager

The cover letter is an integral part of this analytical report

October 23, 2017

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

Workorder No.: N026385

RE: SFPP Norwalk

Attention: Eric Davis

Enclosed are the results for sample(s) received on October 10, 2017 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.

This is an amended report. Please disregard all previous documentation that corresponds to the page(s) enclosed.

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,

Puri Romualdo
Laboratory Director

CLIENT: CH2MHill
Project: SFPP Norwalk
Lab Order: N026385

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.

Analytical Comment for EPA 8015B_GRO:

Surrogate recovery biased high in N026385-003 and -004 possibly due to matrix interferences. Sample results were non-detect (ND) for analytes of interest therefore reanalysis of the sample was not necessary.

Analytical Comment for EPA 8260B:

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

ASSET LABORATORIES
"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

ASSET Laboratories

Date: *23-Oct-17*

CLIENT: CH2MHill
Project: SFPP Norwalk
Lab Order: N026385
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N026385-001A	INF-10-10	Wastewater	10/10/2017 2:00:00 PM	10/10/2017	10/23/2017
N026385-001B	INF-10-10	Wastewater	10/10/2017 2:00:00 PM	10/10/2017	10/23/2017
N026385-002A	POST_OWS-10-10	Wastewater	10/10/2017 1:50:00 PM	10/10/2017	10/23/2017
N026385-002B	POST_OWS-10-10	Wastewater	10/10/2017 1:50:00 PM	10/10/2017	10/23/2017
N026385-003A	MP1-10-10	Wastewater	10/10/2017 1:40:00 PM	10/10/2017	10/23/2017
N026385-003B	MP1-10-10	Wastewater	10/10/2017 1:40:00 PM	10/10/2017	10/23/2017
N026385-004A	INF_FBBR-10-10	Wastewater	10/10/2017 1:30:00 PM	10/10/2017	10/23/2017
N026385-004B	INF_FBBR-10-10	Wastewater	10/10/2017 1:30:00 PM	10/10/2017	10/23/2017
N026385-005A	EFF_FBBR1-10-10	Wastewater	10/10/2017 1:20:00 PM	10/10/2017	10/23/2017
N026385-005B	EFF_FBBR1-10-10	Wastewater	10/10/2017 1:20:00 PM	10/10/2017	10/23/2017
N026385-006A	EFF_FBBR2-10-10	Wastewater	10/10/2017 1:10:00 PM	10/10/2017	10/23/2017
N026385-006B	EFF_FBBR2-10-10	Wastewater	10/10/2017 1:10:00 PM	10/10/2017	10/23/2017
N026385-007A	EFF_POL1-10-10	Wastewater	10/10/2017 1:00:00 PM	10/10/2017	10/23/2017
N026385-007B	EFF_POL1-10-10	Wastewater	10/10/2017 1:00:00 PM	10/10/2017	10/23/2017
N026385-008A	S2A-10-10	Wastewater	10/10/2017 1:25:00 PM	10/10/2017	10/23/2017
N026385-009A	S2B-10-10	Wastewater	10/10/2017 1:22:00 PM	10/10/2017	10/23/2017

CLIENT: CH2MHill
Lab Order: N026385
Project: SFPP Norwalk
Lab ID: N026385-001

Client Sample ID: INF-10-10
Collection Date: 10/10/2017 2:00:00 PM
Matrix: WASTEWATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: **NV00922-MS5_171011A** QC Batch: **P17VW177** PrepDate: Analyst: **QBM**

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.089	1.0		ug/L	1	10/11/2017 12:42 PM
1,1,1-Trichloroethane	ND	0.15	1.0		ug/L	1	10/11/2017 12:42 PM
1,1,2,2-Tetrachloroethane	ND	0.14	1.0		ug/L	1	10/11/2017 12:42 PM
1,1,2-Trichloroethane	ND	0.15	1.0		ug/L	1	10/11/2017 12:42 PM
1,1-Dichloroethane	ND	0.13	0.50		ug/L	1	10/11/2017 12:42 PM
1,1-Dichloroethene	ND	0.15	1.0		ug/L	1	10/11/2017 12:42 PM
1,1-Dichloropropene	ND	0.12	1.0		ug/L	1	10/11/2017 12:42 PM
1,2,3-Trichlorobenzene	ND	0.16	1.0		ug/L	1	10/11/2017 12:42 PM
1,2,3-Trichloropropane	ND	0.097	1.0		ug/L	1	10/11/2017 12:42 PM
1,2,4-Trichlorobenzene	ND	0.13	1.0		ug/L	1	10/11/2017 12:42 PM
1,2,4-Trimethylbenzene	39	0.094	1.0		ug/L	1	10/11/2017 12:42 PM
1,2-Dibromo-3-chloropropane	ND	0.36	2.0		ug/L	1	10/11/2017 12:42 PM
1,2-Dibromoethane	ND	0.18	1.0		ug/L	1	10/11/2017 12:42 PM
1,2-Dichlorobenzene	ND	0.14	1.0		ug/L	1	10/11/2017 12:42 PM
1,2-Dichloroethane	0.78	0.13	0.50		ug/L	1	10/11/2017 12:42 PM
1,2-Dichloropropane	ND	0.14	1.0		ug/L	1	10/11/2017 12:42 PM
1,3,5-Trimethylbenzene	18	0.11	1.0		ug/L	1	10/11/2017 12:42 PM
1,3-Dichlorobenzene	ND	0.11	1.0		ug/L	1	10/11/2017 12:42 PM
1,3-Dichloropropane	ND	0.13	1.0		ug/L	1	10/11/2017 12:42 PM
1,4-Dichlorobenzene	ND	0.13	1.0		ug/L	1	10/11/2017 12:42 PM
2,2-Dichloropropane	ND	0.16	1.0		ug/L	1	10/11/2017 12:42 PM
2-Butanone	ND	1.9	10		ug/L	1	10/11/2017 12:42 PM
2-Chlorotoluene	ND	0.14	1.0		ug/L	1	10/11/2017 12:42 PM
4-Chlorotoluene	ND	0.14	1.0		ug/L	1	10/11/2017 12:42 PM
4-Isopropyltoluene	0.37	0.13	1.0	J	ug/L	1	10/11/2017 12:42 PM
4-Methyl-2-pentanone	ND	1.4	10		ug/L	1	10/11/2017 12:42 PM
Acetone	8.5	4.3	10	J	ug/L	1	10/11/2017 12:42 PM
Acrolein	ND	1.9	20		ug/L	1	10/11/2017 12:42 PM
Acrylonitrile	ND	2.5	20		ug/L	1	10/11/2017 12:42 PM
Benzene	70	0.14	1.0		ug/L	1	10/11/2017 12:42 PM
Bromobenzene	ND	0.13	1.0		ug/L	1	10/11/2017 12:42 PM
Bromochloromethane	ND	0.15	1.0		ug/L	1	10/11/2017 12:42 PM
Bromodichloromethane	ND	0.10	1.0		ug/L	1	10/11/2017 12:42 PM
Bromoform	ND	0.34	1.0		ug/L	1	10/11/2017 12:42 PM
Bromomethane	ND	0.12	1.0		ug/L	1	10/11/2017 12:42 PM
Carbon disulfide	0.32	0.14	1.0	J	ug/L	1	10/11/2017 12:42 PM

Qualifiers:

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

CLIENT: CH2MHill
Lab Order: N026385
Project: SFPP Norwalk
Lab ID: N026385-001

Client Sample ID: INF-10-10
Collection Date: 10/10/2017 2:00:00 PM
Matrix: WASTEWATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: **NV00922-MS5_171011A** QC Batch: **P17VW177** PrepDate: Analyst: **QBM**

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
Carbon tetrachloride	ND	0.13	0.50		ug/L	1	10/11/2017 12:42 PM
Chlorobenzene	ND	0.13	1.0		ug/L	1	10/11/2017 12:42 PM
Chloroethane	ND	0.19	1.0		ug/L	1	10/11/2017 12:42 PM
Chloroform	ND	0.18	1.0		ug/L	1	10/11/2017 12:42 PM
Chloromethane	ND	0.22	1.0		ug/L	1	10/11/2017 12:42 PM
cis-1,2-Dichloroethene	ND	0.20	1.0		ug/L	1	10/11/2017 12:42 PM
cis-1,3-Dichloropropene	ND	0.14	1.0		ug/L	1	10/11/2017 12:42 PM
Di-isopropyl ether	6.5	0.18	1.0		ug/L	1	10/11/2017 12:42 PM
Dibromochloromethane	ND	0.12	1.0		ug/L	1	10/11/2017 12:42 PM
Dibromomethane	ND	0.12	1.0		ug/L	1	10/11/2017 12:42 PM
Dichlorodifluoromethane	ND	0.17	1.0		ug/L	1	10/11/2017 12:42 PM
Ethyl tert-butyl ether	ND	0.15	1.0		ug/L	1	10/11/2017 12:42 PM
Ethylbenzene	5.2	0.14	1.0		ug/L	1	10/11/2017 12:42 PM
Freon-113	ND	0.19	1.0		ug/L	1	10/11/2017 12:42 PM
Hexachlorobutadiene	ND	0.15	1.0		ug/L	1	10/11/2017 12:42 PM
Isopropylbenzene	2.2	0.11	1.0		ug/L	1	10/11/2017 12:42 PM
m,p-Xylene	72	0.23	1.0		ug/L	1	10/11/2017 12:42 PM
Methylene chloride	ND	0.26	2.0		ug/L	1	10/11/2017 12:42 PM
MTBE	3.7	0.13	1.0		ug/L	1	10/11/2017 12:42 PM
n-Butylbenzene	2.6	0.15	1.0		ug/L	1	10/11/2017 12:42 PM
n-Propylbenzene	3.5	0.16	1.0		ug/L	1	10/11/2017 12:42 PM
Naphthalene	37	0.094	1.0		ug/L	1	10/11/2017 12:42 PM
o-Xylene	44	0.13	1.0		ug/L	1	10/11/2017 12:42 PM
sec-Butylbenzene	0.62	0.12	1.0	J	ug/L	1	10/11/2017 12:42 PM
Styrene	ND	0.14	1.0		ug/L	1	10/11/2017 12:42 PM
Tert-amyl methyl ether	ND	0.12	1.0		ug/L	1	10/11/2017 12:42 PM
Tert-Butanol	26	1.8	5.0		ug/L	1	10/11/2017 12:42 PM
tert-Butylbenzene	ND	0.11	1.0		ug/L	1	10/11/2017 12:42 PM
Tetrachloroethene	ND	0.13	1.0		ug/L	1	10/11/2017 12:42 PM
Toluene	13	0.14	2.0		ug/L	1	10/11/2017 12:42 PM
trans-1,2-Dichloroethene	ND	0.20	1.0		ug/L	1	10/11/2017 12:42 PM
trans-1,3-Dichloropropene	ND	0.13	1.0		ug/L	1	10/11/2017 12:42 PM
Trichloroethene	ND	0.14	1.0		ug/L	1	10/11/2017 12:42 PM
Trichlorofluoromethane	ND	0.13	1.0		ug/L	1	10/11/2017 12:42 PM
Vinyl chloride	ND	0.15	0.50		ug/L	1	10/11/2017 12:42 PM
Xylenes, Total	120	1.5	2.0		ug/L	1	10/11/2017 12:42 PM

Qualifiers:

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

CLIENT: CH2MHill
Lab Order: N026385
Project: SFPP Norwalk
Lab ID: N026385-001

Client Sample ID: INF-10-10
Collection Date: 10/10/2017 2:00:00 PM
Matrix: WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **NV00922-MS5_171011A**	QC Batch: **P17VW177**			PrepDate:			Analyst: **QBM**
Surr: 1,2-Dichloroethane-d4	104	0	72-119		%REC	1	10/11/2017 12:42 PM
Surr: 4-Bromofluorobenzene	104	0	76-119		%REC	1	10/11/2017 12:42 PM
Surr: Dibromofluoromethane	106	0	85-115		%REC	1	10/11/2017 12:42 PM
Surr: Toluene-d8	106	0	81-120		%REC	1	10/11/2017 12:42 PM
TPH EXTRACTABLE BY GC/FID							
	EPA 3510C		**EPA 8015B**				
RunID: **NV00922-GC3_171011A**	QC Batch: **64152**			PrepDate:	**10/11/2017**		Analyst: **QCE**
TPH-Diesel (C13-C22)	1200	15	25		ug/L	1	10/11/2017 06:37 PM
TPH-Oil (C23-C36)	240	14	25		ug/L	1	10/11/2017 06:37 PM
Surr: Octacosane	96.5	0	26-152		%REC	1	10/11/2017 06:37 PM
Surr: p-Terphenyl	96.1	0	57-132		%REC	1	10/11/2017 06:37 PM
GASOLINE RANGE ORGANICS BY GC/FID							
			EPA 8015B				
RunID: **NV00922-GC4_171011A**	QC Batch: **E17VW093**			PrepDate:			Analyst: **QBM**
TPH-Gasoline (C4-C12)	860	16	50		ug/L	1	10/11/2017 04:57 PM
Surr: Chlorobenzene - d5	125	0	74-138		%REC	1	10/11/2017 04:57 PM
TOTAL TPH							
			EPA 8015B				
RunID: **NV00922-GC3_171011A**	QC Batch: **R118473**			PrepDate:			Analyst: **QCE**
Total TPH	2300	16	50		ug/L	1	10/11/2017

Qualifiers:

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

CLIENT: CH2MHill
Lab Order: N026385
Project: SFPP Norwalk
Lab ID: N026385-002

Client Sample ID: POST_OWS-10-10
Collection Date: 10/10/2017 1:50:00 PM
Matrix: WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **NV00922-MS5_171011A**	QC Batch: **P17VW177**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethane	ND	0.13	0.50		ug/L	1	10/11/2017 12:20 PM
1,2-Dichloroethane	0.63	0.13	0.50		ug/L	1	10/11/2017 12:20 PM
Benzene	3.9	0.14	1.0		ug/L	1	10/11/2017 12:20 PM
Ethylbenzene	0.75	0.14	1.0	J	ug/L	1	10/11/2017 12:20 PM
m,p-Xylene	11	0.23	1.0		ug/L	1	10/11/2017 12:20 PM
MTBE	3.5	0.13	1.0		ug/L	1	10/11/2017 12:20 PM
o-Xylene	12	0.13	1.0		ug/L	1	10/11/2017 12:20 PM
Tert-Butanol	23	1.8	5.0		ug/L	1	10/11/2017 12:20 PM
Toluene	0.98	0.14	2.0	J	ug/L	1	10/11/2017 12:20 PM
Xylenes, Total	23	1.5	2.0		ug/L	1	10/11/2017 12:20 PM
Surr: 1,2-Dichloroethane-d4	105	0	72-119		%REC	1	10/11/2017 12:20 PM
Surr: 4-Bromofluorobenzene	105	0	76-119		%REC	1	10/11/2017 12:20 PM
Surr: Dibromofluoromethane	104	0	85-115		%REC	1	10/11/2017 12:20 PM
Surr: Toluene-d8	106	0	81-120		%REC	1	10/11/2017 12:20 PM
TPH EXTRACTABLE BY GC/FID							
	EPA 3510C		**EPA 8015B**				
RunID: **NV00922-GC3_171011A**	QC Batch: **64152**			PrepDate:	**10/11/2017**		Analyst: **QCE**
TPH-Diesel (C13-C22)	660	15	25		ug/L	1	10/11/2017 07:03 PM
TPH-Oil (C23-C36)	180	14	25		ug/L	1	10/11/2017 07:03 PM
Surr: Octacosane	93.1	0	26-152		%REC	1	10/11/2017 07:03 PM
Surr: p-Terphenyl	92.5	0	57-132		%REC	1	10/11/2017 07:03 PM
GASOLINE RANGE ORGANICS BY GC/FID							
			EPA 8015B				
RunID: **NV00922-GC4_171011A**	QC Batch: **E17VW093**			PrepDate:			Analyst: **QBM**
TPH-Gasoline (C4-C12)	400	16	50		ug/L	1	10/11/2017 01:50 PM
Surr: Chlorobenzene - d5	127	0	74-138		%REC	1	10/11/2017 01:50 PM
TOTAL TPH							
			EPA 8015B				
RunID: **NV00922-GC3_171011A**	QC Batch: **R118473**			PrepDate:			Analyst: **QCE**
Total TPH	1200	16	50		ug/L	1	10/11/2017

Qualifiers:

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

CLIENT: CH2MHill
Lab Order: N026385
Project: SFPP Norwalk
Lab ID: N026385-003

Client Sample ID: MP1-10-10
Collection Date: 10/10/2017 1:40:00 PM
Matrix: WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **NV00922-MS5_171011A**	QC Batch: **P17VW177**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethane	ND	0.13	0.50		ug/L	1	10/11/2017 11:57 AM
1,2-Dichloroethane	ND	0.13	0.50		ug/L	1	10/11/2017 11:57 AM
Benzene	1.0	0.14	1.0		ug/L	1	10/11/2017 11:57 AM
Ethylbenzene	ND	0.14	1.0		ug/L	1	10/11/2017 11:57 AM
m,p-Xylene	ND	0.23	1.0		ug/L	1	10/11/2017 11:57 AM
MTBE	14	0.13	1.0		ug/L	1	10/11/2017 11:57 AM
o-Xylene	ND	0.13	1.0		ug/L	1	10/11/2017 11:57 AM
Tert-Butanol	ND	1.8	5.0		ug/L	1	10/11/2017 11:57 AM
Toluene	ND	0.14	2.0		ug/L	1	10/11/2017 11:57 AM
Xylenes, Total	ND	1.5	2.0		ug/L	1	10/11/2017 11:57 AM
Surr: 1,2-Dichloroethane-d4	112	0	72-119		%REC	1	10/11/2017 11:57 AM
Surr: 4-Bromofluorobenzene	103	0	76-119		%REC	1	10/11/2017 11:57 AM
Surr: Dibromofluoromethane	111	0	85-115		%REC	1	10/11/2017 11:57 AM
Surr: Toluene-d8	105	0	81-120		%REC	1	10/11/2017 11:57 AM
TPH EXTRACTABLE BY GC/FID							
	EPA 3510C		**EPA 8015B**				
RunID: **NV00922-GC3_171011A**	QC Batch: **64152**			PrepDate:	**10/11/2017**		Analyst: **QCE**
TPH-Diesel (C13-C22)	73	17	28		ug/L	1	10/11/2017 07:29 PM
TPH-Oil (C23-C36)	45	15	28		ug/L	1	10/11/2017 07:29 PM
Surr: Octacosane	89.6	0	26-152		%REC	1	10/11/2017 07:29 PM
Surr: p-Terphenyl	87.3	0	57-132		%REC	1	10/11/2017 07:29 PM
GASOLINE RANGE ORGANICS BY GC/FID							
			EPA 8015B				
RunID: **NV00922-GC4_171011A**	QC Batch: **E17VW093**			PrepDate:			Analyst: **QBM**
TPH-Gasoline (C4-C12)	ND	16	50		ug/L	1	10/11/2017 01:16 PM
Surr: Chlorobenzene - d5	149	0	74-138	S	%REC	1	10/11/2017 01:16 PM
TOTAL TPH							
			EPA 8015B				
RunID: **NV00922-GC3_171011A**	QC Batch: **R118473**			PrepDate:			Analyst: **QCE**
Total TPH	120	16	50		ug/L	1	10/11/2017

Qualifiers:

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

CLIENT: CH2MHill
Lab Order: N026385
Project: SFPP Norwalk
Lab ID: N026385-004

Client Sample ID: INF_FBBR-10-10
Collection Date: 10/10/2017 1:30:00 PM
Matrix: WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **NV00922-MS5_171011A**	QC Batch: **P17VW177**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethane	ND	0.13	0.50		ug/L	1	10/11/2017 11:35 AM
1,2-Dichloroethane	ND	0.13	0.50		ug/L	1	10/11/2017 11:35 AM
Benzene	ND	0.14	1.0		ug/L	1	10/11/2017 11:35 AM
Ethylbenzene	ND	0.14	1.0		ug/L	1	10/11/2017 11:35 AM
m,p-Xylene	ND	0.23	1.0		ug/L	1	10/11/2017 11:35 AM
MTBE	16	0.13	1.0		ug/L	1	10/11/2017 11:35 AM
o-Xylene	ND	0.13	1.0		ug/L	1	10/11/2017 11:35 AM
Tert-Butanol	ND	1.8	5.0		ug/L	1	10/11/2017 11:35 AM
Toluene	ND	0.14	2.0		ug/L	1	10/11/2017 11:35 AM
Xylenes, Total	ND	1.5	2.0		ug/L	1	10/11/2017 11:35 AM
Surr: 1,2-Dichloroethane-d4	102	0	72-119		%REC	1	10/11/2017 11:35 AM
Surr: 4-Bromofluorobenzene	103	0	76-119		%REC	1	10/11/2017 11:35 AM
Surr: Dibromofluoromethane	106	0	85-115		%REC	1	10/11/2017 11:35 AM
Surr: Toluene-d8	104	0	81-120		%REC	1	10/11/2017 11:35 AM
TPH EXTRACTABLE BY GC/FID							
	EPA 3510C		**EPA 8015B**				
RunID: **NV00922-GC3_171011A**	QC Batch: **64152**			PrepDate:	**10/11/2017**		Analyst: **QCE**
TPH-Diesel (C13-C22)	470	16	26		ug/L	1	10/11/2017 07:55 PM
TPH-Oil (C23-C36)	91	14	26		ug/L	1	10/11/2017 07:55 PM
Surr: Octacosane	86.3	0	26-152		%REC	1	10/11/2017 07:55 PM
Surr: p-Terphenyl	87.7	0	57-132		%REC	1	10/11/2017 07:55 PM
GASOLINE RANGE ORGANICS BY GC/FID							
			EPA 8015B				
RunID: **NV00922-GC4_171011A**	QC Batch: **E17VW093**			PrepDate:			Analyst: **QBM**
TPH-Gasoline (C4-C12)	ND	16	50		ug/L	1	10/11/2017 12:42 PM
Surr: Chlorobenzene - d5	140	0	74-138	S	%REC	1	10/11/2017 12:42 PM
TOTAL TPH							
			EPA 8015B				
RunID: **NV00922-GC3_171011A**	QC Batch: **R118473**			PrepDate:			Analyst: **QCE**
Total TPH	560	16	50		ug/L	1	10/11/2017

Qualifiers:

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

CLIENT: CH2MHill
Lab Order: N026385
Project: SFPP Norwalk
Lab ID: N026385-005

Client Sample ID: EFF_FBBR1-10-10
Collection Date: 10/10/2017 1:20:00 PM
Matrix: WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **NV00922-MS5_171011A**	QC Batch: **P17VW177**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethane	ND	0.13	0.50		ug/L	1	10/11/2017 10:28 AM
1,2-Dichloroethane	ND	0.13	0.50		ug/L	1	10/11/2017 10:28 AM
Benzene	ND	0.14	1.0		ug/L	1	10/11/2017 10:28 AM
Ethylbenzene	ND	0.14	1.0		ug/L	1	10/11/2017 10:28 AM
m,p-Xylene	ND	0.23	1.0		ug/L	1	10/11/2017 10:28 AM
MTBE	1.1	0.13	1.0		ug/L	1	10/11/2017 10:28 AM
o-Xylene	ND	0.13	1.0		ug/L	1	10/11/2017 10:28 AM
Tert-Butanol	ND	1.8	5.0		ug/L	1	10/11/2017 10:28 AM
Toluene	ND	0.14	2.0		ug/L	1	10/11/2017 10:28 AM
Xylenes, Total	ND	1.5	2.0		ug/L	1	10/11/2017 10:28 AM
Surr: 1,2-Dichloroethane-d4	106	0	72-119		%REC	1	10/11/2017 10:28 AM
Surr: 4-Bromofluorobenzene	102	0	76-119		%REC	1	10/11/2017 10:28 AM
Surr: Dibromofluoromethane	108	0	85-115		%REC	1	10/11/2017 10:28 AM
Surr: Toluene-d8	103	0	81-120		%REC	1	10/11/2017 10:28 AM
TPH EXTRACTABLE BY GC/FID							
	EPA 3510C		**EPA 8015B**				
RunID: **NV00922-GC3_171011A**	QC Batch: **64152**			PrepDate:	**10/11/2017**		Analyst: **QCE**
TPH-Diesel (C13-C22)	ND	15	25		ug/L	1	10/11/2017 08:22 PM
TPH-Oil (C23-C36)	16	14	25	J	ug/L	1	10/11/2017 08:22 PM
Surr: Octacosane	85.3	0	26-152		%REC	1	10/11/2017 08:22 PM
Surr: p-Terphenyl	82.0	0	57-132		%REC	1	10/11/2017 08:22 PM
GASOLINE RANGE ORGANICS BY GC/FID							
			EPA 8015B				
RunID: **NV00922-GC4_171011A**	QC Batch: **E17VW093**			PrepDate:			Analyst: **QBM**
TPH-Gasoline (C4-C12)	ND	16	50		ug/L	1	10/11/2017 11:01 AM
Surr: Chlorobenzene - d5	134	0	74-138		%REC	1	10/11/2017 11:01 AM
TOTAL TPH							
			EPA 8015B				
RunID: **NV00922-GC3_171011A**	QC Batch: **R118473**			PrepDate:			Analyst: **QCE**
Total TPH	16	16	50	J	ug/L	1	10/11/2017

Qualifiers:

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

CLIENT: CH2MHill
Lab Order: N026385
Project: SFPP Norwalk
Lab ID: N026385-006

Client Sample ID: EFF_FBBR2-10-10
Collection Date: 10/10/2017 1:10:00 PM
Matrix: WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **NV00922-MS5_171011A**	QC Batch: **P17VW177**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethane	ND	0.13	0.50		ug/L	1	10/11/2017 10:50 AM
1,2-Dichloroethane	ND	0.13	0.50		ug/L	1	10/11/2017 10:50 AM
Benzene	ND	0.14	1.0		ug/L	1	10/11/2017 10:50 AM
Ethylbenzene	ND	0.14	1.0		ug/L	1	10/11/2017 10:50 AM
m,p-Xylene	ND	0.23	1.0		ug/L	1	10/11/2017 10:50 AM
MTBE	ND	0.13	1.0		ug/L	1	10/11/2017 10:50 AM
o-Xylene	ND	0.13	1.0		ug/L	1	10/11/2017 10:50 AM
Tert-Butanol	ND	1.8	5.0		ug/L	1	10/11/2017 10:50 AM
Toluene	ND	0.14	2.0		ug/L	1	10/11/2017 10:50 AM
Xylenes, Total	ND	1.5	2.0		ug/L	1	10/11/2017 10:50 AM
Surr: 1,2-Dichloroethane-d4	106	0	72-119		%REC	1	10/11/2017 10:50 AM
Surr: 4-Bromofluorobenzene	105	0	76-119		%REC	1	10/11/2017 10:50 AM
Surr: Dibromofluoromethane	108	0	85-115		%REC	1	10/11/2017 10:50 AM
Surr: Toluene-d8	103	0	81-120		%REC	1	10/11/2017 10:50 AM
TPH EXTRACTABLE BY GC/FID							
	EPA 3510C		**EPA 8015B**				
RunID: **NV00922-GC3_171011A**	QC Batch: **64152**			PrepDate:	**10/11/2017**		Analyst: **QCE**
TPH-Diesel (C13-C22)	ND	16	26		ug/L	1	10/11/2017 11:50 PM
TPH-Oil (C23-C36)	19	14	26	J	ug/L	1	10/11/2017 11:50 PM
Surr: Octacosane	87.0	0	26-152		%REC	1	10/11/2017 11:50 PM
Surr: p-Terphenyl	84.5	0	57-132		%REC	1	10/11/2017 11:50 PM
GASOLINE RANGE ORGANICS BY GC/FID							
			EPA 8015B				
RunID: **NV00922-GC4_171011A**	QC Batch: **E17VW093**			PrepDate:			Analyst: **QBM**
TPH-Gasoline (C4-C12)	ND	16	50		ug/L	1	10/11/2017 11:35 AM
Surr: Chlorobenzene - d5	132	0	74-138		%REC	1	10/11/2017 11:35 AM
TOTAL TPH							
			EPA 8015B				
RunID: **NV00922-GC3_171011A**	QC Batch: **R118473**			PrepDate:			Analyst: **QCE**
Total TPH	19	16	50	J	ug/L	1	10/11/2017

Qualifiers:

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

CLIENT: CH2MHill
Lab Order: N026385
Project: SFPP Norwalk
Lab ID: N026385-007

Client Sample ID: EFF_POL1-10-10
Collection Date: 10/10/2017 1:00:00 PM
Matrix: WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **NV00922-MS5_171011A**	QC Batch: **P17VW177**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethane	ND	0.13	0.50		ug/L	1	10/11/2017 11:13 AM
1,2-Dichloroethane	ND	0.13	0.50		ug/L	1	10/11/2017 11:13 AM
Benzene	ND	0.14	1.0		ug/L	1	10/11/2017 11:13 AM
Ethylbenzene	ND	0.14	1.0		ug/L	1	10/11/2017 11:13 AM
m,p-Xylene	ND	0.23	1.0		ug/L	1	10/11/2017 11:13 AM
MTBE	0.46	0.13	1.0	J	ug/L	1	10/11/2017 11:13 AM
o-Xylene	ND	0.13	1.0		ug/L	1	10/11/2017 11:13 AM
Tert-Butanol	ND	1.8	5.0		ug/L	1	10/11/2017 11:13 AM
Toluene	ND	0.14	2.0		ug/L	1	10/11/2017 11:13 AM
Xylenes, Total	ND	1.5	2.0		ug/L	1	10/11/2017 11:13 AM
Surr: 1,2-Dichloroethane-d4	107	0	72-119		%REC	1	10/11/2017 11:13 AM
Surr: 4-Bromofluorobenzene	103	0	76-119		%REC	1	10/11/2017 11:13 AM
Surr: Dibromofluoromethane	109	0	85-115		%REC	1	10/11/2017 11:13 AM
Surr: Toluene-d8	101	0	81-120		%REC	1	10/11/2017 11:13 AM
TPH EXTRACTABLE BY GC/FID							
	EPA 3510C		**EPA 8015B**				
RunID: **NV00922-GC3_171011A**	QC Batch: **64152**			PrepDate:	**10/11/2017**		Analyst: **QCE**
TPH-Diesel (C13-C22)	ND	16	26		ug/L	1	10/12/2017 12:16 AM
TPH-Oil (C23-C36)	15	14	26	J	ug/L	1	10/12/2017 12:16 AM
Surr: Octacosane	83.5	0	26-152		%REC	1	10/12/2017 12:16 AM
Surr: p-Terphenyl	81.3	0	57-132		%REC	1	10/12/2017 12:16 AM
GASOLINE RANGE ORGANICS BY GC/FID							
			EPA 8015B				
RunID: **NV00922-GC4_171011A**	QC Batch: **E17VW093**			PrepDate:			Analyst: **QBM**
TPH-Gasoline (C4-C12)	ND	16	50		ug/L	1	10/11/2017 12:09 PM
Surr: Chlorobenzene - d5	134	0	74-138		%REC	1	10/11/2017 12:09 PM
TOTAL TPH							
			EPA 8015B				
RunID: **NV00922-GC3_171011A**	QC Batch: **R118473**			PrepDate:			Analyst: **QCE**
Total TPH	15	16	50		ug/L	1	10/11/2017

Qualifiers:

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

CLIENT: CH2MHill
Lab Order: N026385
Project: SFPP Norwalk
Lab ID: N026385-008

Client Sample ID: S2A-10-10
Collection Date: 10/10/2017 1:25:00 PM
Matrix: WASTEWATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: **NV00922-MS5_171011A** QC Batch: **P17VW177** PrepDate: Analyst: **QBM**

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
1,1-Dichloroethane	ND	0.13	0.50		ug/L	1	10/11/2017 01:50 PM
1,2-Dichloroethane	ND	0.13	0.50		ug/L	1	10/11/2017 01:50 PM
Benzene	ND	0.14	1.0		ug/L	1	10/11/2017 01:50 PM
Ethylbenzene	ND	0.14	1.0		ug/L	1	10/11/2017 01:50 PM
m,p-Xylene	ND	0.23	1.0		ug/L	1	10/11/2017 01:50 PM
MTBE	56	0.13	1.0		ug/L	1	10/11/2017 01:50 PM
o-Xylene	ND	0.13	1.0		ug/L	1	10/11/2017 01:50 PM
Tert-Butanol	ND	1.8	5.0		ug/L	1	10/11/2017 01:50 PM
Toluene	ND	0.14	2.0		ug/L	1	10/11/2017 01:50 PM
Xylenes, Total	ND	1.5	2.0		ug/L	1	10/11/2017 01:50 PM
Surr: 1,2-Dichloroethane-d4	104	0	72-119		%REC	1	10/11/2017 01:50 PM
Surr: 4-Bromofluorobenzene	102	0	76-119		%REC	1	10/11/2017 01:50 PM
Surr: Dibromofluoromethane	104	0	85-115		%REC	1	10/11/2017 01:50 PM
Surr: Toluene-d8	104	0	81-120		%REC	1	10/11/2017 01:50 PM

Qualifiers:

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

CLIENT: CH2MHill
Lab Order: N026385
Project: SFPP Norwalk
Lab ID: N026385-009

Client Sample ID: S2B-10-10
Collection Date: 10/10/2017 1:22:00 PM
Matrix: WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **NV00922-MS5_171011A**	QC Batch: **P17VW177**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethane	ND	0.13	0.50		ug/L	1	10/11/2017 01:27 PM
1,2-Dichloroethane	ND	0.13	0.50		ug/L	1	10/11/2017 01:27 PM
Benzene	ND	0.14	1.0		ug/L	1	10/11/2017 01:27 PM
Ethylbenzene	ND	0.14	1.0		ug/L	1	10/11/2017 01:27 PM
m,p-Xylene	ND	0.23	1.0		ug/L	1	10/11/2017 01:27 PM
MTBE	42	0.13	1.0		ug/L	1	10/11/2017 01:27 PM
o-Xylene	ND	0.13	1.0		ug/L	1	10/11/2017 01:27 PM
Tert-Butanol	ND	1.8	5.0		ug/L	1	10/11/2017 01:27 PM
Toluene	ND	0.14	2.0		ug/L	1	10/11/2017 01:27 PM
Xylenes, Total	ND	1.5	2.0		ug/L	1	10/11/2017 01:27 PM
Surr: 1,2-Dichloroethane-d4	107	0	72-119		%REC	1	10/11/2017 01:27 PM
Surr: 4-Bromofluorobenzene	103	0	76-119		%REC	1	10/11/2017 01:27 PM
Surr: Dibromofluoromethane	107	0	85-115		%REC	1	10/11/2017 01:27 PM
Surr: Toluene-d8	103	0	81-120		%REC	1	10/11/2017 01:27 PM

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026385
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_FP_SFPP

Sample ID: **MB-64152** SampType: **MBLK** TestCode: **8015_W_FP_** Units: **ug/L** Prep Date: **10/11/2017** RunNo: **118473**
Client ID: **PBW** Batch ID: **64152** TestNo: **EPA 8015B EPA 3510C** Analysis Date: **10/11/2017** SeqNo: **2789228**

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)	18.514	25									J
Surr: Octacosane	70.497		80.00		88.1	26	152				
Surr: p-Terphenyl	67.565		80.00		84.5	57	132				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026385
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_SFPPTOT

Sample ID: **MB-R118473** SampType: **MBLK** TestCode: **8015_W_SFP** Units: **ug/L** Prep Date: RunNo: **118473**
Client ID: **PBW** Batch ID: **R118473** TestNo: **EPA 8015B** Analysis Date: **10/11/2017** SeqNo: **2789480**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total TPH	18.514	50									J

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026385
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GAS_WSFPP

Sample ID: **E171011LCS** SampType: **LCS** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **118458**
Client ID: **LCSW** Batch ID: **E17VW093** TestNo: **EPA 8015B** Analysis Date: **10/11/2017** SeqNo: **2788562**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	868.000	50	1000	0	86.8	67	136				
Surr: Chlorobenzene - d5	54649.000		50000		109	74	138				

Sample ID: **E171011MB1** SampType: **MBLK** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **118458**
Client ID: **PBW** Batch ID: **E17VW093** TestNo: **EPA 8015B** Analysis Date: **10/11/2017** SeqNo: **2788563**

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	60424.000		50000		121	74	138				

Sample ID: **N026335-017ADUP** SampType: **DUP** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **118458**
Client ID: **ZZZZZZ** Batch ID: **E17VW093** TestNo: **EPA 8015B** Analysis Date: **10/11/2017** SeqNo: **2788565**

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	64155.000		50000		128	74	138		0	0	

Sample ID: **N026385-006AMS** SampType: **MS** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **118458**
Client ID: **ZZZZZZ** Batch ID: **E17VW093** TestNo: **EPA 8015B** Analysis Date: **10/11/2017** SeqNo: **2788572**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	1279.000	50	1000	0	128	67	136				
Surr: Chlorobenzene - d5	68610.000		50000		137	74	138				

Sample ID: **N026385-006AMSD** SampType: **MSD** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **118458**
Client ID: **ZZZZZZ** Batch ID: **E17VW093** TestNo: **EPA 8015B** Analysis Date: **10/11/2017** SeqNo: **2788573**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	1124.000	50	1000	0	112	67	136	1279	12.9	30	

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026385
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GAS_WSFPP

Sample ID: **N026385-006AMSD** SampType: **MSD** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **118458**
Client ID: **ZZZZZZ** Batch ID: **E17VW093** TestNo: **EPA 8015B** Analysis Date: **10/11/2017** SeqNo: **2788573**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Chlorobenzene - d5	62317.000		50000		125	74	138		0	0	

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026385
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **P171011LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **118462**
Client ID: **LCSW** Batch ID: **P17VW177** TestNo: **EPA 8260B** Analysis Date: **10/11/2017** SeqNo: **2788603**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	20.000	1.0	20.00	0	100	81	129				
1,1,1-Trichloroethane	20.330	1.0	20.00	0	102	67	132				
1,1,2,2-Tetrachloroethane	21.620	1.0	20.00	0	108	63	128				
1,1,2-Trichloroethane	21.220	1.0	20.00	0	106	75	125				
1,1-Dichloroethane	20.400	0.50	20.00	0	102	69	133				
1,1-Dichloroethene	18.320	1.0	20.00	0	91.6	68	130				
1,1-Dichloropropene	20.870	1.0	20.00	0	104	73	132				
1,2,3-Trichlorobenzene	22.530	1.0	20.00	0	113	67	137				
1,2,3-Trichloropropane	20.790	1.0	20.00	0	104	73	124				
1,2,4-Trichlorobenzene	21.830	1.0	20.00	0	109	66	134				
1,2,4-Trimethylbenzene	20.940	1.0	20.00	0	105	74	132				
1,2-Dibromo-3-chloropropane	23.450	2.0	20.00	0	117	50	132				
1,2-Dibromoethane	21.990	1.0	20.00	0	110	80	121				
1,2-Dichlorobenzene	20.440	1.0	20.00	0	102	71	122				
1,2-Dichloroethane	20.690	0.50	20.00	0	103	69	132				
1,2-Dichloropropane	19.630	1.0	20.00	0	98.2	75	125				
1,3,5-Trimethylbenzene	20.600	1.0	20.00	0	103	74	131				
1,3-Dichlorobenzene	20.010	1.0	20.00	0	100	75	124				
1,3-Dichloropropane	20.910	1.0	20.00	0	105	73	126				
1,4-Dichlorobenzene	20.070	1.0	20.00	0	100	74	123				
2,2-Dichloropropane	20.690	1.0	20.00	0	103	69	137				
2-Butanone	229.000	10	200.0	0	114	49	136				
2-Chlorotoluene	20.290	1.0	20.00	0	101	73	126				
4-Chlorotoluene	20.390	1.0	20.00	0	102	74	128				
4-Isopropyltoluene	21.020	1.0	20.00	0	105	73	130				
4-Methyl-2-pentanone	233.020	10	200.0	0	117	58	134				
Acetone	221.500	10	200.0	0	111	40	135				
Acrolein	197.470	20	200.0	0	98.7	75	125				
Acrylonitrile	220.550	20	200.0	0	110	75	125				
Benzene	20.340	1.0	20.00	0	102	81	122				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026385
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **P171011LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **118462**
Client ID: **LCSW** Batch ID: **P17VW177** TestNo: **EPA 8260B** Analysis Date: **10/11/2017** SeqNo: **2788603**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	20.000	1.0	20.00	0	100	76	124				
Bromochloromethane	21.340	1.0	20.00	0	107	65	129				
Bromodichloromethane	20.660	1.0	20.00	0	103	76	121				
Bromoform	19.160	1.0	20.00	0	95.8	69	128				
Bromomethane	14.660	1.0	20.00	0	73.3	53	141				
Carbon disulfide	20.020	1.0	20.00	0	100	75	125				
Carbon tetrachloride	20.800	0.50	20.00	0	104	66	138				
Chlorobenzene	19.710	1.0	20.00	0	98.6	81	122				
Chloroethane	25.710	1.0	20.00	0	129	58	133				
Chloroform	18.880	1.0	20.00	0	94.4	69	128				
Chloromethane	22.270	1.0	20.00	0	111	56	131				
cis-1,2-Dichloroethene	19.870	1.0	20.00	0	99.4	72	126				
cis-1,3-Dichloropropene	20.880	1.0	20.00	0	104	69	131				
Di-isopropyl ether	21.120	1.0	20.00	0	106	70	130				
Dibromochloromethane	20.850	1.0	20.00	0	104	66	133				
Dibromomethane	21.650	1.0	20.00	0	108	76	125				
Dichlorodifluoromethane	22.350	1.0	20.00	0	112	53	153				
Ethyl tert-butyl ether	21.010	1.0	20.00	0	105	70	130				
Ethylbenzene	19.690	1.0	20.00	0	98.4	73	127				
Freon-113	22.340	1.0	20.00	0	112	75	125				
Hexachlorobutadiene	20.810	1.0	20.00	0	104	67	131				
Isopropylbenzene	20.310	1.0	20.00	0	102	75	127				
m,p-Xylene	40.320	1.0	40.00	0	101	76	128				
Methylene chloride	21.610	2.0	20.00	0	108	63	137				
MTBE	21.640	1.0	20.00	0	108	65	123				
n-Butylbenzene	21.490	1.0	20.00	0	107	69	137				
n-Propylbenzene	20.670	1.0	20.00	0	103	72	129				
Naphthalene	23.090	1.0	20.00	0	115	54	138				
o-Xylene	20.450	1.0	20.00	0	102	80	121				
sec-Butylbenzene	21.060	1.0	20.00	0	105	72	127				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026385
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **P171011LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **118462**
Client ID: **LCSW** Batch ID: **P17VW177** TestNo: **EPA 8260B** Analysis Date: **10/11/2017** SeqNo: **2788603**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	20.850	1.0	20.00	0	104	65	134				
Tert-amyl methyl ether	21.350	1.0	20.00	0	107	70	130				
Tert-Butanol	120.220	5.0	100.0	0	120	70	130				
tert-Butylbenzene	20.490	1.0	20.00	0	102	70	129				
Tetrachloroethene	19.830	1.0	20.00	0	99.2	66	128				
Toluene	19.460	2.0	20.00	0	97.3	77	122				
trans-1,2-Dichloroethene	18.840	1.0	20.00	0	94.2	63	137				
trans-1,3-Dichloropropene	22.030	1.0	20.00	0	110	59	135				
Trichloroethene	19.850	1.0	20.00	0	99.2	70	127				
Trichlorofluoromethane	20.640	1.0	20.00	0	103	57	129				
Vinyl chloride	21.440	0.50	20.00	0	107	50	134				
Xylenes, Total	60.770	2.0	60.00	0	101	75	125				
Surr: 1,2-Dichloroethane-d4	26.170		25.00		105	72	119				
Surr: 4-Bromofluorobenzene	25.660		25.00		103	76	119				
Surr: Dibromofluoromethane	26.360		25.00		105	85	115				
Surr: Toluene-d8	25.350		25.00		101	81	120				

Sample ID: **N026385-005AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **118462**
Client ID: **ZZZZZZ** Batch ID: **P17VW177** TestNo: **EPA 8260B** Analysis Date: **10/11/2017** SeqNo: **2788604**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	20.940	1.0	20.00	0	105	81	129				
1,1,1-Trichloroethane	23.430	1.0	20.00	0	117	67	132				
1,1,2,2-Tetrachloroethane	21.140	1.0	20.00	0	106	63	128				
1,1,2-Trichloroethane	20.860	1.0	20.00	0	104	75	125				
1,1-Dichloroethane	22.820	0.50	20.00	0	114	69	133				
1,1-Dichloroethene	22.620	1.0	20.00	0	113	68	130				
1,1-Dichloropropene	24.740	1.0	20.00	0	124	73	132				
1,2,3-Trichlorobenzene	22.990	1.0	20.00	0	115	67	137				
1,2,3-Trichloropropane	20.640	1.0	20.00	0	103	73	124				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026385
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N026385-005AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **118462**
Client ID: **ZZZZZZ** Batch ID: **P17VW177** TestNo: **EPA 8260B** Analysis Date: **10/11/2017** SeqNo: **2788604**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	22.780	1.0	20.00	0	114	66	134				
1,2,4-Trimethylbenzene	22.430	1.0	20.00	0	112	74	132				
1,2-Dibromo-3-chloropropane	23.230	2.0	20.00	0	116	50	132				
1,2-Dibromoethane	22.180	1.0	20.00	0	111	80	121				
1,2-Dichlorobenzene	21.120	1.0	20.00	0	106	71	122				
1,2-Dichloroethane	21.230	0.50	20.00	0	106	69	132				
1,2-Dichloropropane	21.090	1.0	20.00	0	105	75	125				
1,3,5-Trimethylbenzene	23.090	1.0	20.00	0	115	74	131				
1,3-Dichlorobenzene	21.730	1.0	20.00	0	109	75	124				
1,3-Dichloropropane	22.110	1.0	20.00	0	111	73	126				
1,4-Dichlorobenzene	21.390	1.0	20.00	0	107	74	123				
2,2-Dichloropropane	24.190	1.0	20.00	0	121	69	137				
2-Butanone	218.590	10	200.0	0	109	49	136				
2-Chlorotoluene	22.600	1.0	20.00	0	113	73	126				
4-Chlorotoluene	22.400	1.0	20.00	0	112	74	128				
4-Isopropyltoluene	24.250	1.0	20.00	0	121	73	130				
4-Methyl-2-pentanone	226.420	10	200.0	0	113	58	134				
Acetone	206.290	10	200.0	4.870	101	40	135				
Acrolein	216.940	20	200.0	0	108	75	125				
Acrylonitrile	232.390	20	200.0	0	116	75	125				
Benzene	22.160	1.0	20.00	0	111	81	122				
Bromobenzene	21.560	1.0	20.00	0	108	76	124				
Bromochloromethane	22.020	1.0	20.00	0	110	65	129				
Bromodichloromethane	21.830	1.0	20.00	0	109	76	121				
Bromoform	19.430	1.0	20.00	0	97.2	69	128				
Bromomethane	17.380	1.0	20.00	0	86.9	53	141				
Carbon disulfide	23.290	1.0	20.00	0	116	75	125				
Carbon tetrachloride	24.730	0.50	20.00	0	124	66	138				
Chlorobenzene	21.100	1.0	20.00	0	106	81	122				
Chloroethane	28.240	1.0	20.00	0	141	58	133				S

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026385
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N026385-005AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **118462**
Client ID: **ZZZZZZ** Batch ID: **P17VW177** TestNo: **EPA 8260B** Analysis Date: **10/11/2017** SeqNo: **2788604**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	20.880	1.0	20.00	0	104	69	128				
Chloromethane	24.200	1.0	20.00	0	121	56	131				
cis-1,2-Dichloroethene	21.220	1.0	20.00	0	106	72	126				
cis-1,3-Dichloropropene	22.020	1.0	20.00	0	110	69	131				
Di-isopropyl ether	22.160	1.0	20.00	0	111	70	130				
Dibromochloromethane	21.440	1.0	20.00	0	107	66	133				
Dibromomethane	21.350	1.0	20.00	0	107	76	125				
Dichlorodifluoromethane	26.290	1.0	20.00	0	131	53	153				
Ethyl tert-butyl ether	21.950	1.0	20.00	0	110	70	130				
Ethylbenzene	21.670	1.0	20.00	0	108	73	127				
Freon-113	26.320	1.0	20.00	0	132	75	125				S
Hexachlorobutadiene	22.710	1.0	20.00	0	114	67	131				
Isopropylbenzene	23.370	1.0	20.00	0	117	75	127				
m,p-Xylene	44.480	1.0	40.00	0	111	76	128				
Methylene chloride	22.540	2.0	20.00	0	113	63	137				
MTBE	22.890	1.0	20.00	1.130	109	65	123				
n-Butylbenzene	25.060	1.0	20.00	0	125	69	137				
n-Propylbenzene	23.450	1.0	20.00	0	117	72	129				
Naphthalene	22.550	1.0	20.00	0	113	54	138				
o-Xylene	22.050	1.0	20.00	0	110	80	121				
sec-Butylbenzene	24.000	1.0	20.00	0	120	72	127				
Styrene	20.590	1.0	20.00	0	103	65	134				
Tert-amyl methyl ether	21.850	1.0	20.00	0	109	70	130				
Tert-Butanol	107.930	5.0	100.0	0	108	70	130				
tert-Butylbenzene	23.320	1.0	20.00	0	117	70	129				
Tetrachloroethene	22.760	1.0	20.00	0	114	66	128				
Toluene	21.610	2.0	20.00	0	108	77	122				
trans-1,2-Dichloroethene	21.820	1.0	20.00	0	109	63	137				
trans-1,3-Dichloropropene	22.620	1.0	20.00	0	113	59	135				
Trichloroethene	22.670	1.0	20.00	0	113	70	127				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026385
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N026385-005AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **118462**
Client ID: **ZZZZZZ** Batch ID: **P17VW177** TestNo: **EPA 8260B** Analysis Date: **10/11/2017** SeqNo: **2788604**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichlorofluoromethane	24.750	1.0	20.00	0	124	57	129				
Vinyl chloride	24.990	0.50	20.00	0	125	50	134				
Xylenes, Total	66.530	2.0	60.00	0	111	75	125				
Surr: 1,2-Dichloroethane-d4	27.060		25.00		108	72	119				
Surr: 4-Bromofluorobenzene	25.640		25.00		103	76	119				
Surr: Dibromofluoromethane	26.980		25.00		108	85	115				
Surr: Toluene-d8	26.200		25.00		105	81	120				

Sample ID: **N026385-005AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **118462**
Client ID: **ZZZZZZ** Batch ID: **P17VW177** TestNo: **EPA 8260B** Analysis Date: **10/11/2017** SeqNo: **2788605**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	21.060	1.0	20.00	0	105	81	129	20.94	0.571	20	
1,1,1-Trichloroethane	22.770	1.0	20.00	0	114	67	132	23.43	2.86	20	
1,1,2,2-Tetrachloroethane	22.040	1.0	20.00	0	110	63	128	21.14	4.17	20	
1,1,2-Trichloroethane	22.120	1.0	20.00	0	111	75	125	20.86	5.86	20	
1,1-Dichloroethane	22.700	0.50	20.00	0	114	69	133	22.82	0.527	20	
1,1-Dichloroethene	21.190	1.0	20.00	0	106	68	130	22.62	6.53	20	
1,1-Dichloropropene	22.670	1.0	20.00	0	113	73	132	24.74	8.73	20	
1,2,3-Trichlorobenzene	23.220	1.0	20.00	0	116	67	137	22.99	0.995	20	
1,2,3-Trichloropropane	21.150	1.0	20.00	0	106	73	124	20.64	2.44	20	
1,2,4-Trichlorobenzene	22.840	1.0	20.00	0	114	66	134	22.78	0.263	20	
1,2,4-Trimethylbenzene	20.260	1.0	20.00	0	101	74	132	22.43	10.2	20	
1,2-Dibromo-3-chloropropane	23.740	2.0	20.00	0	119	50	132	23.23	2.17	20	
1,2-Dibromoethane	22.270	1.0	20.00	0	111	80	121	22.18	0.405	20	
1,2-Dichlorobenzene	20.920	1.0	20.00	0	105	71	122	21.12	0.951	20	
1,2-Dichloroethane	21.740	0.50	20.00	0	109	69	132	21.23	2.37	20	
1,2-Dichloropropane	21.270	1.0	20.00	0	106	75	125	21.09	0.850	20	
1,3,5-Trimethylbenzene	21.640	1.0	20.00	0	108	74	131	23.09	6.48	20	
1,3-Dichlorobenzene	20.880	1.0	20.00	0	104	75	124	21.73	3.99	20	

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026385
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N026385-005AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **118462**
Client ID: **ZZZZZZ** Batch ID: **P17VW177** TestNo: **EPA 8260B** Analysis Date: **10/11/2017** SeqNo: **2788605**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichloropropane	21.640	1.0	20.00	0	108	73	126	22.11	2.15	20	
1,4-Dichlorobenzene	21.030	1.0	20.00	0	105	74	123	21.39	1.70	20	
2,2-Dichloropropane	23.830	1.0	20.00	0	119	69	137	24.19	1.50	20	
2-Butanone	242.520	10	200.0	0	121	49	136	218.6	10.4	20	
2-Chlorotoluene	21.370	1.0	20.00	0	107	73	126	22.60	5.59	20	
4-Chlorotoluene	21.690	1.0	20.00	0	108	74	128	22.40	3.22	20	
4-Isopropyltoluene	22.250	1.0	20.00	0	111	73	130	24.25	8.60	20	
4-Methyl-2-pentanone	244.100	10	200.0	0	122	58	134	226.4	7.52	20	
Acetone	232.640	10	200.0	4.870	114	40	135	206.3	12.0	20	
Acrolein	218.880	20	200.0	0	109	75	125	216.9	0.890	20	
Acrylonitrile	241.990	20	200.0	0	121	75	125	232.4	4.05	20	
Benzene	21.480	1.0	20.00	0	107	81	122	22.16	3.12	20	
Bromobenzene	20.770	1.0	20.00	0	104	76	124	21.56	3.73	20	
Bromochloromethane	24.180	1.0	20.00	0	121	65	129	22.02	9.35	20	
Bromodichloromethane	22.320	1.0	20.00	0	112	76	121	21.83	2.22	20	
Bromoform	19.620	1.0	20.00	0	98.1	69	128	19.43	0.973	20	
Bromomethane	18.700	1.0	20.00	0	93.5	53	141	17.38	7.32	20	
Carbon disulfide	22.710	1.0	20.00	0	114	75	125	23.29	2.52	20	
Carbon tetrachloride	23.090	0.50	20.00	0	115	66	138	24.73	6.86	20	
Chlorobenzene	20.360	1.0	20.00	0	102	81	122	21.10	3.57	20	
Chloroethane	28.010	1.0	20.00	0	140	58	133	28.24	0.818	20	S
Chloroform	21.300	1.0	20.00	0	106	69	128	20.88	1.99	20	
Chloromethane	24.070	1.0	20.00	0	120	56	131	24.20	0.539	20	
cis-1,2-Dichloroethene	22.410	1.0	20.00	0	112	72	126	21.22	5.45	20	
cis-1,3-Dichloropropene	22.220	1.0	20.00	0	111	69	131	22.02	0.904	20	
Di-isopropyl ether	23.100	1.0	20.00	0	116	70	130	22.16	4.15	20	
Dibromochloromethane	21.500	1.0	20.00	0	108	66	133	21.44	0.279	20	
Dibromomethane	21.980	1.0	20.00	0	110	76	125	21.35	2.91	20	
Dichlorodifluoromethane	25.100	1.0	20.00	0	126	53	153	26.29	4.63	20	
Ethyl tert-butyl ether	23.620	1.0	20.00	0	118	70	130	21.95	7.33	20	

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026385
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N026385-005AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **118462**
Client ID: **ZZZZZZ** Batch ID: **P17VW177** TestNo: **EPA 8260B** Analysis Date: **10/11/2017** SeqNo: **2788605**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	20.760	1.0	20.00	0	104	73	127	21.67	4.29	20	
Freon-113	25.660	1.0	20.00	0	128	75	125	26.32	2.54	20	S
Hexachlorobutadiene	21.530	1.0	20.00	0	108	67	131	22.71	5.33	20	
Isopropylbenzene	21.750	1.0	20.00	0	109	75	127	23.37	7.18	20	
m,p-Xylene	41.200	1.0	40.00	0	103	76	128	44.48	7.66	20	
Methylene chloride	23.970	2.0	20.00	0	120	63	137	22.54	6.15	20	
MTBE	25.220	1.0	20.00	1.130	120	65	123	22.89	9.69	20	
n-Butylbenzene	23.450	1.0	20.00	0	117	69	137	25.06	6.64	20	
n-Propylbenzene	21.940	1.0	20.00	0	110	72	129	23.45	6.65	20	
Naphthalene	23.280	1.0	20.00	0	116	54	138	22.55	3.19	20	
o-Xylene	21.030	1.0	20.00	0	105	80	121	22.05	4.74	20	
sec-Butylbenzene	22.150	1.0	20.00	0	111	72	127	24.00	8.02	20	
Styrene	17.890	1.0	20.00	0	89.4	65	134	20.59	14.0	20	
Tert-amyl methyl ether	22.500	1.0	20.00	0	112	70	130	21.85	2.93	20	
Tert-Butanol	128.690	5.0	100.0	0	129	70	130	107.9	17.5	20	
tert-Butylbenzene	22.190	1.0	20.00	0	111	70	129	23.32	4.97	20	
Tetrachloroethene	21.140	1.0	20.00	0	106	66	128	22.76	7.38	20	
Toluene	20.770	2.0	20.00	0	104	77	122	21.61	3.96	20	
trans-1,2-Dichloroethene	21.970	1.0	20.00	0	110	63	137	21.82	0.685	20	
trans-1,3-Dichloropropene	23.380	1.0	20.00	0	117	59	135	22.62	3.30	20	
Trichloroethene	21.340	1.0	20.00	0	107	70	127	22.67	6.04	20	
Trichlorofluoromethane	23.960	1.0	20.00	0	120	57	129	24.75	3.24	20	
Vinyl chloride	24.400	0.50	20.00	0	122	50	134	24.99	2.39	20	
Xylenes, Total	62.230	2.0	60.00	0	104	75	125	66.53	6.68	20	
Surr: 1,2-Dichloroethane-d4	28.980		25.00		116	72	119		0		
Surr: 4-Bromofluorobenzene	26.010		25.00		104	76	119		0		
Surr: Dibromofluoromethane	28.270		25.00		113	85	115		0		
Surr: Toluene-d8	25.570		25.00		102	81	120		0		

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026385
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **P171011MB3** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **118462**
Client ID: **PBW** Batch ID: **P17VW177** TestNo: **EPA 8260B** Analysis Date: **10/11/2017** SeqNo: **2788608**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	1.0									
1,1,1-Trichloroethane	ND	1.0									
1,1,2,2-Tetrachloroethane	ND	1.0									
1,1,2-Trichloroethane	ND	1.0									
1,1-Dichloroethane	ND	0.50									
1,1-Dichloroethene	ND	1.0									
1,1-Dichloropropene	ND	1.0									
1,2,3-Trichlorobenzene	ND	1.0									
1,2,3-Trichloropropane	ND	1.0									
1,2,4-Trichlorobenzene	ND	1.0									
1,2,4-Trimethylbenzene	ND	1.0									
1,2-Dibromo-3-chloropropane	ND	2.0									
1,2-Dibromoethane	ND	1.0									
1,2-Dichlorobenzene	ND	1.0									
1,2-Dichloroethane	ND	0.50									
1,2-Dichloropropane	ND	1.0									
1,3,5-Trimethylbenzene	ND	1.0									
1,3-Dichlorobenzene	ND	1.0									
1,3-Dichloropropane	ND	1.0									
1,4-Dichlorobenzene	ND	1.0									
2,2-Dichloropropane	ND	1.0									
2-Butanone	ND	10									
2-Chlorotoluene	ND	1.0									
4-Chlorotoluene	ND	1.0									
4-Isopropyltoluene	ND	1.0									
4-Methyl-2-pentanone	ND	10									
Acetone	ND	10									
Acrolein	ND	20									
Acrylonitrile	ND	20									
Benzene	ND	1.0									

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026385
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **P171011MB3** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **118462**
Client ID: **PBW** Batch ID: **P17VW177** TestNo: **EPA 8260B** Analysis Date: **10/11/2017** SeqNo: **2788608**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	ND	1.0									
Bromochloromethane	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	1.0									
Carbon disulfide	ND	1.0									
Carbon tetrachloride	ND	0.50									
Chlorobenzene	ND	1.0									
Chloroethane	ND	1.0									
Chloroform	ND	1.0									
Chloromethane	ND	1.0									
cis-1,2-Dichloroethene	ND	1.0									
cis-1,3-Dichloropropene	ND	1.0									
Di-isopropyl ether	ND	1.0									
Dibromochloromethane	ND	1.0									
Dibromomethane	ND	1.0									
Dichlorodifluoromethane	ND	1.0									
Ethyl tert-butyl ether	ND	1.0									
Ethylbenzene	ND	1.0									
Freon-113	ND	1.0									
Hexachlorobutadiene	ND	1.0									
Isopropylbenzene	ND	1.0									
m,p-Xylene	ND	1.0									
Methylene chloride	ND	2.0									
MTBE	ND	1.0									
n-Butylbenzene	ND	1.0									
n-Propylbenzene	ND	1.0									
Naphthalene	ND	1.0									
o-Xylene	ND	1.0									
sec-Butylbenzene	ND	1.0									

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026385
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **P171011MB3** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **118462**
Client ID: **PBW** Batch ID: **P17VW177** TestNo: **EPA 8260B** Analysis Date: **10/11/2017** SeqNo: **2788608**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	ND	1.0									
Tert-amyl methyl ether	ND	1.0									
Tert-Butanol	ND	5.0									
tert-Butylbenzene	ND	1.0									
Tetrachloroethene	ND	1.0									
Toluene	ND	2.0									
trans-1,2-Dichloroethene	ND	1.0									
trans-1,3-Dichloropropene	ND	1.0									
Trichloroethene	ND	1.0									
Trichlorofluoromethane	ND	1.0									
Vinyl chloride	ND	0.50									
Xylenes, Total	ND	2.0									
Surr: 1,2-Dichloroethane-d4	26.460		25.00		106	72	119				
Surr: 4-Bromofluorobenzene	25.710		25.00		103	76	119				
Surr: Dibromofluoromethane	27.560		25.00		110	85	115				
Surr: Toluene-d8	25.760		25.00		103	81	120				

Qualifiers:

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

N026385

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

CHAIN OF CUSTODY RECORD

DATE: 10/10/17
PAGE: 1 of 1

Section A Required Client Information:		Section B Required Project Information:	Section C Invoice Information:		Section D Sampler Information:	
Company:	Kinder Morgan Energy Partners Attention: Steve Defibaugh	Report To: Eric Davis	Attention:	Steve Defibaugh - Ref. AFE# 81195	Sampler Name:	James Dye
Address:	1100 Town & Country Road Orange, CA 92868	Copy To: Steve Defibaugh	Company Name:	Kinder Morgan Energy Partners	Sampler Signature:	[signature]
Email To:	steve_defibaugh@kindermorgan.com eric.davis@ch2m.com	Purchase Order No.:	Address:	1100 Town & Country Road Orange, CA 92868	Sample Date:	10/10/2017
Phone: 714-560-4802	Fax: 714-560-4801	Project Name: **SFPP Norwalk**	ATL Project Manager:	Marlon Cartin		

Section E Required Sample Information

					CONTAINER TYPE				V	V	A	
					# OF CONTAINERS				3	3	2	
					PRESERVATIVE				H	H	--	
					VOLUME (mL)				40	40	1000	
ITEM #	SAMPLE ID	LOCATION/ DESCRIPTION	MATRIX	SAMPLE TYPE (G=GRAB C=COMP)	SAMPLING DATE	SAMPLING TIME	TOTAL # OF CONTAINERS	Analysis Test	BTEX, 1,1-DCA, 1,2-DCA, MTBE, TBA (8260B)	TPH-gas (8015B)	TPH-d, TPH-oil, Total TPH (8015B)	Comments
1	INF-10-10	Influent	WW	G	10/10/17	1400	8		x	x	x	N026385 -01
2	POST_OWS-10-10	OWS Transfer Tank	WW	G	10/10/17	1350	8		x	x	x	-02
3	MP1-10-10	Lead LGAC Outlet	WW	G	10/10/17	1340	8		x	x	x	-03
4	INF_FBBR-10-10	Influent to FBBR	WW	G	10/10/17	1330	8		x	x	x	-04
5	EFF_FBBR1-10-10	Effluent to FBBR1	WW	G	10/10/17	1320	8		x	x	x	-05
6	EFF_FBBR2-10-10	Effluent to FBBR1	WW	G	10/10/17	1310	8		x	x	x	-06
7	EFF_POL1-10-10	Lead Polish LGAC Outlet	WW	G	10/10/17	1300	8		x	x	x	-07
8	S2A-10-10	Out of Dirty Sump BioA	WW	G	10/10/17	1325	3		x			-08
9	S2B-10-10	Out of Dirty Sump BioB	WW	G	10/10/17	1322	3		x			-09
10												
11												
12												

Relinquished by (Signature and Printed Name):	Date / Time	Relinquished by (Signature and Printed Name):	Date / Time
[signature]	10/10/17 1430	[signature]	10/10/17 1600
[signature]	10/10/17 1700	Yoanna Rdguez	10/11/17 8:20

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

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

Special Instruction:
2.9°C / 2.6°C
IR # 2
CSO #: 4618/4617

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

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

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

ASSET Laboratories

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

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

Cooler Received/Opened On:	10/10/2017	Workorder:	N026385
Rep sample Temp (Deg C):	2.9/2.6	IR Gun ID:	2

Temp Blank: ☑ Yes ☐ No

Carrier name: Golden State Overnight

Last 4 digits of Tracking No.: 6618/6617 Packing Material Used: Bubble Wrap

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

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

Comments:

Checklist Completed By: YR 10/11/2017

Reviewed By: 10/11/2017

ASSET Laboratories

WORK ORDER Summary

11-Oct-17

WorkOrder: N026385

Client ID: CH2HI03

Project: SFPP Norwalk **QC Level:** RTNE **Date Received:** 10/10/2017

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N026385-001A	INF-10-10	10/10/2017 2:00:00 PM	10/11/2017	Wastewater	EPA 8015B	GASOLINE RANGE ORGANICS BY GC/FID	☐	☐	☐	VW
			10/11/2017		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N026385-001B			10/11/2017		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: EXTRACTABLE FUELS	☐	☐	☐	WW
			10/11/2017		EPA 8015B	TPH EXTRACTABLE BY GC/FID	☐	☐	☐	WW
			10/11/2017		EPA 8015B	Total TPH	☐	☐	☐	WW
N026385-002A	POST_OWS-10-10	10/10/2017 1:50:00 PM	10/11/2017		EPA 8015B	GASOLINE RANGE ORGANICS BY GC/FID	☐	☐	☐	WV
			10/11/2017		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	WV
N026385-002B			10/11/2017		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: EXTRACTABLE FUELS	☐	☐	☐	WW
			10/11/2017		EPA 8015B	TPH EXTRACTABLE BY GC/FID	☐	☐	☐	WW
			10/11/2017		EPA 8015B	Total TPH	☐	☐	☐	WW
N026385-003A	MP1-10-10	10/10/2017 1:40:00 PM	10/11/2017		EPA 8015B	GASOLINE RANGE ORGANICS BY GC/FID	☐	☐	☐	WV
			10/11/2017		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	WV
N026385-003B			10/11/2017		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: EXTRACTABLE FUELS	☐	☐	☐	WW
			10/11/2017		EPA 8015B	TPH EXTRACTABLE BY GC/FID	☐	☐	☐	WW
			10/11/2017		EPA 8015B	Total TPH	☐	☐	☐	WW
N026385-004A	INF_FBBR-10-10	10/10/2017 1:30:00 PM	10/11/2017		EPA 8015B	GASOLINE RANGE ORGANICS BY GC/FID	☐	☐	☐	WV
			10/11/2017		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	WV
N026385-004B			10/11/2017		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: EXTRACTABLE FUELS	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

11-Oct-17

WorkOrder: N026385

Client ID: CH2HI03

Project: SFPP Norwalk **QC Level:** RTNE **Date Received:** 10/10/2017

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N026385-004B	INF_FBBR-10-10	10/10/2017 1:30:00 PM	10/11/2017	Wastewater	EPA 8015B	TPH EXTRACTABLE BY GC/FID	☐	☐	☐	WW
			10/11/2017		EPA 8015B	Total TPH	☐	☐	☐	WW
N026385-005A	EFF_FBBR1-10-10	10/10/2017 1:20:00 PM	10/11/2017		EPA 8015B	GASOLINE RANGE ORGANICS BY GC/FID	☐	☐	☐	WV
			10/11/2017		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	WV
N026385-005B			10/11/2017		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: EXTRACTABLE FUELS	☐	☐	☐	WW
			10/11/2017		EPA 8015B	TPH EXTRACTABLE BY GC/FID	☐	☐	☐	WW
			10/11/2017		EPA 8015B	Total TPH	☐	☐	☐	WW
N026385-006A	EFF_FBBR2-10-10	~~10/1/2017~~ 1:10:00 PM 10/10/17	10/11/2017		EPA 8015B	GASOLINE RANGE ORGANICS BY GC/FID	☐	☐	☐	WV
		10/12/2017	10/11/2017		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	WV
N026385-006B			10/11/2017		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: EXTRACTABLE FUELS	☐	☐	☐	WW
			10/11/2017		EPA 8015B	TPH EXTRACTABLE BY GC/FID	☐	☐	☐	WW
			10/11/2017		EPA 8015B	Total TPH	☐	☐	☐	WW
N026385-007A	EFF_POL1-10-10	10/10/2017 1:00:00 PM	10/11/2017		EPA 8015B	GASOLINE RANGE ORGANICS BY GC/FID	☐	☐	☐	WV
			10/11/2017		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	WV
N026385-007B			10/11/2017		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: EXTRACTABLE FUELS	☐	☐	☐	WW
			10/11/2017		EPA 8015B	TPH EXTRACTABLE BY GC/FID	☐	☐	☐	WW
			10/11/2017		EPA 8015B	Total TPH	☐	☐	☐	WW
N026385-008A	S2A-10-10	10/10/2017 1:22:00 PM	10/11/2017		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	WV
N026385-009A	S2B-10-10		10/11/2017		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	WV

ASSET Laboratories

WORK ORDER Summary

11-Oct-17

WorkOrder: N026385

Client ID: CH2HI03

Project: SFPP Norwalk **QC Level:** RTNE **Date Received:** 10/10/2017

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N026385-010A	FOLDER	10/11/2017	10/11/2017		Folder	Folder	☐	☐	☐	LAB
			10/11/2017		Folder	Folder	☐	☐	☐	LAB

GSO

800-322-5555
www.gso.com

Ship From
ASSET LABORATORIES
MOLKY BRAR
11110 ARTESIA BLVD. SUITE B
CERRITOS, CA 90703

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

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

Delivery Instructions:
HOLD FOR PICK-UP
Signature Type: NOT REQUIRED

Tracking #: 537936617

CPS

LVS

A

LAS VEGAS

C89102A

73470329

Print Date: 10/10/2017 7:01 PM

Package 1 of 3

LABEL INSTRUCTIONS:

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

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all of the GSO service terms & conditions including, but not limited to; limits of liability, declared value conditions, and claim procedures which are available on our website at www.gso.com.

2.6°C
IATA

GSO

800-322-5555
www.gso.com

Ship From
ASSET LABORATORIES
MOLKY BRAR
11110 ARTESIA BLVD. SUITE B
CERRITOS, CA 90703

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

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

Delivery Instructions:
HOLD FOR PICK-UP
Signature Type: NOT REQUIRED

Tracking #: 537936618

CPS

LVS

A

LAS VEGAS

C89102A

73470330

Print Date: 10/10/2017 7:01 PM

Package 2 of 3

LABEL INSTRUCTIONS:

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

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all of the GSO service terms & conditions including, but not limited to; limits of liability, declared value conditions, and claim procedures which are available on our website at www.gso.com.

2-92
IR#

Marycel Mariano

From: Reports ASSET Laboratories [reports.lv@assetlaboratories.com]
Sent: Friday, October 20, 2017 7:44 AM
To: Marycel Mariano
Subject: Fwd: FW: SFPP Norwalk (Asset Labs No. N026385)
Attachments: N026385.pdf; N026385EDF.zip

-------- Forwarded Message --------
Subject:FW: SFPP Norwalk (Asset Labs No. N026385)
Date: Fri, 20 Oct 2017 07:22:03 +0000
From: Carino, Vladimir/SCO <Vladimir.Carino@CH2M.com>
To: Marlon B. Cartin <marlon@assetlaboratories.com>, reports.lv@assetlaboratories.com <reports.lv@assetlaboratories.com>

Marlon and Fern,

Can you revise the attached report to include the full VOC list for the INF-10-10 sample. Sorry I always ask for this every month. I will revise the COC so that it reflects that we want the INF-XX-XX sample to have a full VOC list.

Thanks.
Vladimir

From: Reports ASSET Laboratories [mailto:reports.lv@assetlaboratories.com]
Sent: Thursday, October 12, 2017 1:49 PM
To: Davis, Eric/LAC <Eric.Davis@CH2M.com>
Cc: Irvine, Cameron/SAC <Cameron.Irvine@CH2M.com>; Carino, Vladimir/SCO <Vladimir.Carino@CH2M.com>; Pataray, Benny/SLC <Benny.Pataray@CH2M.com>; James_Dye@kindermorgan.com; 'Marlon Cartin' <marlon@assetlaboratories.com>
Subject: SFPP Norwalk (Asset Labs No. N026385) [EXTERNAL]

Enclosed is the final report for the above project.

Thanks,

Fern Rivera

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

ASSET LABORATORIES - Serving Clients with Passion and Professionalism

Air TECHNOLOGY Laboratories, Inc.

November 27, 2017

LA Cert #04140
EPA Methods TO3, TO14A, TO15, 25C/3C, RSK-175
TX Cert T104704450-14-6
EPA Methods TO14A, TO15
UT Cert CA0133332015-3
EPA Methods TO3, TO14A, TO15, RSK-175

CH2M Hill
ATTN: Eric Davis
1000 Wilshire Blvd., Suite 2100
Los Angeles, CA 90017

LABORATORY TEST RESULTS

Project Reference: SFPP Norwalk
Lab Number: I111302-01/04

Enclosed are results for sample(s) received 11/13/17 by Air Technology Laboratories. Samples were received intact. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

- Unless otherwise noted in the report, sample analyses were performed within method performance criteria and meet all requirements of the NELAC Standards.
- The enclosed results relate only to the sample(s).

Preliminary results were e-mailed to Eric Davis and Vladimir Carino 11/27/17.

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Note: The cover letter is an integral part of this analytical report.

Air Technology Laboratories, Inc.
18501 Gale Ave. #130
City of Industry, CA 91748
Tel: 626-964-4032
Joann De La Ossa (JDeLaOssa@airtechlabs.com)

I111302-04

CHAIN OF CUSTODY RECORD

DATE: 11/10/17
PAGE: 1 of 1

Section A (Required Client information:)	Section B (Required Project Information:)	Section C (Invoice Information:)	Section D (Sampler Information:)
Company: **CH2M HILL** **Attention: Eric Davis**	Report To: Eric Davis (eric.davis@ch2m.com)	Attention: Eric Davis	Sampler Name: James Dye
Address: 1000 Wilshire Blvd. Suite 2100 Los Angeles, CA 90017	Copy To: Vladimir Carino (vcarino@ch2m.com)	Company Name: CH2M	Sampler Signature:
Email To: eric.davis@ch2m.com vcarino@ch2m.com	Purchase Order No.:	Address: 1000 Wilshire Blvd. Suite 2100 Los Angeles, CA 90017	Sample Date: 11/10/17
Phone: 404-323-1600 Fax:	Project Name: **SFPP Norwalk**	Project Manager: Joann De La Ossa	

Section E (Required Sample Information)

ITEM #	SAMPLE ID	LOCATION/ DESCRIPTION	MATRIX	SAMPLE TYPE (G=GRAB C=COMP)	SAMPLING DATE	SAMPLING TIME	TOTAL # OF CONTAINERS	Analysis Test	TO-3 (Total VOCs as Hexane)	TO-15 (VOCs, Target Analytes)	ASTM-D 1946 (O2/Argon, CO2, CH4, N2)	Comments
01	VEFF-11-10	Effluent (stack)	Vapor	G	11/10/17	0940	1		X	X		Individually Certified 6-Liter SUMMA
02	VEFF-11-10D	Effluent (stack) (duplicate)	Vapor	G	11/10/17	0946	1		X	X		Individually Certified 6-Liter SUMMA
03	VPOST-11-10	Influent (post-dilution)	Vapor	G	11/10/17	1040	1		X	X		Individually Certified 1-Liter SUMMA
04	VINF-11-10	Influent (pre-dilution)	Vapor	G	11/10/17	1050	1		X	X	X	Batch Certified 1-Liter Summa
5												Target analytes includes Historical VOCs and remaining ATLI list per subcontract
6												
7												
8												
9												
10												
11												
12												

Relinquished by (Signature and Printed Name)	Date / Time	Relinquished by (Signature and Printed Name)	Date / Time
	11/10/17 1100	FED EX	11/10/17 1530
FED EX			11/13/17 1136

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

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

Special Instruction:

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

1111302

Client: CH2M Hill
Attn: Eric Davis
Project Name: SFPP Norwalk
Project No.: NA
Date Received: 11/13/17
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	I111302-01			I111302-02			I111302-03			I111302-04		
Client Sample I.D.:	VEFF-11-10			VEFF-11-10D			VPOST-11-10			VINF-11-10		
Date/Time Sampled:	11/10/17 9:40			11/10/17 9:40			11/10/17 10:40			11/10/17 10:50		
Date/Time Analyzed:	11/15/17 23:21			11/16/17 0:03			11/16/17 0:48			11/16/17 1:30		
QC Batch No.:	171115MS2A1			171115MS2A1			171115MS2A1			171115MS2A1		
Analyst Initials:	DT			DT			DT			DT		
Dilution Factor:	2.1			2.1			84			84		
ANALYTE	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv
Dichlorodifluoromethane (12)	ND	0.0021	0.00032	ND	0.0021	0.00032	ND	0.084	0.013	ND	0.084	0.013
Chloromethane	ND	0.0042	0.00046	ND	0.0042	0.00046	ND	0.17	0.019	ND	0.17	0.019
1,2-Cl-1,1,2,2-F ethane (114)	ND	0.0021	0.00042	ND	0.0021	0.00042	ND	0.084	0.017	ND	0.084	0.017
Vinyl Chloride	ND	0.0021	0.00034	ND	0.0021	0.00034	ND	0.084	0.014	ND	0.084	0.014
Bromomethane	ND	0.0021	0.00062	ND	0.0021	0.00062	ND	0.084	0.025	ND	0.084	0.025
Chloroethane	ND	0.0021	0.0018	ND	0.0021	0.0018	ND	0.084	0.071	ND	0.084	0.071
Trichlorofluoromethane (11)	ND	0.0021	0.00045	ND	0.0021	0.00045	ND	0.084	0.018	ND	0.084	0.018
1,1-Dichloroethene	ND	0.0021	0.00048	ND	0.0021	0.00048	ND	0.084	0.019	ND	0.084	0.019
Carbon Disulfide	0.015	0.011	0.00050	0.022	0.011	0.00050	0.13 J	0.42	0.020	ND	0.42	0.020
1,1,2-Cl 1,2,2-F ethane (113)	ND	0.0021	0.00057	ND	0.0021	0.00057	ND	0.084	0.023	ND	0.084	0.023
Acetone	0.033	0.011	0.00061	0.020	0.011	0.00061	ND	0.42	0.024	ND	0.42	0.024
Methylene Chloride	ND	0.0021	0.00060	ND	0.0021	0.00060	ND	0.084	0.024	ND	0.084	0.024
t-1,2-Dichloroethene	ND	0.0021	0.00063	ND	0.0021	0.00063	ND	0.084	0.025	ND	0.084	0.025
1,1-Dichloroethane	ND	0.0021	0.00029	ND	0.0021	0.00029	ND	0.084	0.011	ND	0.084	0.011
c-1,2-Dichloroethene	ND	0.0021	0.00041	ND	0.0021	0.00041	ND	0.084	0.016	ND	0.084	0.016
2-Butanone	0.010	0.0021	0.0013	0.0092	0.0021	0.0013	ND	0.084	0.052	ND	0.084	0.052
t-Butyl Methyl Ether (MTBE)	0.0046	0.0021	0.00047	0.0045	0.0021	0.00047	ND	0.084	0.019	ND	0.084	0.019
Chloroform	ND	0.0021	0.00029	ND	0.0021	0.00029	ND	0.084	0.012	ND	0.084	0.012
1,1,1-Trichloroethane	ND	0.0021	0.00021	ND	0.0021	0.00021	ND	0.084	0.0084	ND	0.084	0.0084
Carbon Tetrachloride	ND	0.0021	0.00037	ND	0.0021	0.00037	ND	0.084	0.015	ND	0.084	0.015
Benzene	0.023	0.0021	0.00020	0.022	0.0021	0.00020	3.4	0.084	0.0081	3.2	0.084	0.0081
1,2-Dichloroethane	ND	0.0021	0.00016	ND	0.0021	0.00016	ND	0.084	0.0063	ND	0.084	0.0063
Trichloroethene	ND	0.0021	0.00030	ND	0.0021	0.00030	ND	0.084	0.012	ND	0.084	0.012
1,2-Dichloropropane	ND	0.0021	0.00038	ND	0.0021	0.00038	ND	0.084	0.015	ND	0.084	0.015
Bromodichloromethane	ND	0.0021	0.00013	ND	0.0021	0.00013	ND	0.084	0.0051	ND	0.084	0.0051
c-1,3-Dichloropropene	ND	0.0021	0.00025	ND	0.0021	0.00025	ND	0.084	0.010	ND	0.084	0.010
4-Methyl-2-Pentanone	ND	0.0021	0.00014	ND	0.0021	0.00014	ND	0.084	0.0057	ND	0.084	0.0057
Toluene	0.020	0.0021	0.00017	0.019	0.0021	0.00017	2.6	0.084	0.0067	2.4	0.084	0.0067
t-1,3-Dichloropropene	ND	0.0021	0.00022	ND	0.0021	0.00022	ND	0.084	0.0087	ND	0.084	0.0087
1,1,2-Trichloroethane	ND	0.0021	0.00034	ND	0.0021	0.00034	ND	0.084	0.014	ND	0.084	0.014
1,3-Dichloropropane	ND	0.0021	0.00010	ND	0.0021	0.00010	ND	0.084	0.0042	ND	0.084	0.0042
Tetrachloroethene	ND	0.0021	0.00025	ND	0.0021	0.00025	ND	0.084	0.010	ND	0.084	0.010
2-Hexanone	ND	0.0021	0.00043	ND	0.0021	0.00043	ND	0.084	0.017	ND	0.084	0.017
Dibromochloromethane	ND	0.0021	0.00038	ND	0.0021	0.00038	ND	0.084	0.015	ND	0.084	0.015
1,2-Dibromoethane	ND	0.0021	0.00019	ND	0.0021	0.00019	ND	0.084	0.0077	ND	0.084	0.0077
Chlorobenzene	ND	0.0021	0.00016	ND	0.0021	0.00016	ND	0.084	0.0066	ND	0.084	0.0066
Ethylbenzene	0.0031	0.0021	0.00012	0.0031	0.0021	0.00012	0.35	0.084	0.0048	0.32	0.084	0.0048
p,&m-Xylene	0.023	0.0021	0.00024	0.023	0.0021	0.00024	2.3	0.084	0.0095	2.1	0.084	0.0095
o-Xylene	0.010	0.0021	0.00026	0.010	0.0021	0.00026	1.1	0.084	0.010	0.95	0.084	0.010

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

Client: CH2M Hill
Attn: Eric Davis
Project Name: SFPP Norwalk
Project No.: NA
Date Received: 11/13/17
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	I111302-01			I111302-02			I111302-03			I111302-04		
Client Sample I.D.:	VEFF-11-10			VEFF-11-10D			VPOST-11-10			VINF-11-10		
Date/Time Sampled:	11/10/17 9:40			11/10/17 9:40			11/10/17 10:40			11/10/17 10:50		
Date/Time Analyzed:	11/15/17 23:21			11/16/17 0:03			11/16/17 0:48			11/16/17 1:30		
QC Batch No.:	171115MS2A1			171115MS2A1			171115MS2A1			171115MS2A1		
Analyst Initials:	DT			DT			DT			DT		
Dilution Factor:	2.1			2.1			84			84		
ANALYTE	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv
Styrene	0.00078 J	0.0021	0.00027	0.00062 J	0.0021	0.00027	0.049 J	0.084	0.011	0.042 J	0.084	0.011
Bromoform	ND	0.0021	0.00012	ND	0.0021	0.00012	ND	0.084	0.0047	ND	0.084	0.0047
Isopropyl benzene	0.00081 J	0.0021	0.00022	0.00077 J	0.0021	0.00022	0.040 J	0.084	0.0088	0.021 J	0.084	0.0088
1,1,2,2-Tetrachloroethane	ND	0.0042	0.00013	ND	0.0042	0.00013	ND	0.17	0.0052	ND	0.17	0.0052
Benzyl Chloride	ND	0.0021	0.00039	ND	0.0021	0.00039	ND	0.084	0.015	ND	0.084	0.015
1,2,3-Trichloropropane	ND	0.0021	0.00057	ND	0.0021	0.00057	ND	0.084	0.023	ND	0.084	0.023
n-Propyl Benzene	0.00045 J	0.0021	0.00012	0.00048 J	0.0021	0.00012	0.037 J	0.084	0.0049	0.030 J	0.084	0.0049
4-Ethyl Toluene	0.0059	0.0021	0.00013	0.0060	0.0021	0.00013	0.45	0.084	0.0053	0.39	0.084	0.0053
1,3,5-Trimethylbenzene	0.0031 J	0.0042	0.00036	0.0032 J	0.0042	0.00036	0.25	0.17	0.015	0.21	0.17	0.015
4-Chlorotoluene	ND	0.0021	0.00025	ND	0.0021	0.00025	ND	0.084	0.010	ND	0.084	0.010
tert-Butylbenzene	ND	0.0021	0.00019	ND	0.0021	0.00019	ND	0.084	0.0076	ND	0.084	0.0076
1,2,4-Trimethylbenzene	0.0045	0.0042	0.00024	0.0048	0.0042	0.00024	0.27	0.17	0.0096	0.22	0.17	0.0096
sec-Butylbenzene	ND	0.0021	0.00020	ND	0.0021	0.00020	ND	0.084	0.0082	ND	0.084	0.0082
p-Isopropyltoluene	0.00033 J	0.0021	0.00027	0.0012 J	0.0021	0.00027	ND	0.084	0.011	ND	0.084	0.011
1,3-Dichlorobenzene	0.00047 J	0.0021	0.00026	0.00045 J	0.0021	0.00026	ND	0.084	0.010	ND	0.084	0.010
1,4-Dichlorobenzene	ND	0.0021	0.00031	ND	0.0021	0.00031	ND	0.084	0.012	ND	0.084	0.012
n-Butylbenzene	0.00044 J	0.0021	0.00015	ND	0.0021	0.00015	0.020 J	0.084	0.0062	0.014 J	0.084	0.0062
1,2-Dichlorobenzene	ND	0.0021	0.00026	ND	0.0021	0.00026	ND	0.084	0.010	ND	0.084	0.010
1,2,4-Trichlorobenzene	ND	0.0042	0.00035	ND	0.0042	0.00035	ND	0.17	0.014	ND	0.17	0.014
Hexachlorobutadiene	ND	0.0021	0.00012	ND	0.0021	0.00012	ND	0.084	0.0049	ND	0.084	0.0049
t-Butanol	ND	0.011	0.00040	ND	0.011	0.00040	ND	0.42	0.016	ND	0.42	0.016
n-Hexane	0.047	0.011	0.00028	0.045	0.011	0.00028	9.3	0.42	0.011	8.7	0.42	0.011
Isopropyl ether	ND	0.011	0.00023	ND	0.011	0.00023	ND	0.42	0.0094	ND	0.42	0.0094
t-Butyl ethyl ether	ND	0.011	0.00042	ND	0.011	0.00042	ND	0.42	0.017	ND	0.42	0.017
2,2-Dichloropropane	ND	0.011	0.00020	ND	0.011	0.00020	ND	0.42	0.0080	ND	0.42	0.0080
t-Amyl methyl ether	ND	0.011	0.00015	ND	0.011	0.00015	ND	0.42	0.0059	ND	0.42	0.0059
1,4-Dioxane	ND	0.011	0.00037	ND	0.011	0.00037	ND	0.42	0.015	ND	0.42	0.015
Naphthalene	ND	0.011	0.00081	ND	0.011	0.00081	ND	0.42	0.032	ND	0.42	0.032
1,2,3-Trichlorobenzene (TIC)	ND	--	--	ND	--	--	ND	--	--	ND	--	--

MDL = Method Detection Limit
ND= Not Detected (below MDL)
RL = Reporting Limit
J = Trace amount. Analyte concentration between RL and MDL.

Reviewed/Approved By: _____ Date 11/21/17
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

Client: CH2M Hill
Attn: Eric Davis
Project Name: SFPP Norwalk
Project No.: NA
Date Received: 11/13/17
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	METHOD BLANK
Client Sample I.D.:	-
Date/Time Sampled:	-
Date/Time Analyzed:	11/15/17 14:22
QC Batch No.:	171115MS2A1
Analyst Initials:	DT
Dilution Factor:	0.20

ANALYTE	Result ppmv	RL ppmv	MDL ppmv
Dichlorodifluoromethane (12)	ND	0.00020	0.000031
Chloromethane	ND	0.00040	0.000044
1,2-Cl-1,1,2,2-F ethane (114)	ND	0.00020	0.000040
Vinyl Chloride	ND	0.00020	0.000032
Bromomethane	ND	0.00020	0.000059
Chloroethane	ND	0.00020	0.00017
Trichlorofluoromethane (11)	ND	0.00020	0.000043
1,1-Dichloroethene	ND	0.00020	0.000045
Carbon Disulfide	0.00022 J	0.0010	0.000048
1,1,2-Cl 1,2,2-F ethane (113)	ND	0.00020	0.000054
Acetone	0.00027 J	0.0010	0.000058
Methylene Chloride	ND	0.00020	0.000057
t-1,2-Dichloroethene	ND	0.00020	0.000060
1,1-Dichloroethane	ND	0.00020	0.000027
c-1,2-Dichloroethene	ND	0.00020	0.000039
2-Butanone	ND	0.00020	0.00012
t-Butyl Methyl Ether (MTBE)	ND	0.00020	0.000045
Chloroform	ND	0.00020	0.000028
1,1,1-Trichloroethane	ND	0.00020	0.000020
Carbon Tetrachloride	ND	0.00020	0.000035
Benzene	0.000023 J	0.00020	0.000019
1,2-Dichloroethane	ND	0.00020	0.000015
Trichloroethene	ND	0.00020	0.000028
1,2-Dichloropropane	ND	0.00020	0.000036
Bromodichloromethane	ND	0.00020	0.000012
c-1,3-Dichloropropene	ND	0.00020	0.000024
4-Methyl-2-Pentanone	ND	0.00020	0.000013
Toluene	ND	0.00020	0.000016
t-1,3-Dichloropropene	ND	0.00020	0.000021
1,1,2-Trichloroethane	ND	0.00020	0.000032
1,3-Dichloropropane	ND	0.00020	0.0000099
Tetrachloroethene	ND	0.00020	0.000024
2-Hexanone	ND	0.00020	0.000041
Dibromochloromethane	ND	0.00020	0.000036
1,2-Dibromoethane	ND	0.00020	0.000018
Chlorobenzene	ND	0.00020	0.000016
Ethylbenzene	ND	0.00020	0.000011
p,&m-Xylene	ND	0.00020	0.000023
o-Xylene	ND	0.00020	0.000024

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

Client: CH2M Hill
Attn: Eric Davis
Project Name: SFPP Norwalk
Project No.: NA
Date Received: 11/13/17
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	METHOD BLANK
Client Sample I.D.:	-
Date/Time Sampled:	-
Date/Time Analyzed:	11/15/17 14:22
QC Batch No.:	171115MS2A1
Analyst Initials:	DT
Dilution Factor:	0.20

ANALYTE	Result ppmv	RL ppmv	MDL ppmv
Styrene	ND	0.00020	0.000026
Bromoform	ND	0.00020	0.000011
Isopropyl benzene	ND	0.00020	0.000021
1,1,2,2-Tetrachloroethane	ND	0.00040	0.000012
Benzyl Chloride	ND	0.00020	0.000037
1,2,3-Trichloropropane	ND	0.00020	0.000054
n-Propyl Benzene	ND	0.00020	0.000012
4-Ethyl Toluene	ND	0.00020	0.000013
1,3,5-Trimethylbenzene	ND	0.00040	0.000035
4-Chlorotoluene	ND	0.00020	0.000024
tert-Butylbenzene	ND	0.00020	0.000018
1,2,4-Trimethylbenzene	ND	0.00040	0.000023
sec-Butylbenzene	ND	0.00020	0.000019
p-Isopropyltoluene	ND	0.00020	0.000026
1,3-Dichlorobenzene	ND	0.00020	0.000024
1,4-Dichlorobenzene	ND	0.00020	0.000029
n-Butylbenzene	ND	0.00020	0.000015
1,2-Dichlorobenzene	ND	0.00020	0.000025
1,2,4-Trichlorobenzene	ND	0.00040	0.000033
Hexachlorobutadiene	ND	0.00020	0.000012
t-Butanol	ND	0.0010	0.000038
n-Hexane	ND	0.0010	0.000027
Isopropyl ether	ND	0.0010	0.000022
t-Butyl ethyl ether	ND	0.0010	0.000040
2,2-Dichloropropane	ND	0.0010	0.000019
t-Amyl methyl ether	ND	0.0010	0.000014
1,4-Dioxane	ND	0.0010	0.000035
Naphthalene	ND	0.0010	0.000077
1,2,3-Trichlorobenzene (TIC)	ND	--	--

MDL = Method Detection Limit
ND= Not Detected (below MDL)
RL = Reporting Limit
J = Trace amount. Analyte concentration between RL and MDL.

Reviewed/Approved By: _____ Date 11/21/17
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 171115MS2A1

Matrix: Air

EPA Method TO-14/TO-15

Lab No:	Method Blank		LCS		LCSD						
Date/Time Analyzed:	11/15/17 14:22		11/15/17 13:01		11/15/17 13:40						
Data File ID:	15NOV008.D		15NOV006.D		15NOV007.D						
Analyst Initials:	DT		DT		DT						
Dilution Factor:	0.2		1.0		1.0			Limits			
ANALYTE	Result ppbv	Spike Amount	Result ppbv	% Rec	Result ppbv	% Rec	RPD	Low %Rec	High %Rec	Max. RPD	Pass/ Fail
1,1-Dichloroethene	0.0	10.0	10.4	104	10.7	107	2.8	70	130	30	Pass
Methylene Chloride	0.0	10.0	10.4	104	10.4	104	0.2	70	130	30	Pass
Trichloroethene	0.0	10.0	10.2	102	10.3	103	1.0	70	130	30	Pass
Toluene	0.0	10.0	8.6	86	8.9	89	4.1	70	130	30	Pass
1,1,2,2-Tetrachloroethane	0.0	10.0	8.6	86	8.9	89	3.5	70	130	30	Pass

RPD = Relative Percent Difference

Reviewed/Approved By: _____ Date: 11/21/17

Mark Johnson
Operations Manager

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Client: CH2M Hill
Attn: Eric Davis
Project Name: SFPP Norwalk
Project No.: NA
Date Received: 11/13/17
Matrix: Air
Reporting Units: ppmv

EPA METHOD TO3

Lab No.:	I111302-01			I111302-02			I111302-03			I111302-04		
Client Sample I.D.:	VEFF-11-10			VEFF-11-10D			VPOST-11-10			VINF-11-10		
Date/Time Sampled:	11/10/17 9:40			11/10/17 9:40			11/10/17 10:40			11/10/17 10:50		
Date/Time Analyzed:	11/17/17 10:32			11/17/17 10:55			11/17/17 12:04			11/17/17 11:41		
QC Batch No.:	171117GC11A1			171117GC11A1			171117GC11A1			171117GC11A1		
Analyst Initials:	AS			AS			AS			AS		
Dilution Factor:	2.1			2.1			6.3			2.1		
ANALYTE	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv
TVOC as Hexane	1.1 J	2.1	0.37	1.2 J	2.1	0.37	230	6.3	1.1	230	2.1	0.37

MDL = Method Detection Limit
ND= Not Detected (below MDL)
RL = Reporting Limit
J = Trace amount. Analyte concentration between RL and MDL.

Reviewed/Approved By: _____ Date 11/24/17
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

QC Batch No: 171117GC11A1
Matrix: Air
Reporting Units: ppmv

EPA METHOD TO3
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	11/17/17 10:08			11/17/17 9:21		11/17/17 9:44					
Analyst Initials:	AS			AS		AS					
Dilution Factor:	1.0			1.0		1.0					
ANALYTE	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	% Rec.	Result ppmv	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
TVOC as Hexane	ND	1.0	0.18	0.880	88	0.880	88	0.0	70	130	25

MDL = Method Detection Limit
ND= Not Detected (below MDL)
RL = Reporting Limit
J = Trace amount. Analyte concentration between RL and MDL.

Reviewed/Approved By: _____ Date 11/24/17

Mark Johnson
Operations Manager

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AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

Client: CH2M Hill
Attn: Eric Davis
Project Name: SFPP Norwalk
Project No.: NA
Date Received: 11/13/17
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	I111302-04		
Client Sample I.D.:	VINF-11-10		
Date/Time Sampled:	11/10/17 10:50		
Date/Time Analyzed:	11/15/17 11:10		
QC Batch No.:	171114GC8A2		
Analyst Initials:	AS		
Dilution Factor:	2.1		

ANALYTE	Result % v/v	RL % v/v	MDL % v/v
Carbon Dioxide	0.87	0.021	0.00089
Oxygen/Argon	21	1.1	0.077
Nitrogen	78	2.1	0.31
Methane	0.0064	0.0021	0.000096

Results normalized including non-methane hydrocarbons
MDL = Method Detection Limit
ND= Not Detected (below MDL)
RL = Reporting Limit
J = Trace amount. Analyte concentration between RL and MDL.

Reviewed/Approved By: _____ Date 11/24/17
Mark Johnson
Operations Manager

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AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

QC Batch No: 171114GC8A2
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK				LCS		LCSD					
Date Analyzed:	11/14/17 16:14				11/14/17 16:28		11/14/17 16:43					
Analyst Initials:	AS				AS		AS					
Dilution Factor:	1.0				1.0		1.0			Limits		
ANALYTE	Result % v/v	RL % v/v	MDL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
Methane	0.00014 J	0.0010	0.000046	0.10	0.0961	96	0.0963	96	0.2	70	130	30

MDL = Method Detection Limit
ND= Not Detected (below MDL)
RL = Reporting Limit
J = Trace amount. Analyte concentration between RL and MDL.

Reviewed/Approved By: _____ Date 11/24/17
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

November 16, 2017

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

Workorder No.: N026968

RE: SFPP Norwalk

Attention: Eric Davis

Enclosed are the results for sample(s) received on November 08, 2017 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,

Quennie Manimtim
Laboratory Director

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

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

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

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

Samples were analyzed within method holding time.

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

Analytical Comment for EPA 8015B_Total:

Method Blank has hit above the reporting limit but less than 1/10 of the amount measured in sample.

Analytical Comments for EPA 8260B:

Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) recovery biased high for some analytes. Sample results were non-detect (ND) for these analytes therefore reanalysis of the samples was not necessary.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria possibly due to matrix interference. The associated Laboratory Control Sample (LCS) recovery was acceptable.

ASSET Laboratories

Date: *16-Nov-17*

CLIENT: CH2MHill
Project: SFPP Norwalk
Lab Order: N026968
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N026968-001A	INF-11-08	Wastewater	11/8/2017 2:10:00 PM	11/8/2017	11/16/2017
N026968-001B	INF-11-08	Wastewater	11/8/2017 2:10:00 PM	11/8/2017	11/16/2017

CLIENT: CH2MHill
Lab Order: N026968
Project: SFPP Norwalk
Lab ID: N026968-001

Client Sample ID: INF-11-08
Collection Date: 11/8/2017 2:10:00 PM
Matrix: WASTEWATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: **NV00922-MS5_171115A** QC Batch: **P17VW199** PrepDate: Analyst: **QBM**

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.089	1.0		ug/L	1	11/15/2017 05:03 PM
1,1,1-Trichloroethane	ND	0.15	1.0		ug/L	1	11/15/2017 05:03 PM
1,1,2,2-Tetrachloroethane	ND	0.14	1.0		ug/L	1	11/15/2017 05:03 PM
1,1,2-Trichloroethane	ND	0.15	1.0		ug/L	1	11/15/2017 05:03 PM
1,1-Dichloroethane	ND	0.13	0.50		ug/L	1	11/15/2017 05:03 PM
1,1-Dichloroethene	ND	0.15	1.0		ug/L	1	11/15/2017 05:03 PM
1,1-Dichloropropene	ND	0.12	1.0		ug/L	1	11/15/2017 05:03 PM
1,2,3-Trichlorobenzene	ND	0.16	1.0		ug/L	1	11/15/2017 05:03 PM
1,2,3-Trichloropropane	ND	0.097	1.0		ug/L	1	11/15/2017 05:03 PM
1,2,4-Trichlorobenzene	ND	0.13	1.0		ug/L	1	11/15/2017 05:03 PM
1,2,4-Trimethylbenzene	290	0.94	10		ug/L	10	11/15/2017 05:26 PM
1,2-Dibromo-3-chloropropane	ND	0.36	2.0		ug/L	1	11/15/2017 05:03 PM
1,2-Dibromoethane	ND	0.18	1.0		ug/L	1	11/15/2017 05:03 PM
1,2-Dichlorobenzene	ND	0.14	1.0		ug/L	1	11/15/2017 05:03 PM
1,2-Dichloroethane	ND	0.13	0.50		ug/L	1	11/15/2017 05:03 PM
1,2-Dichloropropane	ND	0.14	1.0		ug/L	1	11/15/2017 05:03 PM
1,3,5-Trimethylbenzene	200	1.1	10		ug/L	10	11/15/2017 05:26 PM
1,3-Dichlorobenzene	ND	0.11	1.0		ug/L	1	11/15/2017 05:03 PM
1,3-Dichloropropane	ND	0.13	1.0		ug/L	1	11/15/2017 05:03 PM
1,4-Dichlorobenzene	ND	0.13	1.0		ug/L	1	11/15/2017 05:03 PM
2,2-Dichloropropane	ND	0.16	1.0		ug/L	1	11/15/2017 05:03 PM
2-Butanone	ND	1.9	10		ug/L	1	11/15/2017 05:03 PM
2-Chlorotoluene	ND	0.14	1.0		ug/L	1	11/15/2017 05:03 PM
4-Chlorotoluene	ND	0.14	1.0		ug/L	1	11/15/2017 05:03 PM
4-Isopropyltoluene	4.0	0.13	1.0		ug/L	1	11/15/2017 05:03 PM
4-Methyl-2-pentanone	ND	1.4	10		ug/L	1	11/15/2017 05:03 PM
Acetone	17	4.3	10		ug/L	1	11/15/2017 05:03 PM
Acrolein	ND	1.9	20		ug/L	1	11/15/2017 05:03 PM
Acrylonitrile	ND	2.5	20		ug/L	1	11/15/2017 05:03 PM
Benzene	24	0.14	1.0		ug/L	1	11/15/2017 05:03 PM
Bromobenzene	ND	0.13	1.0		ug/L	1	11/15/2017 05:03 PM
Bromochloromethane	ND	0.15	1.0		ug/L	1	11/15/2017 05:03 PM
Bromodichloromethane	ND	0.10	1.0		ug/L	1	11/15/2017 05:03 PM
Bromoform	ND	0.34	1.0		ug/L	1	11/15/2017 05:03 PM
Bromomethane	ND	0.12	1.0		ug/L	1	11/15/2017 05:03 PM
Carbon disulfide	0.26	0.14	1.0	J	ug/L	1	11/15/2017 05:03 PM

Qualifiers:

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

CLIENT: CH2MHill
Lab Order: N026968
Project: SFPP Norwalk
Lab ID: N026968-001

Client Sample ID: INF-11-08
Collection Date: 11/8/2017 2:10:00 PM
Matrix: WASTEWATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: **NV00922-MS5_171115A** QC Batch: **P17VW199** PrepDate: Analyst: **QBM**

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
Carbon tetrachloride	ND	0.13	0.50		ug/L	1	11/15/2017 05:03 PM
Chlorobenzene	ND	0.13	1.0		ug/L	1	11/15/2017 05:03 PM
Chloroethane	ND	0.19	1.0		ug/L	1	11/15/2017 05:03 PM
Chloroform	ND	0.18	1.0		ug/L	1	11/15/2017 05:03 PM
Chloromethane	ND	0.22	1.0		ug/L	1	11/15/2017 05:03 PM
cis-1,2-Dichloroethene	ND	0.20	1.0		ug/L	1	11/15/2017 05:03 PM
cis-1,3-Dichloropropene	ND	0.14	1.0		ug/L	1	11/15/2017 05:03 PM
Di-isopropyl ether	8.8	0.18	1.0		ug/L	1	11/15/2017 05:03 PM
Dibromochloromethane	ND	0.12	1.0		ug/L	1	11/15/2017 05:03 PM
Dibromomethane	ND	0.12	1.0		ug/L	1	11/15/2017 05:03 PM
Dichlorodifluoromethane	ND	0.17	1.0		ug/L	1	11/15/2017 05:03 PM
Ethyl tert-butyl ether	ND	0.15	1.0		ug/L	1	11/15/2017 05:03 PM
Ethylbenzene	6.7	0.14	1.0		ug/L	1	11/15/2017 05:03 PM
Freon-113	ND	0.19	1.0		ug/L	1	11/15/2017 05:03 PM
Hexachlorobutadiene	ND	0.15	1.0		ug/L	1	11/15/2017 05:03 PM
Isopropylbenzene	3.4	0.11	1.0		ug/L	1	11/15/2017 05:03 PM
m,p-Xylene	410	2.3	10		ug/L	10	11/15/2017 05:26 PM
Methylene chloride	ND	0.26	2.0		ug/L	1	11/15/2017 05:03 PM
MTBE	70	0.13	1.0		ug/L	1	11/15/2017 05:03 PM
n-Butylbenzene	ND	0.15	1.0		ug/L	1	11/15/2017 05:03 PM
n-Propylbenzene	9.4	0.16	1.0		ug/L	1	11/15/2017 05:03 PM
Naphthalene	51	0.094	1.0		ug/L	1	11/15/2017 05:03 PM
o-Xylene	280	1.3	10		ug/L	10	11/15/2017 05:26 PM
sec-Butylbenzene	4.7	0.12	1.0		ug/L	1	11/15/2017 05:03 PM
Styrene	ND	0.14	1.0		ug/L	1	11/15/2017 05:03 PM
Tert-amyl methyl ether	ND	0.12	1.0		ug/L	1	11/15/2017 05:03 PM
Tert-Butanol	ND	1.8	5.0		ug/L	1	11/15/2017 05:03 PM
tert-Butylbenzene	ND	0.11	1.0		ug/L	1	11/15/2017 05:03 PM
Tetrachloroethene	ND	0.13	1.0		ug/L	1	11/15/2017 05:03 PM
Toluene	8.7	0.14	2.0		ug/L	1	11/15/2017 05:03 PM
trans-1,2-Dichloroethene	ND	0.20	1.0		ug/L	1	11/15/2017 05:03 PM
trans-1,3-Dichloropropene	ND	0.13	1.0		ug/L	1	11/15/2017 05:03 PM
Trichloroethene	ND	0.14	1.0		ug/L	1	11/15/2017 05:03 PM
Trichlorofluoromethane	ND	0.13	1.0		ug/L	1	11/15/2017 05:03 PM
Vinyl chloride	ND	0.15	0.50		ug/L	1	11/15/2017 05:03 PM
Xylenes, Total	680	15	20		ug/L	10	11/15/2017 05:26 PM

Qualifiers:

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

CLIENT: CH2MHill
Lab Order: N026968
Project: SFPP Norwalk
Lab ID: N026968-001

Client Sample ID: INF-11-08
Collection Date: 11/8/2017 2:10:00 PM
Matrix: WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **NV00922-MS5_171115A**	QC Batch: **P17VW199**			PrepDate:			Analyst: **QBM**
Surr: 1,2-Dichloroethane-d4	93.3	0	72-119		%REC	10	11/15/2017 05:26 PM
Surr: 1,2-Dichloroethane-d4	94.7	0	72-119		%REC	1	11/15/2017 05:03 PM
Surr: 4-Bromofluorobenzene	96.9	0	76-119		%REC	1	11/15/2017 05:03 PM
Surr: 4-Bromofluorobenzene	95.6	0	76-119		%REC	10	11/15/2017 05:26 PM
Surr: Dibromofluoromethane	107	0	85-115		%REC	10	11/15/2017 05:26 PM
Surr: Dibromofluoromethane	103	0	85-115		%REC	1	11/15/2017 05:03 PM
Surr: Toluene-d8	98.2	0	81-120		%REC	1	11/15/2017 05:03 PM
Surr: Toluene-d8	97.9	0	81-120		%REC	10	11/15/2017 05:26 PM
TPH EXTRACTABLE BY GC/FID							
	EPA 3510C		**EPA 8015B**				
RunID: **NV00922-GC3_171114C**	QC Batch: **65652**			PrepDate:	**11/13/2017**		Analyst: **QCE**
TPH-Diesel (C13-C22)	27000	160	260		ug/L	10	11/15/2017 04:58 PM
TPH-Oil (C23-C36)	2000	14	26		ug/L	1	11/15/2017 05:36 AM
Surr: Octacosane	76.8	0	26-152		%REC	1	11/15/2017 05:36 AM
Surr: p-Terphenyl	82.3	0	57-132		%REC	1	11/15/2017 05:36 AM
GASOLINE RANGE ORGANICS BY GC/FID							
			EPA 8015B				
RunID: **NV00922-GC4_171113A**	QC Batch: **E17VW100**			PrepDate:			Analyst: **QBM**
TPH-Gasoline (C4-C12)	4000	160	500		ug/L	10	11/13/2017 04:08 PM
Surr: Chlorobenzene - d5	109	0	74-138		%REC	10	11/13/2017 04:08 PM
TOTAL TPH							
			EPA 8015B				
RunID: **NV00922-GC3_171114C**	QC Batch: **R120270**			PrepDate:			Analyst: **QCE**
Total TPH	33000	16	50	B	ug/L	1	11/14/2017

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026968
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_FP_SFPP

Sample ID: **MB-65652** SampType: **MBLK** TestCode: **8015_W_FP_** Units: **ug/L** Prep Date: **11/13/2017** RunNo: **120237**
Client ID: **PBW** Batch ID: **65652** TestNo: **EPA 8015B EPA 3510C** Analysis Date: **11/14/2017** SeqNo: **2834556**

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)	18.207	25									J
Surr: Octacosane	69.698		80.00		87.1	26	152				
Surr: p-Terphenyl	68.948		80.00		86.2	57	132				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026968
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_SFPPTOT

Sample ID: **MB-R120270** SampType: **MBLK** TestCode: **8015_W_SFP** Units: **ug/L** Prep Date: RunNo: **120270**
Client ID: **PBW** Batch ID: **R120270** TestNo: **EPA 8015B** Analysis Date: **11/14/2017** SeqNo: **2835216**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total TPH	68.207	50									

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026968
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GAS_WSFPP

Sample ID: **E171113LCS** SampType: **LCS** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **120219**
Client ID: **LCSW** Batch ID: **E17VW100** TestNo: **EPA 8015B** Analysis Date: **11/13/2017** SeqNo: **2832468**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	977.000	50	1000	0	97.7	67	136				
Surr: Chlorobenzene - d5	52911.000		50000		106	74	138				

Sample ID: **E171113MB1** SampType: **MBLK** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **120219**
Client ID: **PBW** Batch ID: **E17VW100** TestNo: **EPA 8015B** Analysis Date: **11/13/2017** SeqNo: **2832469**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	50.000	50									
Surr: Chlorobenzene - d5	56619.000		50000		113	74	138				

Sample ID: **N026985-026AMS** SampType: **MS** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **120219**
Client ID: **ZZZZZZ** Batch ID: **E17VW100** TestNo: **EPA 8015B** Analysis Date: **11/13/2017** SeqNo: **2832472**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	823.000	50	1000	32.00	79.1	67	136				
Surr: Chlorobenzene - d5	52140.000		50000		104	74	138				

Sample ID: **N026985-026AMSD** SampType: **MSD** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **120219**
Client ID: **ZZZZZZ** Batch ID: **E17VW100** TestNo: **EPA 8015B** Analysis Date: **11/13/2017** SeqNo: **2832473**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	876.000	50	1000	32.00	84.4	67	136	823.0	6.24	30	
Surr: Chlorobenzene - d5	54947.000		50000		110	74	138		0	0	

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026968
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **P171115LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **120255**
Client ID: **LCSW** Batch ID: **P17VW199** TestNo: **EPA 8260B** Analysis Date: **11/15/2017** SeqNo: **2834799**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	23.500	1.0	20.00	0	118	81	129				
1,1,1-Trichloroethane	21.620	1.0	20.00	0	108	67	132				
1,1,2,2-Tetrachloroethane	24.610	1.0	20.00	0	123	63	128				
1,1,2-Trichloroethane	20.240	1.0	20.00	0	101	75	125				
1,1-Dichloroethane	21.420	0.50	20.00	0	107	69	133				
1,1-Dichloroethene	17.620	1.0	20.00	0	88.1	68	130				
1,1-Dichloropropene	20.480	1.0	20.00	0	102	73	132				
1,2,3-Trichlorobenzene	19.520	1.0	20.00	0	97.6	67	137				
1,2,3-Trichloropropane	21.890	1.0	20.00	0	109	73	124				
1,2,4-Trichlorobenzene	19.440	1.0	20.00	0	97.2	66	134				
1,2,4-Trimethylbenzene	20.540	1.0	20.00	0	103	74	132				
1,2-Dibromo-3-chloropropane	22.860	2.0	20.00	0	114	50	132				
1,2-Dibromoethane	21.970	1.0	20.00	0	110	80	121				
1,2-Dichlorobenzene	20.190	1.0	20.00	0	101	71	122				
1,2-Dichloroethane	18.000	0.50	20.00	0	90.0	69	132				
1,2-Dichloropropane	22.680	1.0	20.00	0	113	75	125				
1,3,5-Trimethylbenzene	20.190	1.0	20.00	0	101	74	131				
1,3-Dichlorobenzene	20.290	1.0	20.00	0	101	75	124				
1,3-Dichloropropane	21.420	1.0	20.00	0	107	73	126				
1,4-Dichlorobenzene	20.260	1.0	20.00	0	101	74	123				
2,2-Dichloropropane	26.420	1.0	20.00	0	132	69	137				
2-Butanone	234.760	10	200.0	0	117	49	136				
2-Chlorotoluene	20.420	1.0	20.00	0	102	73	126				
4-Chlorotoluene	20.710	1.0	20.00	0	104	74	128				
4-Isopropyltoluene	20.000	1.0	20.00	0	100	73	130				
4-Methyl-2-pentanone	228.020	10	200.0	0	114	58	134				
Acetone	204.520	10	200.0	0	102	40	135				
Acrolein	175.300	20	200.0	0	87.6	75	125				
Acrylonitrile	210.440	20	200.0	0	105	75	125				
Benzene	20.740	1.0	20.00	0	104	81	122				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026968
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **P171115LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **120255**
Client ID: **LCSW** Batch ID: **P17VW199** TestNo: **EPA 8260B** Analysis Date: **11/15/2017** SeqNo: **2834799**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	19.920	1.0	20.00	0	99.6	76	124				
Bromochloromethane	18.990	1.0	20.00	0	95.0	65	129				
Bromodichloromethane	20.440	1.0	20.00	0	102	76	121				
Bromoform	21.390	1.0	20.00	0	107	69	128				
Bromomethane	19.820	1.0	20.00	0	99.1	53	141				
Carbon disulfide	19.580	1.0	20.00	0	97.9	75	125				
Carbon tetrachloride	22.290	0.50	20.00	0	111	66	138				
Chlorobenzene	20.260	1.0	20.00	0	101	81	122				
Chloroethane	21.840	1.0	20.00	0	109	58	133				
Chloroform	18.560	1.0	20.00	0	92.8	69	128				
Chloromethane	23.870	1.0	20.00	0	119	56	131				
cis-1,2-Dichloroethene	20.050	1.0	20.00	0	100	72	126				
cis-1,3-Dichloropropene	20.900	1.0	20.00	0	104	69	131				
Di-isopropyl ether	20.460	1.0	20.00	0	102	70	130				
Dibromochloromethane	22.280	1.0	20.00	0	111	66	133				
Dibromomethane	20.270	1.0	20.00	0	101	76	125				
Dichlorodifluoromethane	21.560	1.0	20.00	0	108	53	153				
Ethyl tert-butyl ether	26.710	1.0	20.00	0	134	70	130				S
Ethylbenzene	19.680	1.0	20.00	0	98.4	73	127				
Freon-113	19.080	1.0	20.00	0	95.4	75	125				
Hexachlorobutadiene	18.250	1.0	20.00	0	91.2	67	131				
Isopropylbenzene	20.150	1.0	20.00	0	101	75	127				
m,p-Xylene	38.140	1.0	40.00	0	95.4	76	128				
Methylene chloride	21.130	2.0	20.00	0	106	63	137				
MTBE	21.290	1.0	20.00	0	106	65	123				
n-Butylbenzene	21.080	1.0	20.00	0	105	69	137				
n-Propylbenzene	21.170	1.0	20.00	0	106	72	129				
Naphthalene	17.890	1.0	20.00	0	89.4	54	138				
o-Xylene	17.900	1.0	20.00	0	89.5	80	121				
sec-Butylbenzene	20.950	1.0	20.00	0	105	72	127				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026968
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **P171115LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **120255**
Client ID: **LCSW** Batch ID: **P17VW199** TestNo: **EPA 8260B** Analysis Date: **11/15/2017** SeqNo: **2834799**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	19.200	1.0	20.00	0	96.0	65	134				
Tert-amyl methyl ether	24.120	1.0	20.00	0	121	70	130				
Tert-Butanol	168.510	5.0	100.0	0	169	70	130				S
tert-Butylbenzene	19.670	1.0	20.00	0	98.4	70	129				
Tetrachloroethene	19.620	1.0	20.00	0	98.1	66	128				
Toluene	19.220	2.0	20.00	0	96.1	77	122				
trans-1,2-Dichloroethene	19.640	1.0	20.00	0	98.2	63	137				
trans-1,3-Dichloropropene	23.510	1.0	20.00	0	118	59	135				
Trichloroethene	19.460	1.0	20.00	0	97.3	70	127				
Trichlorofluoromethane	19.880	1.0	20.00	0	99.4	57	129				
Vinyl chloride	21.370	0.50	20.00	0	107	50	134				
Xylenes, Total	56.040	2.0	60.00	0	93.4	75	125				
Surr: 1,2-Dichloroethane-d4	24.910		25.00		99.6	72	119				
Surr: 4-Bromofluorobenzene	24.010		25.00		96.0	76	119				
Surr: Dibromofluoromethane	26.230		25.00		105	85	115				
Surr: Toluene-d8	24.700		25.00		98.8	81	120				

Sample ID: **P171115LCSD** SampType: **LCSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **120255**
Client ID: **LCSS02** Batch ID: **P17VW199** TestNo: **EPA 8260B** Analysis Date: **11/15/2017** SeqNo: **2834800**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	23.620	1.0	20.00	0	118	81	129	23.50	0.509	20	
1,1,1-Trichloroethane	21.120	1.0	20.00	0	106	67	132	21.62	2.34	20	
1,1,2,2-Tetrachloroethane	24.290	1.0	20.00	0	121	63	128	24.61	1.31	20	
1,1,2-Trichloroethane	20.360	1.0	20.00	0	102	75	125	20.24	0.591	20	
1,1-Dichloroethane	20.940	0.50	20.00	0	105	69	133	21.42	2.27	20	
1,1-Dichloroethene	17.730	1.0	20.00	0	88.6	68	130	17.62	0.622	20	
1,1-Dichloropropene	20.410	1.0	20.00	0	102	73	132	20.48	0.342	20	
1,2,3-Trichlorobenzene	19.320	1.0	20.00	0	96.6	67	137	19.52	1.03	20	
1,2,3-Trichloropropane	21.790	1.0	20.00	0	109	73	124	21.89	0.458	20	

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026968
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **P171115LCSD** SampType: **LCSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **120255**
Client ID: **LCSS02** Batch ID: **P17VW199** TestNo: **EPA 8260B** Analysis Date: **11/15/2017** SeqNo: **2834800**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	19.170	1.0	20.00	0	95.9	66	134	19.44	1.40	20	
1,2,4-Trimethylbenzene	21.140	1.0	20.00	0	106	74	132	20.54	2.88	20	
1,2-Dibromo-3-chloropropane	23.190	2.0	20.00	0	116	50	132	22.86	1.43	20	
1,2-Dibromoethane	21.610	1.0	20.00	0	108	80	121	21.97	1.65	20	
1,2-Dichlorobenzene	20.530	1.0	20.00	0	103	71	122	20.19	1.67	20	
1,2-Dichloroethane	18.150	0.50	20.00	0	90.8	69	132	18.00	0.830	20	
1,2-Dichloropropane	23.300	1.0	20.00	0	116	75	125	22.68	2.70	20	
1,3,5-Trimethylbenzene	20.790	1.0	20.00	0	104	74	131	20.19	2.93	20	
1,3-Dichlorobenzene	20.550	1.0	20.00	0	103	75	124	20.29	1.27	20	
1,3-Dichloropropane	21.420	1.0	20.00	0	107	73	126	21.42	0	20	
1,4-Dichlorobenzene	20.400	1.0	20.00	0	102	74	123	20.26	0.689	20	
2,2-Dichloropropane	26.210	1.0	20.00	0	131	69	137	26.42	0.798	20	
2-Butanone	221.000	10	200.0	0	110	49	136	234.8	6.04	20	
2-Chlorotoluene	20.950	1.0	20.00	0	105	73	126	20.42	2.56	20	
4-Chlorotoluene	21.090	1.0	20.00	0	105	74	128	20.71	1.82	20	
4-Isopropyltoluene	20.780	1.0	20.00	0	104	73	130	20.00	3.83	20	
4-Methyl-2-pentanone	226.260	10	200.0	0	113	58	134	228.0	0.775	20	
Acetone	186.740	10	200.0	0	93.4	40	135	204.5	9.09	20	
Acrolein	157.700	20	200.0	0	78.8	75	125	175.3	10.6	20	
Acrylonitrile	196.020	20	200.0	0	98.0	75	125	210.4	7.10	20	
Benzene	21.040	1.0	20.00	0	105	81	122	20.74	1.44	20	
Bromobenzene	20.500	1.0	20.00	0	103	76	124	19.92	2.87	20	
Bromochloromethane	18.650	1.0	20.00	0	93.3	65	129	18.99	1.81	20	
Bromodichloromethane	20.510	1.0	20.00	0	103	76	121	20.44	0.342	20	
Bromoform	20.710	1.0	20.00	0	104	69	128	21.39	3.23	20	
Bromomethane	20.250	1.0	20.00	0	101	53	141	19.82	2.15	20	
Carbon disulfide	19.480	1.0	20.00	0	97.4	75	125	19.58	0.512	20	
Carbon tetrachloride	21.830	0.50	20.00	0	109	66	138	22.29	2.09	20	
Chlorobenzene	20.200	1.0	20.00	0	101	81	122	20.26	0.297	20	
Chloroethane	21.580	1.0	20.00	0	108	58	133	21.84	1.20	20	

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026968
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **P171115LCSD** SampType: **LCSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **120255**
Client ID: **LCSS02** Batch ID: **P17VW199** TestNo: **EPA 8260B** Analysis Date: **11/15/2017** SeqNo: **2834800**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	18.410	1.0	20.00	0	92.0	69	128	18.56	0.811	20	
Chloromethane	23.090	1.0	20.00	0	115	56	131	23.87	3.32	20	
cis-1,2-Dichloroethene	20.140	1.0	20.00	0	101	72	126	20.05	0.448	20	
cis-1,3-Dichloropropene	21.000	1.0	20.00	0	105	69	131	20.90	0.477	20	
Di-isopropyl ether	20.300	1.0	20.00	0	102	70	130	20.46	0.785	20	
Dibromochloromethane	21.870	1.0	20.00	0	109	66	133	22.28	1.86	20	
Dibromomethane	19.920	1.0	20.00	0	99.6	76	125	20.27	1.74	20	
Dichlorodifluoromethane	20.840	1.0	20.00	0	104	53	153	21.56	3.40	20	
Ethyl tert-butyl ether	26.780	1.0	20.00	0	134	70	130	26.71	0.262	20	S
Ethylbenzene	19.980	1.0	20.00	0	99.9	73	127	19.68	1.51	20	
Freon-113	18.250	1.0	20.00	0	91.2	75	125	19.08	4.45	20	
Hexachlorobutadiene	18.370	1.0	20.00	0	91.9	67	131	18.25	0.655	20	
Isopropylbenzene	20.520	1.0	20.00	0	103	75	127	20.15	1.82	20	
m,p-Xylene	38.830	1.0	40.00	0	97.1	76	128	38.14	1.79	20	
Methylene chloride	20.760	2.0	20.00	0	104	63	137	21.13	1.77	20	
MTBE	21.080	1.0	20.00	0	105	65	123	21.29	0.991	20	
n-Butylbenzene	21.260	1.0	20.00	0	106	69	137	21.08	0.850	20	
n-Propylbenzene	21.690	1.0	20.00	0	108	72	129	21.17	2.43	20	
Naphthalene	17.770	1.0	20.00	0	88.8	54	138	17.89	0.673	20	
o-Xylene	18.190	1.0	20.00	0	91.0	80	121	17.90	1.61	20	
sec-Butylbenzene	21.270	1.0	20.00	0	106	72	127	20.95	1.52	20	
Styrene	19.610	1.0	20.00	0	98.0	65	134	19.20	2.11	20	
Tert-amyl methyl ether	24.220	1.0	20.00	0	121	70	130	24.12	0.414	20	
Tert-Butanol	159.270	5.0	100.0	0	159	70	130	168.5	5.64	20	S
tert-Butylbenzene	20.370	1.0	20.00	0	102	70	129	19.67	3.50	20	
Tetrachloroethene	19.910	1.0	20.00	0	99.6	66	128	19.62	1.47	20	
Toluene	19.320	2.0	20.00	0	96.6	77	122	19.22	0.519	20	
trans-1,2-Dichloroethene	20.220	1.0	20.00	0	101	63	137	19.64	2.91	20	
trans-1,3-Dichloropropene	23.210	1.0	20.00	0	116	59	135	23.51	1.28	20	
Trichloroethene	19.070	1.0	20.00	0	95.4	70	127	19.46	2.02	20	

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026968
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **P171115LCSD** SampType: **LCSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **120255**
Client ID: **LCSS02** Batch ID: **P17VW199** TestNo: **EPA 8260B** Analysis Date: **11/15/2017** SeqNo: **2834800**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichlorofluoromethane	19.810	1.0	20.00	0	99.0	57	129	19.88	0.353	20	
Vinyl chloride	20.710	0.50	20.00	0	104	50	134	21.37	3.14	20	
Xylenes, Total	57.020	2.0	60.00	0	95.0	75	125	56.04	1.73	20	
Surr: 1,2-Dichloroethane-d4	23.540		25.00		94.2	72	119		0		
Surr: 4-Bromofluorobenzene	23.820		25.00		95.3	76	119		0		
Surr: Dibromofluoromethane	25.930		25.00		104	85	115		0		
Surr: Toluene-d8	24.430		25.00		97.7	81	120		0		

Sample ID: **P171115MB2** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **120255**
Client ID: **PBW** Batch ID: **P17VW199** TestNo: **EPA 8260B** Analysis Date: **11/15/2017** SeqNo: **2834802**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	1.0									
1,1,1-Trichloroethane	ND	1.0									
1,1,2,2-Tetrachloroethane	ND	1.0									
1,1,2-Trichloroethane	ND	1.0									
1,1-Dichloroethane	ND	0.50									
1,1-Dichloroethene	ND	1.0									
1,1-Dichloropropene	ND	1.0									
1,2,3-Trichlorobenzene	ND	1.0									
1,2,3-Trichloropropane	ND	1.0									
1,2,4-Trichlorobenzene	ND	1.0									
1,2,4-Trimethylbenzene	ND	1.0									
1,2-Dibromo-3-chloropropane	ND	2.0									
1,2-Dibromoethane	ND	1.0									
1,2-Dichlorobenzene	ND	1.0									
1,2-Dichloroethane	ND	0.50									
1,2-Dichloropropane	ND	1.0									
1,3,5-Trimethylbenzene	ND	1.0									
1,3-Dichlorobenzene	ND	1.0									

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026968
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **P171115MB2** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **120255**
Client ID: **PBW** Batch ID: **P17VW199** TestNo: **EPA 8260B** Analysis Date: **11/15/2017** SeqNo: **2834802**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichloropropane	ND	1.0									
1,4-Dichlorobenzene	ND	1.0									
2,2-Dichloropropane	ND	1.0									
2-Butanone	ND	10									
2-Chlorotoluene	ND	1.0									
4-Chlorotoluene	ND	1.0									
4-Isopropyltoluene	ND	1.0									
4-Methyl-2-pentanone	ND	10									
Acetone	ND	10									
Acrolein	ND	20									
Acrylonitrile	ND	20									
Benzene	ND	1.0									
Bromobenzene	ND	1.0									
Bromochloromethane	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	1.0									
Carbon disulfide	ND	1.0									
Carbon tetrachloride	ND	0.50									
Chlorobenzene	ND	1.0									
Chloroethane	ND	1.0									
Chloroform	ND	1.0									
Chloromethane	ND	1.0									
cis-1,2-Dichloroethene	ND	1.0									
cis-1,3-Dichloropropene	ND	1.0									
Di-isopropyl ether	ND	1.0									
Dibromochloromethane	ND	1.0									
Dibromomethane	ND	1.0									
Dichlorodifluoromethane	ND	1.0									
Ethyl tert-butyl ether	ND	1.0									

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026968
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **P171115MB2** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **120255**
Client ID: **PBW** Batch ID: **P17VW199** TestNo: **EPA 8260B** Analysis Date: **11/15/2017** SeqNo: **2834802**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	ND	1.0									
Freon-113	ND	1.0									
Hexachlorobutadiene	ND	1.0									
Isopropylbenzene	ND	1.0									
m,p-Xylene	ND	1.0									
Methylene chloride	ND	2.0									
MTBE	ND	1.0									
n-Butylbenzene	ND	1.0									
n-Propylbenzene	ND	1.0									
Naphthalene	ND	1.0									
o-Xylene	ND	1.0									
sec-Butylbenzene	ND	1.0									
Styrene	ND	1.0									
Tert-amyl methyl ether	ND	1.0									
Tert-Butanol	ND	5.0									
tert-Butylbenzene	ND	1.0									
Tetrachloroethene	ND	1.0									
Toluene	ND	2.0									
trans-1,2-Dichloroethene	ND	1.0									
trans-1,3-Dichloropropene	ND	1.0									
Trichloroethene	ND	1.0									
Trichlorofluoromethane	ND	1.0									
Vinyl chloride	ND	0.50									
Xylenes, Total	ND	2.0									
Surr: 1,2-Dichloroethane-d4	25.730		25.00		103	72	119				
Surr: 4-Bromofluorobenzene	22.340		25.00		89.4	76	119				
Surr: Dibromofluoromethane	27.700		25.00		111	85	115				
Surr: Toluene-d8	25.080		25.00		100	81	120				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026968
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N026908-001AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **120255**
Client ID: **ZZZZZZ** Batch ID: **P17VW199** TestNo: **EPA 8260B** Analysis Date: **11/15/2017** SeqNo: **2834824**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	23.320	1.0	20.00	0	117	81	129				
1,1,1-Trichloroethane	21.960	1.0	20.00	0	110	67	132				
1,1,2,2-Tetrachloroethane	26.980	1.0	20.00	0	135	63	128				S
1,1,2-Trichloroethane	22.350	1.0	20.00	0	112	75	125				
1,1-Dichloroethane	22.730	0.50	20.00	0	114	69	133				
1,1-Dichloroethene	17.160	1.0	20.00	0	85.8	68	130				
1,1-Dichloropropene	18.950	1.0	20.00	0	94.8	73	132				
1,2,3-Trichlorobenzene	18.460	1.0	20.00	0	92.3	67	137				
1,2,3-Trichloropropane	23.670	1.0	20.00	0	118	73	124				
1,2,4-Trichlorobenzene	17.780	1.0	20.00	0	88.9	66	134				
1,2,4-Trimethylbenzene	18.980	1.0	20.00	0	94.9	74	132				
1,2-Dibromo-3-chloropropane	24.330	2.0	20.00	0	122	50	132				
1,2-Dibromoethane	22.790	1.0	20.00	0	114	80	121				
1,2-Dichlorobenzene	19.840	1.0	20.00	0	99.2	71	122				
1,2-Dichloroethane	19.340	0.50	20.00	0	96.7	69	132				
1,2-Dichloropropane	23.640	1.0	20.00	0	118	75	125				
1,3,5-Trimethylbenzene	18.610	1.0	20.00	0	93.0	74	131				
1,3-Dichlorobenzene	19.390	1.0	20.00	0	97.0	75	124				
1,3-Dichloropropane	22.440	1.0	20.00	0	112	73	126				
1,4-Dichlorobenzene	19.270	1.0	20.00	0	96.4	74	123				
2,2-Dichloropropane	24.800	1.0	20.00	0	124	69	137				
2-Butanone	275.030	10	200.0	0	138	49	136				S
2-Chlorotoluene	19.340	1.0	20.00	0	96.7	73	126				
4-Chlorotoluene	19.260	1.0	20.00	0	96.3	74	128				
4-Isopropyltoluene	18.080	1.0	20.00	0	90.4	73	130				
4-Methyl-2-pentanone	264.980	10	200.0	0	132	58	134				
Acetone	231.460	10	200.0	14.01	109	40	135				
Acrolein	118.650	20	200.0	0	59.3	75	125				S
Acrylonitrile	236.940	20	200.0	0	118	75	125				
Benzene	20.670	1.0	20.00	0	103	81	122				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026968
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N026908-001AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **120255**
Client ID: **ZZZZZZ** Batch ID: **P17VW199** TestNo: **EPA 8260B** Analysis Date: **11/15/2017** SeqNo: **2834824**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	19.700	1.0	20.00	0	98.5	76	124				
Bromochloromethane	21.210	1.0	20.00	0	106	65	129				
Bromodichloromethane	21.600	1.0	20.00	0	108	76	121				
Bromoform	22.970	1.0	20.00	0	115	69	128				
Bromomethane	21.360	1.0	20.00	0	107	53	141				
Carbon disulfide	19.270	1.0	20.00	0	96.4	75	125				
Carbon tetrachloride	20.690	0.50	20.00	0	103	66	138				
Chlorobenzene	19.570	1.0	20.00	0	97.9	81	122				
Chloroethane	19.740	1.0	20.00	0	98.7	58	133				
Chloroform	20.190	1.0	20.00	0.4000	99.0	69	128				
Chloromethane	23.790	1.0	20.00	0	119	56	131				
cis-1,2-Dichloroethene	21.430	1.0	20.00	0	107	72	126				
cis-1,3-Dichloropropene	21.140	1.0	20.00	0	106	69	131				
Di-isopropyl ether	22.130	1.0	20.00	0	111	70	130				
Dibromochloromethane	22.870	1.0	20.00	0	114	66	133				
Dibromomethane	21.280	1.0	20.00	0	106	76	125				
Dichlorodifluoromethane	20.270	1.0	20.00	0	101	53	153				
Ethyl tert-butyl ether	30.390	1.0	20.00	0	152	70	130				S
Ethylbenzene	18.630	1.0	20.00	0	93.2	73	127				
Freon-113	18.710	1.0	20.00	0	93.6	75	125				
Hexachlorobutadiene	15.100	1.0	20.00	0	75.5	67	131				
Isopropylbenzene	18.510	1.0	20.00	0	92.6	75	127				
m,p-Xylene	36.110	1.0	40.00	0	90.3	76	128				
Methylene chloride	24.270	2.0	20.00	0	121	63	137				
MTBE	25.050	1.0	20.00	0	125	65	123				S
n-Butylbenzene	18.310	1.0	20.00	0	91.6	69	137				
n-Propylbenzene	19.280	1.0	20.00	0	96.4	72	129				
Naphthalene	18.490	1.0	20.00	0	92.5	54	138				
o-Xylene	17.390	1.0	20.00	0	87.0	80	121				
sec-Butylbenzene	18.970	1.0	20.00	0	94.8	72	127				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026968
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N026908-001AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **120255**
Client ID: **ZZZZZZ** Batch ID: **P17VW199** TestNo: **EPA 8260B** Analysis Date: **11/15/2017** SeqNo: **2834824**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	18.630	1.0	20.00	0	93.2	65	134				
Tert-amyl methyl ether	25.080	1.0	20.00	0	125	70	130				
Tert-Butanol	212.860	5.0	100.0	0	213	70	130				S
tert-Butylbenzene	18.180	1.0	20.00	0	90.9	70	129				
Tetrachloroethene	18.970	1.0	20.00	0	94.8	66	128				
Toluene	19.140	2.0	20.00	0	95.7	77	122				
trans-1,2-Dichloroethene	20.780	1.0	20.00	0	104	63	137				
trans-1,3-Dichloropropene	24.030	1.0	20.00	0	120	59	135				
Trichloroethene	18.400	1.0	20.00	0	92.0	70	127				
Trichlorofluoromethane	19.640	1.0	20.00	0	98.2	57	129				
Vinyl chloride	19.980	0.50	20.00	0	99.9	50	134				
Xylenes, Total	53.500	2.0	60.00	0	89.2	75	125				
Surr: 1,2-Dichloroethane-d4	27.640		25.00		111	72	119				
Surr: 4-Bromofluorobenzene	24.200		25.00		96.8	76	119				
Surr: Dibromofluoromethane	29.360		25.00		117	85	115				S
Surr: Toluene-d8	25.420		25.00		102	81	120				

Sample ID: **N026908-001AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **120255**
Client ID: **ZZZZZZ** Batch ID: **P17VW199** TestNo: **EPA 8260B** Analysis Date: **11/15/2017** SeqNo: **2834825**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	24.060	1.0	20.00	0	120	81	129	23.32	3.12	20	
1,1,1-Trichloroethane	21.480	1.0	20.00	0	107	67	132	21.96	2.21	20	
1,1,2,2-Tetrachloroethane	27.540	1.0	20.00	0	138	63	128	26.98	2.05	20	S
1,1,2-Trichloroethane	22.300	1.0	20.00	0	112	75	125	22.35	0.224	20	
1,1-Dichloroethane	22.530	0.50	20.00	0	113	69	133	22.73	0.884	20	
1,1-Dichloroethene	17.220	1.0	20.00	0	86.1	68	130	17.16	0.349	20	
1,1-Dichloropropene	19.320	1.0	20.00	0	96.6	73	132	18.95	1.93	20	
1,2,3-Trichlorobenzene	19.040	1.0	20.00	0	95.2	67	137	18.46	3.09	20	
1,2,3-Trichloropropane	23.750	1.0	20.00	0	119	73	124	23.67	0.337	20	

Qualifiers:

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

Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N026968
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N026908-001AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **120255**
Client ID: **ZZZZZZ** Batch ID: **P17VW199** TestNo: **EPA 8260B** Analysis Date: **11/15/2017** SeqNo: **2834825**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	18.580	1.0	20.00	0	92.9	66	134	17.78	4.40	20	
1,2,4-Trimethylbenzene	19.600	1.0	20.00	0	98.0	74	132	18.98	3.21	20	
1,2-Dibromo-3-chloropropane	25.550	2.0	20.00	0	128	50	132	24.33	4.89	20	
1,2-Dibromoethane	23.930	1.0	20.00	0	120	80	121	22.79	4.88	20	
1,2-Dichlorobenzene	20.430	1.0	20.00	0	102	71	122	19.84	2.93	20	
1,2-Dichloroethane	19.110	0.50	20.00	0	95.6	69	132	19.34	1.20	20	
1,2-Dichloropropane	23.770	1.0	20.00	0	119	75	125	23.64	0.548	20	
1,3,5-Trimethylbenzene	18.770	1.0	20.00	0	93.8	74	131	18.61	0.856	20	
1,3-Dichlorobenzene	20.050	1.0	20.00	0	100	75	124	19.39	3.35	20	
1,3-Dichloropropane	23.300	1.0	20.00	0	116	73	126	22.44	3.76	20	
1,4-Dichlorobenzene	19.970	1.0	20.00	0	99.8	74	123	19.27	3.57	20	
2,2-Dichloropropane	24.300	1.0	20.00	0	122	69	137	24.80	2.04	20	
2-Butanone	279.280	10	200.0	0	140	49	136	275.0	1.53	20	S
2-Chlorotoluene	19.720	1.0	20.00	0	98.6	73	126	19.34	1.95	20	
4-Chlorotoluene	19.990	1.0	20.00	0	100	74	128	19.26	3.72	20	
4-Isopropyltoluene	18.300	1.0	20.00	0	91.5	73	130	18.08	1.21	20	
4-Methyl-2-pentanone	274.960	10	200.0	0	137	58	134	265.0	3.70	20	S
Acetone	235.840	10	200.0	14.01	111	40	135	231.5	1.87	20	
Acrolein	119.480	20	200.0	0	59.7	75	125	118.6	0.697	20	S
Acrylonitrile	245.020	20	200.0	0	123	75	125	236.9	3.35	20	
Benzene	20.870	1.0	20.00	0	104	81	122	20.67	0.963	20	
Bromobenzene	20.420	1.0	20.00	0	102	76	124	19.70	3.59	20	
Bromochloromethane	21.470	1.0	20.00	0	107	65	129	21.21	1.22	20	
Bromodichloromethane	21.460	1.0	20.00	0	107	76	121	21.60	0.650	20	
Bromoform	23.670	1.0	20.00	0	118	69	128	22.97	3.00	20	
Bromomethane	20.200	1.0	20.00	0	101	53	141	21.36	5.58	20	
Carbon disulfide	18.650	1.0	20.00	0	93.3	75	125	19.27	3.27	20	
Carbon tetrachloride	20.400	0.50	20.00	0	102	66	138	20.69	1.41	20	
Chlorobenzene	20.200	1.0	20.00	0	101	81	122	19.57	3.17	20	
Chloroethane	19.540	1.0	20.00	0	97.7	58	133	19.74	1.02	20	

Qualifiers:

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

Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N026968
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N026908-001AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **120255**
Client ID: **ZZZZZZ** Batch ID: **P17VW199** TestNo: **EPA 8260B** Analysis Date: **11/15/2017** SeqNo: **2834825**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	20.320	1.0	20.00	0.4000	99.6	69	128	20.19	0.642	20	
Chloromethane	23.670	1.0	20.00	0	118	56	131	23.79	0.506	20	
cis-1,2-Dichloroethene	20.890	1.0	20.00	0	104	72	126	21.43	2.55	20	
cis-1,3-Dichloropropene	21.250	1.0	20.00	0	106	69	131	21.14	0.519	20	
Di-isopropyl ether	22.450	1.0	20.00	0	112	70	130	22.13	1.44	20	
Dibromochloromethane	23.460	1.0	20.00	0	117	66	133	22.87	2.55	20	
Dibromomethane	21.890	1.0	20.00	0	109	76	125	21.28	2.83	20	
Dichlorodifluoromethane	19.950	1.0	20.00	0	99.8	53	153	20.27	1.59	20	
Ethyl tert-butyl ether	30.350	1.0	20.00	0	152	70	130	30.39	0.132	20	S
Ethylbenzene	18.780	1.0	20.00	0	93.9	73	127	18.63	0.802	20	
Freon-113	17.790	1.0	20.00	0	89.0	75	125	18.71	5.04	20	
Hexachlorobutadiene	15.220	1.0	20.00	0	76.1	67	131	15.10	0.792	20	
Isopropylbenzene	18.870	1.0	20.00	0	94.4	75	127	18.51	1.93	20	
m,p-Xylene	36.230	1.0	40.00	0	90.6	76	128	36.11	0.332	20	
Methylene chloride	24.300	2.0	20.00	0	122	63	137	24.27	0.124	20	
MTBE	25.240	1.0	20.00	0	126	65	123	25.05	0.756	20	S
n-Butylbenzene	18.960	1.0	20.00	0	94.8	69	137	18.31	3.49	20	
n-Propylbenzene	19.770	1.0	20.00	0	98.8	72	129	19.28	2.51	20	
Naphthalene	20.500	1.0	20.00	0	103	54	138	18.49	10.3	20	
o-Xylene	17.470	1.0	20.00	0	87.4	80	121	17.39	0.459	20	
sec-Butylbenzene	19.250	1.0	20.00	0	96.2	72	127	18.97	1.47	20	
Styrene	18.870	1.0	20.00	0	94.4	65	134	18.63	1.28	20	
Tert-amyl methyl ether	25.900	1.0	20.00	0	130	70	130	25.08	3.22	20	
Tert-Butanol	223.330	5.0	100.0	0	223	70	130	212.9	4.80	20	S
tert-Butylbenzene	18.190	1.0	20.00	0	91.0	70	129	18.18	0.0550	20	
Tetrachloroethene	18.490	1.0	20.00	0	92.5	66	128	18.97	2.56	20	
Toluene	19.220	2.0	20.00	0	96.1	77	122	19.14	0.417	20	
trans-1,2-Dichloroethene	20.560	1.0	20.00	0	103	63	137	20.78	1.06	20	
trans-1,3-Dichloropropene	24.570	1.0	20.00	0	123	59	135	24.03	2.22	20	
Trichloroethene	19.000	1.0	20.00	0	95.0	70	127	18.40	3.21	20	

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N026968
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N026908-001AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **120255**
Client ID: **ZZZZZZ** Batch ID: **P17VW199** TestNo: **EPA 8260B** Analysis Date: **11/15/2017** SeqNo: **2834825**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichlorofluoromethane	18.440	1.0	20.00	0	92.2	57	129	19.64	6.30	20	
Vinyl chloride	19.570	0.50	20.00	0	97.9	50	134	19.98	2.07	20	
Xylenes, Total	53.700	2.0	60.00	0	89.5	75	125	53.50	0.373	20	
Surr: 1,2-Dichloroethane-d4	27.140		25.00		109	72	119		0		
Surr: 4-Bromofluorobenzene	24.070		25.00		96.3	76	119		0		
Surr: Dibromofluoromethane	28.730		25.00		115	85	115		0		
Surr: Toluene-d8	25.340		25.00		101	81	120		0		

Qualifiers:

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

N026968

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

CHAIN OF CUSTODY RECORD

DATE: 11/8/17
PAGE: 1 of 1

Section A (Required Client Information:)		Section B (Required Project Information:)		Section C (Invoice Information:)		Section D (Sampler Information:)	
Company:	Kinder Morgan Energy Partners Attention: Steve Defibaugh	Report To:	Eric Davis	Attention:	Steve Defibaugh - Ref. AFE# 81195	Sampler Name:	James Dye
Address:	1100 Town & Country Road Orange, CA 92868	Copy To:	Steve Defibaugh	Company Name:	Kinder Morgan Energy Partners	Sampler Signature:	
Email To:	steve_defibaugh@kindermorgan.com eric.davis@ch2m.com	Purchase Order No.:		Address:	1100 Town & Country Road Orange, CA 92868	Sample Date:	11/8/17
Phone: 714-560-4802	Fax: 714-560-4801	Project Name:	SFPP Norwalk	ATL Project Manager:	Marlon Cartin		

Section E (Required Sample Information)

ITEM #	SAMPLE ID	LOCATION/ DESCRIPTION	MATRIX	SAMPLE TYPE (G=GRAB C=COMP)	SAMPLING DATE	SAMPLING TIME	TOTAL # OF CONTAINERS	SAMPLE TEMPERATURE (°F)	Analysis Test: Full VOCs + Oxygenates List (8260B)	TPH-gas (8015B)	TPH-d, TPH-oil, Total TPH (8015B)	Comments
	CONTAINER TYPE								V	V	A	
	# OF CONTAINERS								3	3	2	
	PRESERVATIVE								H	H	--	
	VOLUME (mL)								40	40	1000	
1	INF-11-08	INFLUENT	WW	G	11/8/17	1410	8	N/A	X	X	X	N026968 -01
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

Relinquished by (Signature and Printed Name):	Date / Time	Relinquished by (Signature and Printed Name):	Date / Time
	11/8/17 1420		11/8/17 2:50
Relinquished by (Signature and Printed Name):	Date / Time	Relinquished by (Signature and Printed Name):	Date / Time
	11/8/17 7:30	Leandro Rodriguez	11/9/17 8:31 am
Relinquished by (Signature and Printed Name):	Date / Time	Relinquished by (Signature and Printed Name):	Date / Time

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

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

Special Instruction:
4.3 °C IR#1
COC #: 2214

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

ASSET Laboratories

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

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

Cooler Received/Opened On:	11/9/2017	Workorder:	N026968
Rep sample Temp (Deg C):	4.3	IR Gun ID:	1

Temp Blank: ☑ Yes ☐ No

Carrier name: Golden State Overnight

Last 4 digits of Tracking No.: 2214 Packing Material Used: Bubble Wrap

Cooling process: ☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None

Sample Receipt Checklist

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

Comments:

Checklist Completed By: YR 11/9/2017

Reviewed By: 11/14/2017

ASSET Laboratories

WORK ORDER Summary

09-Nov-17

WorkOrder: N026968

Client ID: CH2HI03

Project: SFPP Norwalk **QC Level:** RTNE **Date Received:** 11/8/2017

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N026968-001A	INF-11-08	11/8/2017 2:10:00 PM	11/15/2017	Wastewater	EPA 8015B	GASOLINE RANGE ORGANICS BY GC/FID	☐	☐	☐	VW
			11/15/2017		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N026968-001B			11/15/2017		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: EXTRACTABLE FUELS	☐	☐	☐	WW
			11/15/2017		EPA 8015B	TPH EXTRACTABLE BY GC/FID	☐	☐	☐	WW
			11/15/2017		EPA 8015B	Total TPH	☐	☐	☐	WW
N026968-002A	FOLDER	11/15/2017	11/15/2017		Folder	Folder	☐	☐	☐	LAB
			11/15/2017		Folder	Folder	☐	☐	☐	LAB

GSO

800-322-5555
www.gso.com

Ship From
ASSET LABORATORIES
MOLKY BRAR
11110 ARTESIA BLVD. SUITE B
CERRITOS, CA 90703

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

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

Delivery Instructions:
HOLD FOR PICK-UP
Signature Type: NOT REQUIRED

Tracking #: 538312214

CPS

LVS **A**

LAS VEGAS

C89102A

74898694

Print Date: 11/8/2017 5:29 PM

Package 1 of 2

LABEL INSTRUCTIONS:

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

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all of the GSO service terms & conditions including, but not limited to; limits of liability, declared value conditions, and claim procedures which are available on our website at www.gso.com.

4.3E
DM#1

Air TECHNOLOGY Laboratories, Inc.

December 26, 2017

LA Cert #04140
EPA Methods TO3, TO14A, TO15, 25C/3C, RSK-175
TX Cert T104704450-14-6
EPA Methods TO14A, TO15
UT Cert CA0133332015-3
EPA Methods TO3, TO14A, TO15, RSK-175

CH2M Hill
ATTN: Eric Davis
1000 Wilshire Blvd., Suite 2100
Los Angeles, CA 90017

LABORATORY TEST RESULTS

Project Reference: SFPP Norwalk
Lab Number: I121104-01/04

Enclosed are results for sample(s) received 12/11/17 by Air Technology Laboratories. Samples were received intact. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

- Unless otherwise noted in the report, sample analyses were performed within method performance criteria and meet all requirements of the NELAC Standards.
- The enclosed results relate only to the sample(s).

Preliminary results were e-mailed to Eric Davis and Vladimir Carino 12/26/17.

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Note: The cover letter is an integral part of this analytical report.

I121104-01/04

Air Technology Laboratories, Inc.
18501 Gale Ave. #130
City of Industry, CA 91748
Tel: 626-964-4032
Joann De La Ossa (JDeLaOssa@airtechlabs.com)

CHAIN OF CUSTODY RECORD

DATE: 12/8/17
PAGE: 1 of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Section D Sampler Information:	
Company:	CH2M HILL Attention: Eric Davis	Report To:	Eric Davis (eric.davis@ch2m.com)	Attention:	Eric Davis	Sampler Name:	James Dye
Address:	1000 Wilshire Blvd. Suite 2100 Los Angeles, CA 90017	Copy To:	Vladimir Carino (vcarino@ch2m.com)	Company Name:	CH2M	Sampler Signature:	
Email To:	eric.davis@ch2m.com vcarino@ch2m.com	Purchase Order No.:		Address:	1000 Wilshire Blvd. Suite 2100 Los Angeles, CA 90017	Sample Date:	12/8/17
Phone:	404-323-1600 Fax:	Project Name:	SFPP Norwalk	Project Manager:	Joann De La Ossa		

Section E
Required Sample Information

ITEM #	SAMPLE ID	LOCATION/ DESCRIPTION	MATRIX	SAMPLE TYPE (G=GRAB C=COMP)	SAMPLING DATE	SAMPLING TIME	TOTAL # OF CONTAINERS	Analysis Test	TO-3 (Total VOCs as Hexane)	TO-15 (VOCs, Target Analytes)	ASTM-D 1946 (O2/Argon, CO2, CH4, N2)	Comments
CONTAINER TYPE												
# OF CONTAINERS												
PRESERVATIVE												
VOLUME (mL)												
01	1	VEFF-12-08	Effluent (stack)	Vapor	G	12/8/17	0900	1		X	X		Individually Certified 6-Liter SUMMA
02	2	VEFF-12-08D	Effluent (stack) (duplicate)	Vapor	G	12/8/17	0900	1		X	X		Individually Certified 6-Liter SUMMA
03	3	VPOST-12-08	Influent (post-dilution)	Vapor	G	12/8/17	1000	1		X	X		Individually Certified 1-Liter SUMMA
04	4	VINF-12-08	Influent (pre-dilution)	Vapor	G	12/8/17	1015	1		X	X	X	Batch Certified 1-Liter Summa
	5												Target analytes includes Historical VOCs and remaining ATLI list per subcontract
	6												
	7												
	8												
	9												
	10												
	11												
	12												

Relinquished by (Signature and Printed Name):	Date / Time	Relinquished by (Signature and Printed Name):	Date / Time
	12/8/17 1530	FEDEX	12/8/17 1530
Relinquished by (Signature and Printed Name): FEDEX	Date / Time	Relinquished by (Signature and Printed Name):	Date / Time 12/11/17 1300
Relinquished by (Signature and Printed Name):	Date / Time	Relinquished by (Signature and Printed Name):	Date / Time

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

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

Special Instruction:

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

Client: CH2M Hill
Attn: Eric Davis
Project Name: SFPP Norwalk
Project No.: NA
Date Received: 12/11/17
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	I121104-01			I121104-02			I121104-03			I121104-04		
Client Sample I.D.:	VEFF-12-08			VEFF-12-08D			VPOST-12-08			VINF-12-08		
Date/Time Sampled:	12/8/17 9:00			12/8/17 9:00			12/8/17 10:00			12/8/17 10:15		
Date/Time Analyzed:	12/20/17 9:16			12/20/17 9:54			12/20/17 10:33			12/20/17 11:12		
QC Batch No.:	171220MS2A1			171220MS2A1			171220MS2A1			171220MS2A1		
Analyst Initials:	DT			DT			DT			DT		
Dilution Factor:	1.9			1.9			67			81		
ANALYTE	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv
Dichlorodifluoromethane (12)	ND	0.0019	0.00030	ND	0.0019	0.00030	ND	0.067	0.010	ND	0.081	0.012
Chloromethane	ND	0.0039	0.00043	ND	0.0039	0.00043	ND	0.13	0.015	ND	0.16	0.018
1,2-Cl-1,1,2,2-F ethane (114)	ND	0.0019	0.00039	ND	0.0019	0.00039	ND	0.067	0.014	ND	0.081	0.016
Vinyl Chloride	ND	0.0019	0.00032	ND	0.0019	0.00032	ND	0.067	0.011	ND	0.081	0.013
Bromomethane	ND	0.0019	0.00057	ND	0.0019	0.00057	ND	0.067	0.020	ND	0.081	0.024
Chloroethane	ND	0.0019	0.0016	ND	0.0019	0.0016	ND	0.067	0.057	ND	0.081	0.068
Trichlorofluoromethane (11)	ND	0.0019	0.00042	ND	0.0019	0.00042	ND	0.067	0.015	ND	0.081	0.017
1,1-Dichloroethene	ND	0.0019	0.00044	ND	0.0019	0.00044	ND	0.067	0.015	ND	0.081	0.018
Carbon Disulfide	0.050	0.0097	0.00047	0.0055 J	0.0097	0.00047	0.043 J	0.34	0.016	ND	0.40	0.019
1,1,2-Cl 1,2,2-F ethane (113)	ND	0.0019	0.00052	ND	0.0019	0.00052	ND	0.067	0.018	ND	0.081	0.022
Acetone	0.014	0.0097	0.00056	0.012	0.0097	0.00056	ND	0.34	0.019	ND	0.40	0.023
Methylene Chloride	ND	0.0019	0.00055	ND	0.0019	0.00055	ND	0.067	0.019	ND	0.081	0.023
t-1,2-Dichloroethene	ND	0.0019	0.00058	ND	0.0019	0.00058	ND	0.067	0.020	ND	0.081	0.024
1,1-Dichloroethane	ND	0.0019	0.00026	ND	0.0019	0.00026	ND	0.067	0.0092	ND	0.081	0.011
c-1,2-Dichloroethene	ND	0.0019	0.00038	ND	0.0019	0.00038	ND	0.067	0.013	ND	0.081	0.016
2-Butanone	0.0057	0.0019	0.0012	0.0058	0.0019	0.0012	ND	0.067	0.042	ND	0.081	0.050
t-Butyl Methyl Ether (MTBE)	0.0021	0.0019	0.00043	0.0026	0.0019	0.00043	0.57	0.067	0.015	ND	0.081	0.018
Chloroform	ND	0.0019	0.00027	ND	0.0019	0.00027	ND	0.067	0.0094	ND	0.081	0.011
1,1,1-Trichloroethane	ND	0.0019	0.00019	ND	0.0019	0.00019	ND	0.067	0.0068	ND	0.081	0.0081
Carbon Tetrachloride	ND	0.0019	0.00034	ND	0.0019	0.00034	ND	0.067	0.012	ND	0.081	0.014
Benzene	0.017	0.0019	0.00019	0.017	0.0019	0.00019	2.8	0.067	0.0065	3.6	0.081	0.0078
1,2-Dichloroethane	ND	0.0019	0.00014	ND	0.0019	0.00014	ND	0.067	0.0050	ND	0.081	0.0060
Trichloroethene	ND	0.0019	0.00027	ND	0.0019	0.00027	ND	0.067	0.0095	ND	0.081	0.011
1,2-Dichloropropane	ND	0.0019	0.00035	ND	0.0019	0.00035	ND	0.067	0.012	ND	0.081	0.015
Bromodichloromethane	ND	0.0019	0.00012	ND	0.0019	0.00012	ND	0.067	0.0041	ND	0.081	0.0049
c-1,3-Dichloropropene	ND	0.0019	0.00023	ND	0.0019	0.00023	ND	0.067	0.0081	ND	0.081	0.0097
4-Methyl-2-Pentanone	ND	0.0019	0.00013	ND	0.0019	0.00013	ND	0.067	0.0045	ND	0.081	0.0054
Toluene	0.017	0.0019	0.00015	0.017	0.0019	0.00015	2.1	0.067	0.0054	3.0	0.081	0.0064
t-1,3-Dichloropropene	ND	0.0019	0.00020	ND	0.0019	0.00020	ND	0.067	0.0070	ND	0.081	0.0083
1,1,2-Trichloroethane	ND	0.0019	0.00031	ND	0.0019	0.00031	ND	0.067	0.011	ND	0.081	0.013
1,3-Dichloropropane	ND	0.0019	0.000097	ND	0.0019	0.000097	ND	0.067	0.0033	ND	0.081	0.0040
Tetrachloroethene	ND	0.0019	0.00023	ND	0.0019	0.00023	ND	0.067	0.0081	ND	0.081	0.0097
2-Hexanone	ND	0.0019	0.00040	ND	0.0019	0.00040	ND	0.067	0.014	ND	0.081	0.017
Dibromochloromethane	ND	0.0019	0.00035	ND	0.0019	0.00035	ND	0.067	0.012	ND	0.081	0.015
1,2-Dibromoethane	ND	0.0019	0.00018	ND	0.0019	0.00018	ND	0.067	0.0061	ND	0.081	0.0074
Chlorobenzene	ND	0.0019	0.00015	ND	0.0019	0.00015	ND	0.067	0.0052	ND	0.081	0.0063
Ethylbenzene	0.0024	0.0019	0.00011	0.0024	0.0019	0.00011	0.26	0.067	0.0039	0.35	0.081	0.0046
p,&m-Xylene	0.019	0.0019	0.00022	0.020	0.0019	0.00022	1.7	0.067	0.0076	2.5	0.081	0.0091
o-Xylene	0.0087	0.0019	0.00024	0.0093	0.0019	0.00024	0.86	0.067	0.0082	1.2	0.081	0.0098

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

Client: CH2M Hill
Attn: Eric Davis
Project Name: SFPP Norwalk
Project No.: NA
Date Received: 12/11/17
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	I121104-01			I121104-02			I121104-03			I121104-04		
Client Sample I.D.:	VEFF-12-08			VEFF-12-08D			VPOST-12-08			VINF-12-08		
Date/Time Sampled:	12/8/17 9:00			12/8/17 9:00			12/8/17 10:00			12/8/17 10:15		
Date/Time Analyzed:	12/20/17 9:16			12/20/17 9:54			12/20/17 10:33			12/20/17 11:12		
QC Batch No.:	171220MS2A1			171220MS2A1			171220MS2A1			171220MS2A1		
Analyst Initials:	DT			DT			DT			DT		
Dilution Factor:	1.9			1.9			67			81		
ANALYTE	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv
Styrene	0.00053 J	0.0019	0.00025	0.00056 J	0.0019	0.00025	0.039 J	0.067	0.0087	0.043 J	0.081	0.010
Bromoform	ND	0.0019	0.00011	ND	0.0019	0.00011	ND	0.067	0.0038	ND	0.081	0.0045
Isopropyl benzene	0.00066 J	0.0019	0.00020	0.00043 J	0.0019	0.00020	0.17	0.067	0.0070	0.026 J	0.081	0.0084
1,1,2,2-Tetrachloroethane	ND	0.0039	0.00012	ND	0.0039	0.00012	ND	0.13	0.0041	ND	0.16	0.0049
Benzyl Chloride	ND	0.0019	0.00036	ND	0.0019	0.00036	ND	0.067	0.012	ND	0.081	0.015
1,2,3-Trichloropropane	ND	0.0019	0.00052	ND	0.0019	0.00052	ND	0.067	0.018	ND	0.081	0.022
n-Propyl Benzene	0.00050 J	0.0019	0.00011	ND	0.0019	0.00011	0.031 J	0.067	0.0039	0.045 J	0.081	0.0047
4-Ethyl Toluene	0.0053	0.0019	0.00012	0.0055	0.0019	0.00012	0.32	0.067	0.0043	0.46	0.081	0.0051
1,3,5-Trimethylbenzene	0.0029 J	0.0039	0.00034	0.0030 J	0.0039	0.00034	0.19	0.13	0.012	0.25	0.16	0.014
4-Chlorotoluene	ND	0.0019	0.00023	ND	0.0019	0.00023	ND	0.067	0.0080	ND	0.081	0.0096
tert-Butylbenzene	0.00056 J	0.0019	0.00018	ND	0.0019	0.00018	ND	0.067	0.0061	ND	0.081	0.0073
1,2,4-Trimethylbenzene	0.0043	0.0039	0.00022	0.0042	0.0039	0.00022	0.18	0.13	0.0076	0.25	0.16	0.0092
sec-Butylbenzene	ND	0.0019	0.00019	ND	0.0019	0.00019	ND	0.067	0.0065	ND	0.081	0.0078
p-Isopropyltoluene	0.00027 J	0.0019	0.00025	0.00045 J	0.0019	0.00025	0.012 J	0.067	0.0088	0.022 J	0.081	0.011
1,3-Dichlorobenzene	0.00032 J	0.0019	0.00024	0.00024 J	0.0019	0.00024	ND	0.067	0.0082	ND	0.081	0.0098
1,4-Dichlorobenzene	ND	0.0019	0.00028	ND	0.0019	0.00028	ND	0.067	0.0098	ND	0.081	0.012
n-Butylbenzene	0.00047 J	0.0019	0.00014	ND	0.0019	0.00014	0.013 J	0.067	0.0049	ND	0.081	0.0059
1,2-Dichlorobenzene	ND	0.0019	0.00024	ND	0.0019	0.00024	ND	0.067	0.0084	ND	0.081	0.010
1,2,4-Trichlorobenzene	ND	0.0039	0.00032	ND	0.0039	0.00032	ND	0.13	0.011	ND	0.16	0.013
Hexachlorobutadiene	ND	0.0019	0.00011	ND	0.0019	0.00011	ND	0.067	0.0040	ND	0.081	0.0047
t-Butanol	ND	0.0097	0.00037	ND	0.0097	0.00037	ND	0.34	0.013	ND	0.40	0.016
n-Hexane	0.035	0.0097	0.00026	0.037	0.0097	0.00026	7.6	0.34	0.0091	9.4	0.40	0.011
Isopropyl ether	ND	0.0097	0.00022	ND	0.0097	0.00022	ND	0.34	0.0075	ND	0.40	0.0090
t-Butyl ethyl ether	ND	0.0097	0.00039	ND	0.0097	0.00039	ND	0.34	0.013	ND	0.40	0.016
2,2-Dichloropropane	ND	0.0097	0.00018	ND	0.0097	0.00018	ND	0.34	0.0064	ND	0.40	0.0077
t-Amyl methyl ether	ND	0.0097	0.00014	ND	0.0097	0.00014	ND	0.34	0.0048	ND	0.40	0.0057
1,4-Dioxane	ND	0.0097	0.00034	ND	0.0097	0.00034	ND	0.34	0.012	ND	0.40	0.014
Naphthalene	ND	0.0097	0.00075	ND	0.0097	0.00075	ND	0.34	0.026	ND	0.40	0.031
1,2,3-Trichlorobenzene (TIC)	ND	--	--	ND	--	--	ND	--	--	ND	--	--

MDL = Method Detection Limit
ND= Not Detected (below MDL)
RL = Reporting Limit
J = Trace amount. Analyte concentration between RL and MDL.

Reviewed/Approved By: _____ Date 12-22-17

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

Client: CH2M Hill
Attn: Eric Davis
Project Name: SFPP Norwalk
Project No.: NA
Date Received: 12/11/17
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	METHOD BLANK		
Client Sample I.D.:	-		
Date/Time Sampled:	-		
Date/Time Analyzed:	12/20/17 5:04		
QC Batch No.:	171220MS2A1		
Analyst Initials:	DT		
Dilution Factor:	0.20		

ANALYTE	Result ppmv	RL ppmv	MDL ppmv
Dichlorodifluoromethane (12)	ND	0.00020	0.000031
Chloromethane	ND	0.00040	0.000044
1,2-Cl-1,1,2,2-F ethane (114)	ND	0.00020	0.000040
Vinyl Chloride	ND	0.00020	0.000032
Bromomethane	ND	0.00020	0.000059
Chloroethane	ND	0.00020	0.00017
Trichlorofluoromethane (11)	ND	0.00020	0.000043
1,1-Dichloroethene	ND	0.00020	0.000045
Carbon Disulfide	ND	0.0010	0.000048
1,1,2-Cl 1,2,2-F ethane (113)	ND	0.00020	0.000054
Acetone	ND	0.0010	0.000058
Methylene Chloride	ND	0.00020	0.000057
t-1,2-Dichloroethene	ND	0.00020	0.000060
1,1-Dichloroethane	ND	0.00020	0.000027
c-1,2-Dichloroethene	ND	0.00020	0.000039
2-Butanone	ND	0.00020	0.00012
t-Butyl Methyl Ether (MTBE)	ND	0.00020	0.000045
Chloroform	ND	0.00020	0.000028
1,1,1-Trichloroethane	ND	0.00020	0.000020
Carbon Tetrachloride	ND	0.00020	0.000035
Benzene	ND	0.00020	0.000019
1,2-Dichloroethane	ND	0.00020	0.000015
Trichloroethene	ND	0.00020	0.000028
1,2-Dichloropropane	ND	0.00020	0.000036
Bromodichloromethane	ND	0.00020	0.000012
c-1,3-Dichloropropene	ND	0.00020	0.000024
4-Methyl-2-Pentanone	ND	0.00020	0.000013
Toluene	ND	0.00020	0.000016
t-1,3-Dichloropropene	ND	0.00020	0.000021
1,1,2-Trichloroethane	ND	0.00020	0.000032
1,3-Dichloropropane	ND	0.00020	0.0000099
Tetrachloroethene	ND	0.00020	0.000024
2-Hexanone	ND	0.00020	0.000041
Dibromochloromethane	ND	0.00020	0.000036
1,2-Dibromoethane	ND	0.00020	0.000018
Chlorobenzene	ND	0.00020	0.000016
Ethylbenzene	ND	0.00020	0.000011
p,&m-Xylene	ND	0.00020	0.000023
o-Xylene	ND	0.00020	0.000024

18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

Client: CH2M Hill
Attn: Eric Davis
Project Name: SFPP Norwalk
Project No.: NA
Date Received: 12/11/17
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	METHOD BLANK
Client Sample I.D.:	-
Date/Time Sampled:	-
Date/Time Analyzed:	12/20/17 5:04
QC Batch No.:	171220MS2A1
Analyst Initials:	DT
Dilution Factor:	0.20

ANALYTE	Result ppmv	RL ppmv	MDL ppmv
Styrene	ND	0.00020	0.000026
Bromoform	ND	0.00020	0.000011
Isopropyl benzene	ND	0.00020	0.000021
1,1,2,2-Tetrachloroethane	ND	0.00040	0.000012
Benzyl Chloride	ND	0.00020	0.000037
1,2,3-Trichloropropane	ND	0.00020	0.000054
n-Propyl Benzene	ND	0.00020	0.000012
4-Ethyl Toluene	ND	0.00020	0.000013
1,3,5-Trimethylbenzene	ND	0.00040	0.000035
4-Chlorotoluene	ND	0.00020	0.000024
tert-Butylbenzene	ND	0.00020	0.000018
1,2,4-Trimethylbenzene	ND	0.00040	0.000023
sec-Butylbenzene	ND	0.00020	0.000019
p-Isopropyltoluene	ND	0.00020	0.000026
1,3-Dichlorobenzene	ND	0.00020	0.000024
1,4-Dichlorobenzene	ND	0.00020	0.000029
n-Butylbenzene	ND	0.00020	0.000015
1,2-Dichlorobenzene	ND	0.00020	0.000025
1,2,4-Trichlorobenzene	ND	0.00040	0.000033
Hexachlorobutadiene	ND	0.00020	0.000012
t-Butanol	ND	0.0010	0.000038
n-Hexane	ND	0.0010	0.000027
Isopropyl ether	ND	0.0010	0.000022
t-Butyl ethyl ether	ND	0.0010	0.000040
2,2-Dichloropropane	ND	0.0010	0.000019
t-Amyl methyl ether	ND	0.0010	0.000014
1,4-Dioxane	ND	0.0010	0.000035
Naphthalene	ND	0.0010	0.000077
1,2,3-Trichlorobenzene (TIC)	ND	--	--

MDL = Method Detection Limit
ND= Not Detected (below MDL)
RL = Reporting Limit
J = Trace amount. Analyte concentration between RL and MDL.

Reviewed/Approved By: _____ Date 12-22-17
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 171220MS2A1

Matrix: Air

EPA Method TO-14/TO-15

Lab No:	Method Blank		LCS		LCSD						
Date/Time Analyzed:	12/20/17 5:04		12/20/17 3:42		12/20/17 4:20						
Data File ID:	20DEC007.D		20DEC005.D		20DEC006.D						
Analyst Initials:	DT		DT		DT						
Dilution Factor:	0.2		1.0		1.0			Limits			
ANALYTE	Result ppbv	Spike Amount	Result ppbv	% Rec	Result ppbv	% Rec	RPD	Low %Rec	High %Rec	Max. RPD	Pass/ Fail
1,1-Dichloroethene	0.0	10.0	9.9	99	9.9	99	0.3	70	130	30	Pass
Methylene Chloride	0.0	10.0	9.4	94	9.7	97	2.8	70	130	30	Pass
Trichloroethene	0.0	10.0	10.3	103	9.9	99	4.2	70	130	30	Pass
Toluene	0.0	10.0	8.6	86	8.6	86	0.9	70	130	30	Pass
1,1,2,2-Tetrachloroethane	0.0	10.0	8.8	88	8.8	88	0.2	70	130	30	Pass

RPD = Relative Percent Difference

Reviewed/Approved By: _____ Date: 12-22-17

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

Client: CH2M Hill
Attn: Eric Davis
Project Name: SFPP Norwalk
Project No.: NA
Date Received: 12/11/17
Matrix: Air
Reporting Units: ppmv

EPA METHOD TO3

Lab No.:	I121104-01			I121104-02			I121104-03			I121104-04		
Client Sample I.D.:	VEFF-12-08			VEFF-12-08D			VPOST-12-08			VINF-12-08		
Date/Time Sampled:	12/8/17 9:00			12/8/17 9:00			12/8/17 10:00			12/8/17 10:15		
Date/Time Analyzed:	12/14/17 9:21			12/14/17 9:43			12/14/17 10:06			12/14/17 10:28		
QC Batch No.:	171214GC11A1			171214GC11A1			171214GC11A1			171214GC11A1		
Analyst Initials:	AS			AS			AS			AS		
Dilution Factor:	1.9			1.9			1.7			2.0		
ANALYTE	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv
TVOC as Hexane	0.74 J	1.9	0.34	0.78 J	1.9	0.34	200	1.7	0.30	250	2.0	0.36

MDL = Method Detection Limit
ND= Not Detected (below MDL)
RL = Reporting Limit
J = Trace amount. Analyte concentration between RL and MDL.

Reviewed/Approved By: _____ Date 12-22-17
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

QC Batch No: 171214GC11A1
Matrix: Air
Reporting Units: ppmv

EPA METHOD TO3
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	12/14/17 8:59			12/14/17 8:28		12/14/17 8:39					
Analyst Initials:	AS			AS		AS					
Dilution Factor:	1.0			1.0		1.0					
ANALYTE	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	% Rec.	Result ppmv	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
TVOC as Hexane	ND	1.0	0.18	4.80	96	4.87	97	1.4	70	130	25

MDL = Method Detection Limit
ND= Not Detected (below MDL)
RL = Reporting Limit
J = Trace amount. Analyte concentration between RL and MDL.

Reviewed/Approved By: _____ Date 12-22-17

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

Client: CH2M Hill
Attn: Eric Davis
Project Name: SFPP Norwalk
Project No.: NA
Date Received: 12/11/17
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	I121104-04		
Client Sample I.D.:	VINF-12-08		
Date/Time Sampled:	12/8/17 10:15		
Date/Time Analyzed:	12/14/17 9:33		
QC Batch No.:	171213GC8A1		
Analyst Initials:	AS		
Dilution Factor:	2.0		

ANALYTE	Result % v/v	RL % v/v	MDL % v/v
Carbon Dioxide	0.77	0.020	0.00086
Oxygen/Argon	21	1.0	0.074
Nitrogen	78	2.0	0.29
Methane	0.0040	0.0020	0.000092

Results normalized including non-methane hydrocarbons
MDL = Method Detection Limit
ND= Not Detected (below MDL)
RL = Reporting Limit
J = Trace amount. Analyte concentration between RL and MDL.

Reviewed/Approved By: _____ Date 12-22-17
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

QC Batch No: 171213GC8A1
Matrix: Air
Reporting Units: % v/v

ASTM D1946
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK				LCS		LCSD					
Date Analyzed:	12/14/17 8:17				12/13/17 13:56		12/13/17 14:11					
Analyst Initials:	AS				AS		AS					
Dilution Factor:	1.0				1.0		1.0			Limits		
ANALYTE	Result % v/v	RL % v/v	MDL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
Carbon Dioxide	ND	0.010	0.00042	10	8.93	89	8.96	89	0.4	70	130	30
Oxygen/Argon	0.088 J	0.50	0.037	15	16.4	110	16.5	111	0.7	70	130	30
Nitrogen	ND	1.0	0.14	70	72.8	104	73.3	105	0.7	70	130	30
Methane	0.00011 J	0.0010	0.000046	0.10	0.103	103	0.104	104	0.8	70	130	30

MDL = Method Detection Limit
ND = Not Detected (below RL)
ND= Not Detected (below MDL)
RL = Reporting Limit
J = Trace amount. Analyte concentration between RL and MDL.

Reviewed/Approved By: _____ Date 12-22-17
Mark Jol Mark Johnson
Operatio Operations Manager

The cover letter is an integral part of this analytical report

January 08, 2018

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

Workorder No.: N027591

RE: SFPP Norwalk

Attention: Eric Davis

Enclosed are the results for sample(s) received on December 15, 2017 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.

This is an amended report. Please disregard all previous documentation that corresponds to the page(s) enclosed.

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,

Quennie Manimtim
Laboratory Director

CLIENT: CH2MHill
Project: SFPP Norwalk
Lab Order: N027591

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

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

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

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

Samples were analyzed within method holding time.

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

Analytical Comments for EPA 8015B_GRO:

Matrix Spike (MS) is outside recovery criteria for surrogate in N027549-003AMS possibly due to matrix interference. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comment for EPA 8260B:

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

ASSET Laboratories

Date: *08-Jan-18*

CLIENT: CH2MHill
Project: SFPP Norwalk
Lab Order: N027591
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N027591-001A	INF-12-15	Wastewater	12/15/2017 1:00:00 PM	12/15/2017	12/28/2017
N027591-001B	INF-12-15	Wastewater	12/15/2017 1:00:00 PM	12/15/2017	12/28/2017

CLIENT: CH2MHill
Lab Order: N027591
Project: SFPP Norwalk
Lab ID: N027591-001

Client Sample ID: INF-12-15
Collection Date: 12/15/2017 1:00:00 PM
Matrix: WASTEWATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: **NV00922-MS5_171226A** QC Batch: **P17VW242** PrepDate: Analyst: **QBM**

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.38	1.0		ug/L	1	12/26/2017 10:09 PM
1,1,1-Trichloroethane	ND	0.38	1.0		ug/L	1	12/26/2017 10:09 PM
1,1,2,2-Tetrachloroethane	ND	0.34	1.0		ug/L	1	12/26/2017 10:09 PM
1,1,2-Trichloroethane	ND	0.29	1.0		ug/L	1	12/26/2017 10:09 PM
1,1-Dichloroethane	ND	0.45	0.50		ug/L	1	12/26/2017 10:09 PM
1,1-Dichloroethene	ND	0.34	1.0		ug/L	1	12/26/2017 10:09 PM
1,1-Dichloropropene	ND	0.32	1.0		ug/L	1	12/26/2017 10:09 PM
1,2,3-Trichlorobenzene	ND	0.28	1.0		ug/L	1	12/26/2017 10:09 PM
1,2,3-Trichloropropane	ND	0.26	1.0		ug/L	1	12/26/2017 10:09 PM
1,2,4-Trichlorobenzene	ND	0.21	1.0		ug/L	1	12/26/2017 10:09 PM
1,2,4-Trimethylbenzene	10	0.33	1.0		ug/L	1	12/26/2017 10:09 PM
1,2-Dibromo-3-chloropropane	ND	0.67	2.0		ug/L	1	12/26/2017 10:09 PM
1,2-Dibromoethane	ND	0.31	1.0		ug/L	1	12/26/2017 10:09 PM
1,2-Dichlorobenzene	ND	0.29	1.0		ug/L	1	12/26/2017 10:09 PM
1,2-Dichloroethane	ND	0.29	0.50		ug/L	1	12/26/2017 10:09 PM
1,2-Dichloropropane	ND	0.24	1.0		ug/L	1	12/26/2017 10:09 PM
1,3,5-Trimethylbenzene	39	0.27	1.0		ug/L	1	12/26/2017 10:09 PM
1,3-Dichlorobenzene	ND	0.28	1.0		ug/L	1	12/26/2017 10:09 PM
1,3-Dichloropropane	ND	0.32	1.0		ug/L	1	12/26/2017 10:09 PM
1,4-Dichlorobenzene	ND	0.32	1.0		ug/L	1	12/26/2017 10:09 PM
2,2-Dichloropropane	ND	0.32	1.0		ug/L	1	12/26/2017 10:09 PM
2-Butanone	ND	4.9	10		ug/L	1	12/26/2017 10:09 PM
2-Chlorotoluene	ND	0.28	1.0		ug/L	1	12/26/2017 10:09 PM
4-Chlorotoluene	ND	0.30	1.0		ug/L	1	12/26/2017 10:09 PM
4-Isopropyltoluene	1.5	0.33	1.0		ug/L	1	12/26/2017 10:09 PM
4-Methyl-2-pentanone	ND	3.2	10		ug/L	1	12/26/2017 10:09 PM
Acetone	16	9.7	10		ug/L	1	12/26/2017 10:09 PM
Benzene	6.0	0.34	1.0		ug/L	1	12/26/2017 10:09 PM
Bromobenzene	ND	0.25	1.0		ug/L	1	12/26/2017 10:09 PM
Bromochloromethane	ND	0.41	1.0		ug/L	1	12/26/2017 10:09 PM
Bromodichloromethane	ND	0.38	1.0		ug/L	1	12/26/2017 10:09 PM
Bromoform	ND	0.39	1.0		ug/L	1	12/26/2017 10:09 PM
Bromomethane	ND	0.79	1.0		ug/L	1	12/26/2017 10:09 PM
Carbon disulfide	ND	0.81	1.0		ug/L	1	12/26/2017 10:09 PM
Carbon tetrachloride	ND	0.40	0.50		ug/L	1	12/26/2017 10:09 PM
Chlorobenzene	ND	0.30	1.0		ug/L	1	12/26/2017 10:09 PM

Qualifiers:

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

CLIENT: CH2MHill
Lab Order: N027591
Project: SFPP Norwalk
Lab ID: N027591-001

Client Sample ID: INF-12-15
Collection Date: 12/15/2017 1:00:00 PM
Matrix: WASTEWATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: **NV00922-MS5_171226A** QC Batch: **P17VW242** PrepDate: Analyst: **QBM**

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
Chloroethane	ND	0.97	1.0		ug/L	1	12/26/2017 10:09 PM
Chloroform	ND	0.27	1.0		ug/L	1	12/26/2017 10:09 PM
Chloromethane	ND	0.36	1.0		ug/L	1	12/26/2017 10:09 PM
cis-1,2-Dichloroethene	ND	0.32	1.0		ug/L	1	12/26/2017 10:09 PM
cis-1,3-Dichloropropene	ND	0.28	1.0		ug/L	1	12/26/2017 10:09 PM
Di-isopropyl ether	ND	0.079	1.0		ug/L	1	12/26/2017 10:09 PM
Dibromochloromethane	ND	0.41	1.0		ug/L	1	12/26/2017 10:09 PM
Dibromomethane	ND	0.28	1.0		ug/L	1	12/26/2017 10:09 PM
Dichlorodifluoromethane	ND	0.29	1.0		ug/L	1	12/26/2017 10:09 PM
Ethyl tert-butyl ether	ND	0.30	1.0		ug/L	1	12/26/2017 10:09 PM
Ethylbenzene	1.6	0.31	1.0		ug/L	1	12/26/2017 10:09 PM
Freon-113	ND	0.35	1.0		ug/L	1	12/26/2017 10:09 PM
Hexachlorobutadiene	ND	0.30	1.0		ug/L	1	12/26/2017 10:09 PM
Isopropylbenzene	0.59	0.26	1.0	J	ug/L	1	12/26/2017 10:09 PM
m,p-Xylene	34	0.23	1.0		ug/L	1	12/26/2017 10:09 PM
Methylene chloride	ND	1.9	2.0		ug/L	1	12/26/2017 10:09 PM
MTBE	120	3.4	10		ug/L	10	12/26/2017 10:32 PM
n-Butylbenzene	ND	0.34	1.0		ug/L	1	12/26/2017 10:09 PM
n-Propylbenzene	ND	0.32	1.0		ug/L	1	12/26/2017 10:09 PM
Naphthalene	5.8	0.42	1.0		ug/L	1	12/26/2017 10:09 PM
o-Xylene	19	0.31	1.0		ug/L	1	12/26/2017 10:09 PM
sec-Butylbenzene	0.95	0.32	1.0	J	ug/L	1	12/26/2017 10:09 PM
Styrene	ND	0.21	1.0		ug/L	1	12/26/2017 10:09 PM
Tert-amyl methyl ether	ND	0.26	1.0		ug/L	1	12/26/2017 10:09 PM
Tert-Butanol	200	2.4	5.0		ug/L	1	12/26/2017 10:09 PM
tert-Butylbenzene	ND	0.28	1.0		ug/L	1	12/26/2017 10:09 PM
Tetrachloroethene	ND	0.30	1.0		ug/L	1	12/26/2017 10:09 PM
Toluene	5.9	0.46	2.0		ug/L	1	12/26/2017 10:09 PM
trans-1,2-Dichloroethene	ND	0.40	1.0		ug/L	1	12/26/2017 10:09 PM
trans-1,3-Dichloropropene	ND	0.25	1.0		ug/L	1	12/26/2017 10:09 PM
Trichloroethene	ND	0.37	1.0		ug/L	1	12/26/2017 10:09 PM
Trichlorofluoromethane	ND	0.37	1.0		ug/L	1	12/26/2017 10:09 PM
Vinyl chloride	ND	0.29	0.50		ug/L	1	12/26/2017 10:09 PM
Xylenes, Total	52	1.5	2.0		ug/L	1	12/26/2017 10:09 PM
Surr: 1,2-Dichloroethane-d4	107	0	72-119		%REC	10	12/26/2017 10:32 PM
Surr: 1,2-Dichloroethane-d4	106	0	72-119		%REC	1	12/26/2017 10:09 PM

Qualifiers:

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

CLIENT: CH2MHill
Lab Order: N027591
Project: SFPP Norwalk
Lab ID: N027591-001

Client Sample ID: INF-12-15
Collection Date: 12/15/2017 1:00:00 PM
Matrix: WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **NV00922-MS5_171226A**	QC Batch: **P17VW242**			PrepDate:			Analyst: **QBM**
Surr: 4-Bromofluorobenzene	107	0	76-119		%REC	10	12/26/2017 10:32 PM
Surr: 4-Bromofluorobenzene	110	0	76-119		%REC	1	12/26/2017 10:09 PM
Surr: Dibromofluoromethane	105	0	85-115		%REC	1	12/26/2017 10:09 PM
Surr: Dibromofluoromethane	105	0	85-115		%REC	10	12/26/2017 10:32 PM
Surr: Toluene-d8	105	0	81-120		%REC	10	12/26/2017 10:32 PM
Surr: Toluene-d8	108	0	81-120		%REC	1	12/26/2017 10:09 PM
TPH EXTRACTABLE BY GC/FID							
	EPA 3510C		**EPA 8015B**				
RunID: **NV00922-GC3_171218B**	QC Batch: **66102**			PrepDate:	**12/18/2017**		Analyst: **SS**
TPH-Diesel (C13-C22)	2300	16	26		ug/L	1	12/18/2017 11:58 PM
TPH-Oil (C23-C36)	500	14	26		ug/L	1	12/18/2017 11:58 PM
Surr: Octacosane	91.1	0	26-152		%REC	1	12/18/2017 11:58 PM
Surr: p-Terphenyl	90.2	0	57-132		%REC	1	12/18/2017 11:58 PM
GASOLINE RANGE ORGANICS BY GC/FID							
			EPA 8015B				
RunID: **NV00922-GC4_171222A**	QC Batch: **E17VW110**			PrepDate:			Analyst: **QBM**
TPH-Gasoline (C4-C12)	1400	32	100		ug/L	2	12/22/2017 01:56 PM
Surr: Chlorobenzene - d5	97.8	0	74-138		%REC	2	12/22/2017 01:56 PM
TOTAL TPH							
			EPA 8015B				
RunID: **NV00922-GC3_171218B**	QC Batch: **R120918**			PrepDate:			Analyst: **SS**
Total TPH	4200	16	50		ug/L	1	12/18/2017

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_FP_SFPP

Sample ID: **MB-66102** SampType: **MBLK** TestCode: **8015_W_FP_** Units: **ug/L** Prep Date: **12/18/2017** RunNo: **120918**
Client ID: **PBW** Batch ID: **66102** TestNo: **EPA 8015B EPA 3510C** Analysis Date: **12/18/2017** SeqNo: **2871367**

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)	13.643	25									J
Surr: Octacosane	84.000		80.00		105	26	152				
Surr: p-Terphenyl	85.382		80.00		107	57	132				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_SFPPTOT

Sample ID: **MB-R120918** SampType: **MBLK** TestCode: **8015_W_SFP** Units: **ug/L** Prep Date: RunNo: **120918**
Client ID: **PBW** Batch ID: **R120918** TestNo: **EPA 8015B** Analysis Date: **12/18/2017** SeqNo: **2873124**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total TPH	13.643	50									

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GAS_WSFPP

Sample ID: **E171220LCS** SampType: **LCS** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **120959**
Client ID: **LCSW** Batch ID: **E17VW109** TestNo: **EPA 8015B** Analysis Date: **12/20/2017** SeqNo: **2873307**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	844.000	50	1000	0	84.4	67	136				
Surr: Chlorobenzene - d5	56017.000		50000		112	74	138				

Sample ID: **E171220MB1** SampType: **MBLK** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **120959**
Client ID: **PBW** Batch ID: **E17VW109** TestNo: **EPA 8015B** Analysis Date: **12/20/2017** SeqNo: **2873308**

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	61724.000		50000		123	74	138				

Sample ID: **N027549-003AMS** SampType: **MS** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **120959**
Client ID: **ZZZZZZ** Batch ID: **E17VW109** TestNo: **EPA 8015B** Analysis Date: **12/20/2017** SeqNo: **2873311**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	1020.000	50	1000	21.00	99.9	67	136				
Surr: Chlorobenzene - d5	71416.000		50000		143	74	138				S

Sample ID: **N027549-003AMSD** SampType: **MSD** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **120959**
Client ID: **ZZZZZZ** Batch ID: **E17VW109** TestNo: **EPA 8015B** Analysis Date: **12/20/2017** SeqNo: **2873312**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	826.000	50	1000	21.00	80.5	67	136	1020	21.0	30	
Surr: Chlorobenzene - d5	58899.000		50000		118	74	138		0	0	

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GAS_WSFPP

Sample ID: **E171222LCS** SampType: **LCS** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **121041**
Client ID: **LCSW** Batch ID: **E17VW110** TestNo: **EPA 8015B** Analysis Date: **12/22/2017** SeqNo: **2878118**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	943.000	50	1000	0	94.3	67	136				
Surr: Chlorobenzene - d5	50089.000		50000		100	74	138				

Sample ID: **E171222MB1** SampType: **MBLK** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **121041**
Client ID: **PBW** Batch ID: **E17VW110** TestNo: **EPA 8015B** Analysis Date: **12/22/2017** SeqNo: **2878119**

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	59994.000		50000		120	74	138				

Sample ID: **N027648-002AMS** SampType: **MS** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **121041**
Client ID: **ZZZZZZ** Batch ID: **E17VW110** TestNo: **EPA 8015B** Analysis Date: **12/22/2017** SeqNo: **2878124**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	927.000	50	1000	83.00	84.4	67	136				
Surr: Chlorobenzene - d5	46006.000		50000		92.0	74	138				

Sample ID: **N027648-002AMSD** SampType: **MSD** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **121041**
Client ID: **ZZZZZZ** Batch ID: **E17VW110** TestNo: **EPA 8015B** Analysis Date: **12/22/2017** SeqNo: **2878125**

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	83.00	88.4	67	136	927.0	4.22	30	
Surr: Chlorobenzene - d5	52366.000		50000		105	74	138		0	0	

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **P171226LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121067**
Client ID: **LCSW** Batch ID: **P17VW242** TestNo: **EPA 8260B** Analysis Date: **12/26/2017** SeqNo: **2879141**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	21.480	1.0	20.00	0	107	81	129				
1,1,1-Trichloroethane	21.520	1.0	20.00	0	108	67	132				
1,1,2,2-Tetrachloroethane	21.720	1.0	20.00	0	109	63	128				
1,1,2-Trichloroethane	21.230	1.0	20.00	0	106	75	125				
1,1-Dichloroethane	20.550	0.50	20.00	0	103	69	133				
1,1-Dichloroethene	19.750	1.0	20.00	0	98.8	68	130				
1,1-Dichloropropene	20.460	1.0	20.00	0	102	73	132				
1,2,3-Trichlorobenzene	21.420	1.0	20.00	0	107	67	137				
1,2,3-Trichloropropane	21.290	1.0	20.00	0	106	73	124				
1,2,4-Trichlorobenzene	20.790	1.0	20.00	0	104	66	134				
1,2,4-Trimethylbenzene	21.170	1.0	20.00	0	106	74	132				
1,2-Dibromo-3-chloropropane	21.210	2.0	20.00	0	106	50	132				
1,2-Dibromoethane	21.490	1.0	20.00	0	107	80	121				
1,2-Dichlorobenzene	20.750	1.0	20.00	0	104	71	122				
1,2-Dichloroethane	21.940	0.50	20.00	0	110	69	132				
1,2-Dichloropropane	21.610	1.0	20.00	0	108	75	125				
1,3,5-Trimethylbenzene	21.400	1.0	20.00	0	107	74	131				
1,3-Dichlorobenzene	20.710	1.0	20.00	0	104	75	124				
1,3-Dichloropropane	21.720	1.0	20.00	0	109	73	126				
1,4-Dichlorobenzene	20.580	1.0	20.00	0	103	74	123				
2,2-Dichloropropane	19.190	1.0	20.00	0	96.0	69	137				
2-Butanone	218.040	10	200.0	0	109	49	136				
2-Chlorotoluene	20.870	1.0	20.00	0	104	73	126				
4-Chlorotoluene	20.700	1.0	20.00	0	104	74	128				
4-Isopropyltoluene	21.100	1.0	20.00	0	106	73	130				
4-Methyl-2-pentanone	225.370	10	200.0	0	113	58	134				
Acetone	197.590	10	200.0	0	98.8	40	135				
Benzene	20.970	1.0	20.00	0	105	81	122				
Bromobenzene	21.640	1.0	20.00	0	108	76	124				
Bromochloromethane	23.260	1.0	20.00	0	116	65	129				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **P171226LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121067**
Client ID: **LCSW** Batch ID: **P17VW242** TestNo: **EPA 8260B** Analysis Date: **12/26/2017** SeqNo: **2879141**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromodichloromethane	21.750	1.0	20.00	0	109	76	121				
Bromoform	23.120	1.0	20.00	0	116	69	128				
Bromomethane	25.070	1.0	20.00	0	125	53	141				
Carbon disulfide	20.170	1.0	20.00	0	101	75	125				
Carbon tetrachloride	21.340	0.50	20.00	0	107	66	138				
Chlorobenzene	21.250	1.0	20.00	0	106	81	122				
Chloroethane	17.570	1.0	20.00	0	87.9	58	133				
Chloroform	19.760	1.0	20.00	0	98.8	69	128				
Chloromethane	21.030	1.0	20.00	0	105	56	131				
cis-1,2-Dichloroethene	20.610	1.0	20.00	0	103	72	126				
cis-1,3-Dichloropropene	21.030	1.0	20.00	0	105	69	131				
Di-isopropyl ether	21.520	1.0	20.00	0	108	70	130				
Dibromochloromethane	22.910	1.0	20.00	0	115	66	133				
Dibromomethane	21.900	1.0	20.00	0	110	76	125				
Dichlorodifluoromethane	22.750	1.0	20.00	0	114	53	153				
Ethyl tert-butyl ether	21.930	1.0	20.00	0	110	70	130				
Ethylbenzene	20.280	1.0	20.00	0	101	73	127				
Freon-113	20.580	1.0	20.00	0	103	75	125				
Hexachlorobutadiene	20.700	1.0	20.00	0	104	67	131				
Isopropylbenzene	21.580	1.0	20.00	0	108	75	127				
m,p-Xylene	42.100	1.0	40.00	0	105	76	128				
Methylene chloride	21.430	2.0	20.00	0	107	63	137				
MTBE	21.550	1.0	20.00	0	108	65	123				
n-Butylbenzene	20.940	1.0	20.00	0	105	69	137				
n-Propylbenzene	21.080	1.0	20.00	0	105	72	129				
Naphthalene	21.790	1.0	20.00	0	109	54	138				
o-Xylene	20.830	1.0	20.00	0	104	80	121				
sec-Butylbenzene	20.860	1.0	20.00	0	104	72	127				
Styrene	21.270	1.0	20.00	0	106	65	134				
Tert-amyl methyl ether	21.300	1.0	20.00	0	106	70	130				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **P171226LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121067**
Client ID: **LCSW** Batch ID: **P17VW242** TestNo: **EPA 8260B** Analysis Date: **12/26/2017** SeqNo: **2879141**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tert-Butanol	112.000	5.0	100.0	0	112	70	130				
tert-Butylbenzene	20.840	1.0	20.00	0	104	70	129				
Tetrachloroethene	20.030	1.0	20.00	0	100	66	128				
Toluene	19.600	2.0	20.00	0	98.0	77	122				
trans-1,2-Dichloroethene	20.420	1.0	20.00	0	102	63	137				
trans-1,3-Dichloropropene	22.110	1.0	20.00	0	111	59	135				
Trichloroethene	20.540	1.0	20.00	0	103	70	127				
Trichlorofluoromethane	21.740	1.0	20.00	0	109	57	129				
Vinyl chloride	20.640	0.50	20.00	0	103	50	134				
Xylenes, Total	62.930	2.0	60.00	0	105	75	125				
Surr: 1,2-Dichloroethane-d4	26.710		25.00		107	72	119				
Surr: 4-Bromofluorobenzene	25.880		25.00		104	76	119				
Surr: Dibromofluoromethane	26.470		25.00		106	85	115				
Surr: Toluene-d8	25.420		25.00		102	81	120				

Sample ID: **N027610-003AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121067**
Client ID: **ZZZZZZ** Batch ID: **P17VW242** TestNo: **EPA 8260B** Analysis Date: **12/26/2017** SeqNo: **2879142**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	21.270	1.0	20.00	0	106	81	129				
1,1,1-Trichloroethane	21.370	1.0	20.00	0	107	67	132				
1,1,2,2-Tetrachloroethane	19.580	1.0	20.00	0	97.9	63	128				
1,1,2-Trichloroethane	20.520	1.0	20.00	0	103	75	125				
1,1-Dichloroethane	20.120	0.50	20.00	0	101	69	133				
1,1-Dichloroethene	20.600	1.0	20.00	0	103	68	130				
1,1-Dichloropropene	20.380	1.0	20.00	0	102	73	132				
1,2,3-Trichlorobenzene	21.130	1.0	20.00	0	106	67	137				
1,2,3-Trichloropropane	20.420	1.0	20.00	0	102	73	124				
1,2,4-Trichlorobenzene	21.090	1.0	20.00	0	105	66	134				
1,2,4-Trimethylbenzene	20.780	1.0	20.00	0	104	74	132				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N027610-003AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121067**
Client ID: **ZZZZZZ** Batch ID: **P17VW242** TestNo: **EPA 8260B** Analysis Date: **12/26/2017** SeqNo: **2879142**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	19.610	2.0	20.00	0	98.0	50	132				
1,2-Dibromoethane	20.390	1.0	20.00	0	102	80	121				
1,2-Dichlorobenzene	20.670	1.0	20.00	0	103	71	122				
1,2-Dichloroethane	20.010	0.50	20.00	0	100	69	132				
1,2-Dichloropropane	20.460	1.0	20.00	0	102	75	125				
1,3,5-Trimethylbenzene	21.410	1.0	20.00	0	107	74	131				
1,3-Dichlorobenzene	20.890	1.0	20.00	0	104	75	124				
1,3-Dichloropropane	20.990	1.0	20.00	0	105	73	126				
1,4-Dichlorobenzene	20.570	1.0	20.00	0	103	74	123				
2,2-Dichloropropane	21.220	1.0	20.00	0	106	69	137				
2-Butanone	197.390	10	200.0	0	98.7	49	136				
2-Chlorotoluene	20.700	1.0	20.00	0	104	73	126				
4-Chlorotoluene	20.790	1.0	20.00	0	104	74	128				
4-Isopropyltoluene	21.780	1.0	20.00	0	109	73	130				
4-Methyl-2-pentanone	206.710	10	200.0	0	103	58	134				
Acetone	179.640	10	200.0	0	89.8	40	135				
Benzene	20.050	1.0	20.00	0	100	81	122				
Bromobenzene	20.700	1.0	20.00	0	104	76	124				
Bromochloromethane	21.610	1.0	20.00	0	108	65	129				
Bromodichloromethane	20.120	1.0	20.00	0	101	76	121				
Bromoform	21.900	1.0	20.00	0	110	69	128				
Bromomethane	22.020	1.0	20.00	0	110	53	141				
Carbon disulfide	20.870	1.0	20.00	0	104	75	125				
Carbon tetrachloride	21.450	0.50	20.00	0	107	66	138				
Chlorobenzene	20.720	1.0	20.00	0	104	81	122				
Chloroethane	18.630	1.0	20.00	0	93.2	58	133				
Chloroform	19.450	1.0	20.00	0	97.3	69	128				
Chloromethane	20.280	1.0	20.00	0	101	56	131				
cis-1,2-Dichloroethene	19.900	1.0	20.00	0	99.5	72	126				
cis-1,3-Dichloropropene	19.840	1.0	20.00	0	99.2	69	131				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N027610-003AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121067**
Client ID: **ZZZZZZ** Batch ID: **P17VW242** TestNo: **EPA 8260B** Analysis Date: **12/26/2017** SeqNo: **2879142**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Di-isopropyl ether	20.830	1.0	20.00	0	104	70	130				
Dibromochloromethane	22.200	1.0	20.00	0	111	66	133				
Dibromomethane	19.560	1.0	20.00	0	97.8	76	125				
Dichlorodifluoromethane	23.600	1.0	20.00	0	118	53	153				
Ethyl tert-butyl ether	20.860	1.0	20.00	0	104	70	130				
Ethylbenzene	20.200	1.0	20.00	0	101	73	127				
Freon-113	19.890	1.0	20.00	0	99.4	75	125				
Hexachlorobutadiene	20.890	1.0	20.00	0	104	67	131				
Isopropylbenzene	21.520	1.0	20.00	0	108	75	127				
m,p-Xylene	41.600	1.0	40.00	0	104	76	128				
Methylene chloride	20.160	2.0	20.00	0	101	63	137				
MTBE	20.500	1.0	20.00	0	103	65	123				
n-Butylbenzene	22.260	1.0	20.00	0	111	69	137				
n-Propylbenzene	21.730	1.0	20.00	0	109	72	129				
Naphthalene	20.370	1.0	20.00	0	102	54	138				
o-Xylene	20.670	1.0	20.00	0	103	80	121				
sec-Butylbenzene	22.130	1.0	20.00	0	111	72	127				
Styrene	19.410	1.0	20.00	0	97.0	65	134				
Tert-amyl methyl ether	20.700	1.0	20.00	0	104	70	130				
Tert-Butanol	106.160	5.0	100.0	0	106	70	130				
tert-Butylbenzene	21.190	1.0	20.00	0	106	70	129				
Tetrachloroethene	21.020	1.0	20.00	0	105	66	128				
Toluene	19.430	2.0	20.00	0	97.2	77	122				
trans-1,2-Dichloroethene	20.410	1.0	20.00	0	102	63	137				
trans-1,3-Dichloropropene	21.220	1.0	20.00	0	106	59	135				
Trichloroethene	20.670	1.0	20.00	0	103	70	127				
Trichlorofluoromethane	25.340	1.0	20.00	0	127	57	129				
Vinyl chloride	21.230	0.50	20.00	0	106	50	134				
Xylenes, Total	62.270	2.0	60.00	0	104	75	125				
Surr: 1,2-Dichloroethane-d4	25.680		25.00		103	72	119				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N027610-003AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121067**
Client ID: **ZZZZZZ** Batch ID: **P17VW242** TestNo: **EPA 8260B** Analysis Date: **12/26/2017** SeqNo: **2879142**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	25.860		25.00		103	76	119				
Surr: Dibromofluoromethane	26.520		25.00		106	85	115				
Surr: Toluene-d8	25.200		25.00		101	81	120				

Sample ID: **N027610-003AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121067**
Client ID: **ZZZZZZ** Batch ID: **P17VW242** TestNo: **EPA 8260B** Analysis Date: **12/26/2017** SeqNo: **2879143**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	21.320	1.0	20.00	0	107	81	129	21.27	0.235	20	
1,1,1-Trichloroethane	20.310	1.0	20.00	0	102	67	132	21.37	5.09	20	
1,1,2,2-Tetrachloroethane	21.520	1.0	20.00	0	108	63	128	19.58	9.44	20	
1,1,2-Trichloroethane	21.990	1.0	20.00	0	110	75	125	20.52	6.92	20	
1,1-Dichloroethane	19.920	0.50	20.00	0	99.6	69	133	20.12	0.999	20	
1,1-Dichloroethene	22.410	1.0	20.00	0	112	68	130	20.60	8.42	20	
1,1-Dichloropropene	20.210	1.0	20.00	0	101	73	132	20.38	0.838	20	
1,2,3-Trichlorobenzene	22.300	1.0	20.00	0	112	67	137	21.13	5.39	20	
1,2,3-Trichloropropane	21.300	1.0	20.00	0	106	73	124	20.42	4.22	20	
1,2,4-Trichlorobenzene	21.760	1.0	20.00	0	109	66	134	21.09	3.13	20	
1,2,4-Trimethylbenzene	19.170	1.0	20.00	0	95.9	74	132	20.78	8.06	20	
1,2-Dibromo-3-chloropropane	20.970	2.0	20.00	0	105	50	132	19.61	6.70	20	
1,2-Dibromoethane	22.040	1.0	20.00	0	110	80	121	20.39	7.78	20	
1,2-Dichlorobenzene	20.700	1.0	20.00	0	104	71	122	20.67	0.145	20	
1,2-Dichloroethane	21.560	0.50	20.00	0	108	69	132	20.01	7.46	20	
1,2-Dichloropropane	19.440	1.0	20.00	0	97.2	75	125	20.46	5.11	20	
1,3,5-Trimethylbenzene	20.600	1.0	20.00	0	103	74	131	21.41	3.86	20	
1,3-Dichlorobenzene	20.870	1.0	20.00	0	104	75	124	20.89	0.0958	20	
1,3-Dichloropropane	20.840	1.0	20.00	0	104	73	126	20.99	0.717	20	
1,4-Dichlorobenzene	20.470	1.0	20.00	0	102	74	123	20.57	0.487	20	
2,2-Dichloropropane	20.760	1.0	20.00	0	104	69	137	21.22	2.19	20	
2-Butanone	208.690	10	200.0	0	104	49	136	197.4	5.57	20	

Qualifiers:

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

Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N027610-003AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121067**
Client ID: **ZZZZZZ** Batch ID: **P17VW242** TestNo: **EPA 8260B** Analysis Date: **12/26/2017** SeqNo: **2879143**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Chlorotoluene	19.920	1.0	20.00	0	99.6	73	126	20.70	3.84	20	
4-Chlorotoluene	20.720	1.0	20.00	0	104	74	128	20.79	0.337	20	
4-Isopropyltoluene	21.090	1.0	20.00	0	105	73	130	21.78	3.22	20	
4-Methyl-2-pentanone	228.910	10	200.0	0	114	58	134	206.7	10.2	20	
Acetone	194.640	10	200.0	0	97.3	40	135	179.6	8.02	20	
Benzene	20.410	1.0	20.00	0	102	81	122	20.05	1.78	20	
Bromobenzene	20.780	1.0	20.00	0	104	76	124	20.70	0.386	20	
Bromochloromethane	21.920	1.0	20.00	0	110	65	129	21.61	1.42	20	
Bromodichloromethane	20.900	1.0	20.00	0	104	76	121	20.12	3.80	20	
Bromoform	22.600	1.0	20.00	0	113	69	128	21.90	3.15	20	
Bromomethane	24.020	1.0	20.00	0	120	53	141	22.02	8.69	20	
Carbon disulfide	23.550	1.0	20.00	0	118	75	125	20.87	12.1	20	
Carbon tetrachloride	20.770	0.50	20.00	0	104	66	138	21.45	3.22	20	
Chlorobenzene	20.520	1.0	20.00	0	103	81	122	20.72	0.970	20	
Chloroethane	17.620	1.0	20.00	0	88.1	58	133	18.63	5.57	20	
Chloroform	19.390	1.0	20.00	0	97.0	69	128	19.45	0.309	20	
Chloromethane	19.600	1.0	20.00	0	98.0	56	131	20.28	3.41	20	
cis-1,2-Dichloroethene	19.900	1.0	20.00	0	99.5	72	126	19.90	0	20	
cis-1,3-Dichloropropene	21.010	1.0	20.00	0	105	69	131	19.84	5.73	20	
Di-isopropyl ether	20.850	1.0	20.00	0	104	70	130	20.83	0.0960	20	
Dibromochloromethane	22.580	1.0	20.00	0	113	66	133	22.20	1.70	20	
Dibromomethane	21.100	1.0	20.00	0	106	76	125	19.56	7.58	20	
Dichlorodifluoromethane	22.490	1.0	20.00	0	112	53	153	23.60	4.82	20	
Ethyl tert-butyl ether	21.220	1.0	20.00	0	106	70	130	20.86	1.71	20	
Ethylbenzene	19.630	1.0	20.00	0	98.2	73	127	20.20	2.86	20	
Freon-113	22.460	1.0	20.00	0	112	75	125	19.89	12.1	20	
Hexachlorobutadiene	21.380	1.0	20.00	0	107	67	131	20.89	2.32	20	
Isopropylbenzene	20.930	1.0	20.00	0	105	75	127	21.52	2.78	20	
m,p-Xylene	40.900	1.0	40.00	0	102	76	128	41.60	1.70	20	
Methylene chloride	20.540	2.0	20.00	0	103	63	137	20.16	1.87	20	

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N027610-003AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121067**
Client ID: **ZZZZZZ** Batch ID: **P17VW242** TestNo: **EPA 8260B** Analysis Date: **12/26/2017** SeqNo: **2879143**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	21.230	1.0	20.00	0	106	65	123	20.50	3.50	20	
n-Butylbenzene	21.320	1.0	20.00	0	107	69	137	22.26	4.31	20	
n-Propylbenzene	20.900	1.0	20.00	0	104	72	129	21.73	3.89	20	
Naphthalene	20.830	1.0	20.00	0	104	54	138	20.37	2.23	20	
o-Xylene	20.080	1.0	20.00	0	100	80	121	20.67	2.90	20	
sec-Butylbenzene	20.830	1.0	20.00	0	104	72	127	22.13	6.05	20	
Styrene	16.790	1.0	20.00	0	84.0	65	134	19.41	14.5	20	
Tert-amyl methyl ether	21.210	1.0	20.00	0	106	70	130	20.70	2.43	20	
Tert-Butanol	114.640	5.0	100.0	0	115	70	130	106.2	7.68	20	
tert-Butylbenzene	20.580	1.0	20.00	0	103	70	129	21.19	2.92	20	
Tetrachloroethene	20.020	1.0	20.00	0	100	66	128	21.02	4.87	20	
Toluene	19.540	2.0	20.00	0	97.7	77	122	19.43	0.565	20	
trans-1,2-Dichloroethene	19.990	1.0	20.00	0	100	63	137	20.41	2.08	20	
trans-1,3-Dichloropropene	22.160	1.0	20.00	0	111	59	135	21.22	4.33	20	
Trichloroethene	20.260	1.0	20.00	0	101	70	127	20.67	2.00	20	
Trichlorofluoromethane	19.990	1.0	20.00	0	100	57	129	25.34	23.6	20	R
Vinyl chloride	20.800	0.50	20.00	0	104	50	134	21.23	2.05	20	
Xylenes, Total	60.980	2.0	60.00	0	102	75	125	62.27	2.09	20	
Surr: 1,2-Dichloroethane-d4	25.910		25.00		104	72	119		0		
Surr: 4-Bromofluorobenzene	25.930		25.00		104	76	119		0		
Surr: Dibromofluoromethane	26.160		25.00		105	85	115		0		
Surr: Toluene-d8	25.760		25.00		103	81	120		0		

Sample ID: **P171226MB3** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121067**
Client ID: **PBW** Batch ID: **P17VW242** TestNo: **EPA 8260B** Analysis Date: **12/26/2017** SeqNo: **2879146**

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

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **P171226MB3** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121067**
Client ID: **PBW** Batch ID: **P17VW242** TestNo: **EPA 8260B** Analysis Date: **12/26/2017** SeqNo: **2879146**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2-Trichloroethane	ND	1.0									
1,1-Dichloroethane	ND	0.50									
1,1-Dichloroethene	ND	1.0									
1,1-Dichloropropene	ND	1.0									
1,2,3-Trichlorobenzene	ND	1.0									
1,2,3-Trichloropropane	ND	1.0									
1,2,4-Trichlorobenzene	ND	1.0									
1,2,4-Trimethylbenzene	ND	1.0									
1,2-Dibromo-3-chloropropane	ND	2.0									
1,2-Dibromoethane	ND	1.0									
1,2-Dichlorobenzene	ND	1.0									
1,2-Dichloroethane	ND	0.50									
1,2-Dichloropropane	ND	1.0									
1,3,5-Trimethylbenzene	ND	1.0									
1,3-Dichlorobenzene	ND	1.0									
1,3-Dichloropropane	ND	1.0									
1,4-Dichlorobenzene	ND	1.0									
2,2-Dichloropropane	ND	1.0									
2-Butanone	ND	10									
2-Chlorotoluene	ND	1.0									
4-Chlorotoluene	ND	1.0									
4-Isopropyltoluene	ND	1.0									
4-Methyl-2-pentanone	ND	10									
Acetone	ND	10									
Benzene	ND	1.0									
Bromobenzene	ND	1.0									
Bromochloromethane	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	1.0									

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **P171226MB3** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121067**
Client ID: **PBW** Batch ID: **P17VW242** TestNo: **EPA 8260B** Analysis Date: **12/26/2017** SeqNo: **2879146**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon disulfide	ND	1.0									
Carbon tetrachloride	ND	0.50									
Chlorobenzene	ND	1.0									
Chloroethane	ND	1.0									
Chloroform	ND	1.0									
Chloromethane	ND	1.0									
cis-1,2-Dichloroethene	ND	1.0									
cis-1,3-Dichloropropene	ND	1.0									
Di-isopropyl ether	ND	1.0									
Dibromochloromethane	ND	1.0									
Dibromomethane	ND	1.0									
Dichlorodifluoromethane	ND	1.0									
Ethyl tert-butyl ether	ND	1.0									
Ethylbenzene	ND	1.0									
Freon-113	ND	1.0									
Hexachlorobutadiene	ND	1.0									
Isopropylbenzene	ND	1.0									
m,p-Xylene	ND	1.0									
Methylene chloride	ND	2.0									
MTBE	ND	1.0									
n-Butylbenzene	ND	1.0									
n-Propylbenzene	ND	1.0									
Naphthalene	ND	1.0									
o-Xylene	ND	1.0									
sec-Butylbenzene	ND	1.0									
Styrene	ND	1.0									
Tert-amyl methyl ether	ND	1.0									
Tert-Butanol	ND	5.0									
tert-Butylbenzene	ND	1.0									
Tetrachloroethene	ND	1.0									

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **P171226MB3** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121067**
Client ID: **PBW** Batch ID: **P17VW242** TestNo: **EPA 8260B** Analysis Date: **12/26/2017** SeqNo: **2879146**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	ND	2.0									
trans-1,2-Dichloroethene	ND	1.0									
trans-1,3-Dichloropropene	ND	1.0									
Trichloroethene	ND	1.0									
Trichlorofluoromethane	ND	1.0									
Vinyl chloride	ND	0.50									
Xylenes, Total	ND	2.0									
Surr: 1,2-Dichloroethane-d4	27.430		25.00		110	72	119				
Surr: 4-Bromofluorobenzene	25.910		25.00		104	76	119				
Surr: Dibromofluoromethane	27.830		25.00		111	85	115				
Surr: Toluene-d8	26.370		25.00		105	81	120				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **R171222LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121044**
Client ID: **LCSW** Batch ID: **R17VW120** TestNo: **EPA 8260B** Analysis Date: **12/22/2017** SeqNo: **2878190**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	18.370	1.0	20.00	0	91.9	81	129				
1,1,1-Trichloroethane	20.770	1.0	20.00	0	104	67	132				
1,1,2,2-Tetrachloroethane	20.770	1.0	20.00	0	104	63	128				
1,1,2-Trichloroethane	18.940	1.0	20.00	0	94.7	75	125				
1,1-Dichloroethane	19.410	0.50	20.00	0	97.0	69	133				
1,1-Dichloroethene	19.590	1.0	20.00	0	98.0	68	130				
1,1-Dichloropropene	19.470	1.0	20.00	0	97.4	73	132				
1,2,3-Trichlorobenzene	18.690	1.0	20.00	0	93.5	67	137				
1,2,3-Trichloropropane	18.210	1.0	20.00	0	91.1	73	124				
1,2,4-Trichlorobenzene	18.530	1.0	20.00	0	92.6	66	134				
1,2,4-Trimethylbenzene	20.240	1.0	20.00	0	101	74	132				
1,2-Dibromo-3-chloropropane	17.720	2.0	20.00	0	88.6	50	132				
1,2-Dibromoethane	19.400	1.0	20.00	0	97.0	80	121				
1,2-Dichlorobenzene	18.590	1.0	20.00	0	93.0	71	122				
1,2-Dichloroethane	19.160	0.50	20.00	0	95.8	69	132				
1,2-Dichloropropane	18.550	1.0	20.00	0	92.8	75	125				
1,3,5-Trimethylbenzene	20.100	1.0	20.00	0	101	74	131				
1,3-Dichlorobenzene	18.920	1.0	20.00	0	94.6	75	124				
1,3-Dichloropropane	18.550	1.0	20.00	0	92.8	73	126				
1,4-Dichlorobenzene	18.690	1.0	20.00	0	93.5	74	123				
2,2-Dichloropropane	21.210	1.0	20.00	0	106	69	137				
2-Butanone	204.400	10	200.0	0	102	49	136				
2-Chlorotoluene	19.080	1.0	20.00	0	95.4	73	126				
4-Chlorotoluene	19.360	1.0	20.00	0	96.8	74	128				
4-Isopropyltoluene	19.670	1.0	20.00	0	98.4	73	130				
4-Methyl-2-pentanone	203.700	10	200.0	0	102	58	134				
Acetone	195.220	10	200.0	0	97.6	40	135				
Benzene	19.560	1.0	20.00	0	97.8	81	122				
Bromobenzene	18.610	1.0	20.00	0	93.0	76	124				
Bromochloromethane	17.680	1.0	20.00	0	88.4	65	129				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **R171222LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121044**
Client ID: **LCSW** Batch ID: **R17VW120** TestNo: **EPA 8260B** Analysis Date: **12/22/2017** SeqNo: **2878190**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromodichloromethane	19.410	1.0	20.00	0	97.0	76	121				
Bromoform	18.420	1.0	20.00	0	92.1	69	128				
Bromomethane	20.630	1.0	20.00	0	103	53	141				
Carbon disulfide	23.180	1.0	20.00	0	116	75	125				
Carbon tetrachloride	21.900	0.50	20.00	0	110	66	138				
Chlorobenzene	18.820	1.0	20.00	0	94.1	81	122				
Chloroethane	21.700	1.0	20.00	0	108	58	133				
Chloroform	17.490	1.0	20.00	0	87.5	69	128				
Chloromethane	17.930	1.0	20.00	0	89.7	56	131				
cis-1,2-Dichloroethene	17.810	1.0	20.00	0	89.0	72	126				
cis-1,3-Dichloropropene	18.740	1.0	20.00	0	93.7	69	131				
Di-isopropyl ether	17.250	1.0	20.00	0	86.2	70	130				
Dibromochloromethane	19.020	1.0	20.00	0	95.1	66	133				
Dibromomethane	18.960	1.0	20.00	0	94.8	76	125				
Dichlorodifluoromethane	18.720	1.0	20.00	0	93.6	53	153				
Ethyl tert-butyl ether	19.450	1.0	20.00	0	97.3	70	130				
Ethylbenzene	18.640	1.0	20.00	0	93.2	73	127				
Freon-113	23.380	1.0	20.00	0	117	75	125				
Hexachlorobutadiene	19.820	1.0	20.00	0	99.1	67	131				
Isopropylbenzene	18.450	1.0	20.00	0	92.2	75	127				
m,p-Xylene	39.440	1.0	40.00	0	98.6	76	128				
Methylene chloride	17.960	2.0	20.00	0	89.8	63	137				
MTBE	16.960	1.0	20.00	0	84.8	65	123				
n-Butylbenzene	19.470	1.0	20.00	0	97.4	69	137				
n-Propylbenzene	19.140	1.0	20.00	0	95.7	72	129				
Naphthalene	15.910	1.0	20.00	0	79.6	54	138				
o-Xylene	18.500	1.0	20.00	0	92.5	80	121				
sec-Butylbenzene	19.900	1.0	20.00	0	99.5	72	127				
Styrene	19.650	1.0	20.00	0	98.2	65	134				
Tert-amyl methyl ether	20.330	1.0	20.00	0	102	70	130				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **R171222LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121044**
Client ID: **LCSW** Batch ID: **R17VW120** TestNo: **EPA 8260B** Analysis Date: **12/22/2017** SeqNo: **2878190**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tert-Butanol	80.330	5.0	100.0	0	80.3	70	130				
tert-Butylbenzene	18.810	1.0	20.00	0	94.1	70	129				
Tetrachloroethene	18.630	1.0	20.00	0	93.2	66	128				
Toluene	19.010	2.0	20.00	0	95.1	77	122				
trans-1,2-Dichloroethene	18.820	1.0	20.00	0	94.1	63	137				
trans-1,3-Dichloropropene	20.490	1.0	20.00	0	102	59	135				
Trichloroethene	18.850	1.0	20.00	0	94.3	70	127				
Trichlorofluoromethane	22.050	1.0	20.00	0	110	57	129				
Vinyl chloride	19.410	0.50	20.00	0	97.0	50	134				
Xylenes, Total	57.940	2.0	60.00	0	96.6	75	125				
Surr: 1,2-Dichloroethane-d4	26.020		25.00		104	72	119				
Surr: 4-Bromofluorobenzene	25.360		25.00		101	76	119				
Surr: Dibromofluoromethane	25.490		25.00		102	85	115				
Surr: Toluene-d8	26.000		25.00		104	81	120				

Sample ID: **N027580-005AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121044**
Client ID: **ZZZZZZ** Batch ID: **R17VW120** TestNo: **EPA 8260B** Analysis Date: **12/22/2017** SeqNo: **2878191**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	19.930	1.0	20.00	0	99.7	81	129				
1,1,1-Trichloroethane	23.800	1.0	20.00	0	119	67	132				
1,1,2,2-Tetrachloroethane	19.800	1.0	20.00	0	99.0	63	128				
1,1,2-Trichloroethane	18.190	1.0	20.00	0	91.0	75	125				
1,1-Dichloroethane	23.760	0.50	20.00	0	119	69	133				
1,1-Dichloroethene	21.820	1.0	20.00	0	109	68	130				
1,1-Dichloropropene	22.380	1.0	20.00	0	112	73	132				
1,2,3-Trichlorobenzene	18.890	1.0	20.00	0	94.4	67	137				
1,2,3-Trichloropropane	17.480	1.0	20.00	0	87.4	73	124				
1,2,4-Trichlorobenzene	19.240	1.0	20.00	0	96.2	66	134				
1,2,4-Trimethylbenzene	22.390	1.0	20.00	0	112	74	132				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N027580-005AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121044**
Client ID: **ZZZZZZ** Batch ID: **R17VW120** TestNo: **EPA 8260B** Analysis Date: **12/22/2017** SeqNo: **2878191**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	16.840	2.0	20.00	0	84.2	50	132				
1,2-Dibromoethane	18.410	1.0	20.00	0	92.0	80	121				
1,2-Dichlorobenzene	19.100	1.0	20.00	0	95.5	71	122				
1,2-Dichloroethane	18.570	0.50	20.00	0	92.8	69	132				
1,2-Dichloropropane	19.160	1.0	20.00	0	95.8	75	125				
1,3,5-Trimethylbenzene	22.710	1.0	20.00	0	114	74	131				
1,3-Dichlorobenzene	20.320	1.0	20.00	0	102	75	124				
1,3-Dichloropropane	19.160	1.0	20.00	0	95.8	73	126				
1,4-Dichlorobenzene	19.830	1.0	20.00	0	99.2	74	123				
2,2-Dichloropropane	25.960	1.0	20.00	0	130	69	137				
2-Butanone	168.690	10	200.0	0	84.3	49	136				
2-Chlorotoluene	20.850	1.0	20.00	0	104	73	126				
4-Chlorotoluene	20.880	1.0	20.00	0	104	74	128				
4-Isopropyltoluene	23.050	1.0	20.00	0	115	73	130				
4-Methyl-2-pentanone	184.200	10	200.0	0	92.1	58	134				
Acetone	169.400	10	200.0	0	84.7	40	135				
Benzene	22.420	1.0	20.00	1.540	104	81	122				
Bromobenzene	19.350	1.0	20.00	0	96.8	76	124				
Bromochloromethane	17.850	1.0	20.00	0	89.2	65	129				
Bromodichloromethane	19.420	1.0	20.00	0	97.1	76	121				
Bromoform	18.250	1.0	20.00	0	91.2	69	128				
Bromomethane	22.730	1.0	20.00	0	114	53	141				
Carbon disulfide	25.980	1.0	20.00	0	130	75	125				S
Carbon tetrachloride	25.970	0.50	20.00	0	130	66	138				
Chlorobenzene	20.790	1.0	20.00	0	104	81	122				
Chloroethane	23.360	1.0	20.00	0	117	58	133				
Chloroform	18.440	1.0	20.00	0	92.2	69	128				
Chloromethane	18.840	1.0	20.00	0	94.2	56	131				
cis-1,2-Dichloroethene	19.150	1.0	20.00	0	95.8	72	126				
cis-1,3-Dichloropropene	18.860	1.0	20.00	0	94.3	69	131				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N027580-005AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121044**
Client ID: **ZZZZZZ** Batch ID: **R17VW120** TestNo: **EPA 8260B** Analysis Date: **12/22/2017** SeqNo: **2878191**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Di-isopropyl ether	21.160	1.0	20.00	0	106	70	130				
Dibromochloromethane	19.440	1.0	20.00	0	97.2	66	133				
Dibromomethane	18.400	1.0	20.00	0	92.0	76	125				
Dichlorodifluoromethane	22.670	1.0	20.00	0	113	53	153				
Ethyl tert-butyl ether	18.710	1.0	20.00	0	93.6	70	130				
Ethylbenzene	21.710	1.0	20.00	0	109	73	127				
Freon-113	27.690	1.0	20.00	0	138	75	125				S
Hexachlorobutadiene	22.410	1.0	20.00	0	112	67	131				
Isopropylbenzene	21.060	1.0	20.00	0	105	75	127				
m,p-Xylene	45.730	1.0	40.00	0	114	76	128				
Methylene chloride	21.270	2.0	20.00	0	106	63	137				
MTBE	18.110	1.0	20.00	0	90.6	65	123				
n-Butylbenzene	23.060	1.0	20.00	0	115	69	137				
n-Propylbenzene	22.030	1.0	20.00	0	110	72	129				
Naphthalene	15.920	1.0	20.00	0	79.6	54	138				
o-Xylene	21.130	1.0	20.00	0	106	80	121				
sec-Butylbenzene	23.380	1.0	20.00	0	117	72	127				
Styrene	2.060	1.0	20.00	0	10.3	65	134				S
Tert-amyl methyl ether	20.220	1.0	20.00	0	101	70	130				
Tert-Butanol	86.000	5.0	100.0	0	86.0	70	130				
tert-Butylbenzene	22.060	1.0	20.00	0	110	70	129				
Tetrachloroethene	22.550	1.0	20.00	0	113	66	128				
Toluene	20.610	2.0	20.00	0	103	77	122				
trans-1,2-Dichloroethene	22.880	1.0	20.00	0	114	63	137				
trans-1,3-Dichloropropene	20.590	1.0	20.00	0	103	59	135				
Trichloroethene	20.600	1.0	20.00	0	103	70	127				
Trichlorofluoromethane	25.750	1.0	20.00	0	129	57	129				
Vinyl chloride	22.120	0.50	20.00	0	111	50	134				
Xylenes, Total	66.860	2.0	60.00	0	111	75	125				
Surr: 1,2-Dichloroethane-d4	24.740		25.00		99.0	72	119				

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N027580-005AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121044**
Client ID: **ZZZZZZ** Batch ID: **R17VW120** TestNo: **EPA 8260B** Analysis Date: **12/22/2017** SeqNo: **2878191**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	26.050		25.00		104	76	119				
Surr: Dibromofluoromethane	24.870		25.00		99.5	85	115				
Surr: Toluene-d8	25.440		25.00		102	81	120				

Sample ID: **N027580-005AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121044**
Client ID: **ZZZZZZ** Batch ID: **R17VW120** TestNo: **EPA 8260B** Analysis Date: **12/22/2017** SeqNo: **2878192**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	18.800	1.0	20.00	0	94.0	81	129	19.93	5.84	20	
1,1,1-Trichloroethane	22.280	1.0	20.00	0	111	67	132	23.80	6.60	20	
1,1,2,2-Tetrachloroethane	20.650	1.0	20.00	0	103	63	128	19.80	4.20	20	
1,1,2-Trichloroethane	19.280	1.0	20.00	0	96.4	75	125	18.19	5.82	20	
1,1-Dichloroethane	19.580	0.50	20.00	0	97.9	69	133	23.76	19.3	20	
1,1-Dichloroethene	18.270	1.0	20.00	0	91.4	68	130	21.82	17.7	20	
1,1-Dichloropropene	20.400	1.0	20.00	0	102	73	132	22.38	9.26	20	
1,2,3-Trichlorobenzene	19.100	1.0	20.00	0	95.5	67	137	18.89	1.11	20	
1,2,3-Trichloropropane	18.580	1.0	20.00	0	92.9	73	124	17.48	6.10	20	
1,2,4-Trichlorobenzene	19.310	1.0	20.00	0	96.6	66	134	19.24	0.363	20	
1,2,4-Trimethylbenzene	21.120	1.0	20.00	0	106	74	132	22.39	5.84	20	
1,2-Dibromo-3-chloropropane	17.740	2.0	20.00	0	88.7	50	132	16.84	5.21	20	
1,2-Dibromoethane	19.650	1.0	20.00	0	98.2	80	121	18.41	6.52	20	
1,2-Dichlorobenzene	18.910	1.0	20.00	0	94.6	71	122	19.10	1.00	20	
1,2-Dichloroethane	18.830	0.50	20.00	0	94.2	69	132	18.57	1.39	20	
1,2-Dichloropropane	18.980	1.0	20.00	0	94.9	75	125	19.16	0.944	20	
1,3,5-Trimethylbenzene	21.090	1.0	20.00	0	105	74	131	22.71	7.40	20	
1,3-Dichlorobenzene	19.690	1.0	20.00	0	98.4	75	124	20.32	3.15	20	
1,3-Dichloropropane	18.880	1.0	20.00	0	94.4	73	126	19.16	1.47	20	
1,4-Dichlorobenzene	19.200	1.0	20.00	0	96.0	74	123	19.83	3.23	20	
2,2-Dichloropropane	23.410	1.0	20.00	0	117	69	137	25.96	10.3	20	
2-Butanone	190.930	10	200.0	0	95.5	49	136	168.7	12.4	20	

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N027580-005AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121044**
Client ID: **ZZZZZZ** Batch ID: **R17VW120** TestNo: **EPA 8260B** Analysis Date: **12/22/2017** SeqNo: **2878192**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Chlorotoluene	19.640	1.0	20.00	0	98.2	73	126	20.85	5.98	20	
4-Chlorotoluene	19.900	1.0	20.00	0	99.5	74	128	20.88	4.81	20	
4-Isopropyltoluene	20.950	1.0	20.00	0	105	73	130	23.05	9.55	20	
4-Methyl-2-pentanone	208.950	10	200.0	0	104	58	134	184.2	12.6	20	
Acetone	162.830	10	200.0	0	81.4	40	135	169.4	3.96	20	
Benzene	21.570	1.0	20.00	1.540	100	81	122	22.42	3.86	20	
Bromobenzene	19.130	1.0	20.00	0	95.7	76	124	19.35	1.14	20	
Bromochloromethane	18.820	1.0	20.00	0	94.1	65	129	17.85	5.29	20	
Bromodichloromethane	19.290	1.0	20.00	0	96.5	76	121	19.42	0.672	20	
Bromoform	18.910	1.0	20.00	0	94.6	69	128	18.25	3.55	20	
Bromomethane	22.100	1.0	20.00	0	110	53	141	22.73	2.81	20	
Carbon disulfide	21.460	1.0	20.00	0	107	75	125	25.98	19.1	20	
Carbon tetrachloride	23.260	0.50	20.00	0	116	66	138	25.97	11.0	20	
Chlorobenzene	19.520	1.0	20.00	0	97.6	81	122	20.79	6.30	20	
Chloroethane	18.460	1.0	20.00	0	92.3	58	133	23.36	23.4	20	R
Chloroform	17.930	1.0	20.00	0	89.7	69	128	18.44	2.80	20	
Chloromethane	19.930	1.0	20.00	0	99.7	56	131	18.84	5.62	20	
cis-1,2-Dichloroethene	18.850	1.0	20.00	0	94.3	72	126	19.15	1.58	20	
cis-1,3-Dichloropropene	19.060	1.0	20.00	0	95.3	69	131	18.86	1.05	20	
Di-isopropyl ether	17.210	1.0	20.00	0	86.1	70	130	21.16	20.6	20	R
Dibromochloromethane	18.760	1.0	20.00	0	93.8	66	133	19.44	3.56	20	
Dibromomethane	19.010	1.0	20.00	0	95.1	76	125	18.40	3.26	20	
Dichlorodifluoromethane	21.690	1.0	20.00	0	108	53	153	22.67	4.42	20	
Ethyl tert-butyl ether	20.220	1.0	20.00	0	101	70	130	18.71	7.76	20	
Ethylbenzene	19.960	1.0	20.00	0	99.8	73	127	21.71	8.40	20	
Freon-113	22.710	1.0	20.00	0	114	75	125	27.69	19.8	20	
Hexachlorobutadiene	20.690	1.0	20.00	0	103	67	131	22.41	7.98	20	
Isopropylbenzene	19.360	1.0	20.00	0	96.8	75	127	21.06	8.41	20	
m,p-Xylene	42.480	1.0	40.00	0	106	76	128	45.73	7.37	20	
Methylene chloride	18.730	2.0	20.00	0	93.6	63	137	21.27	12.7	20	

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N027580-005AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121044**
Client ID: **ZZZZZZ** Batch ID: **R17VW120** TestNo: **EPA 8260B** Analysis Date: **12/22/2017** SeqNo: **2878192**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	17.890	1.0	20.00	0	89.4	65	123	18.11	1.22	20	
n-Butylbenzene	20.950	1.0	20.00	0	105	69	137	23.06	9.59	20	
n-Propylbenzene	20.220	1.0	20.00	0	101	72	129	22.03	8.57	20	
Naphthalene	16.710	1.0	20.00	0	83.6	54	138	15.92	4.84	20	
o-Xylene	19.890	1.0	20.00	0	99.4	80	121	21.13	6.05	20	
sec-Butylbenzene	21.200	1.0	20.00	0	106	72	127	23.38	9.78	20	
Styrene	1.050	1.0	20.00	0	5.25	65	134	2.060	65.0	20	SR
Tert-amyl methyl ether	20.820	1.0	20.00	0	104	70	130	20.22	2.92	20	
Tert-Butanol	88.150	5.0	100.0	0	88.2	70	130	86.00	2.47	20	
tert-Butylbenzene	20.060	1.0	20.00	0	100	70	129	22.06	9.50	20	
Tetrachloroethene	19.500	1.0	20.00	0	97.5	66	128	22.55	14.5	20	
Toluene	19.740	2.0	20.00	0	98.7	77	122	20.61	4.31	20	
trans-1,2-Dichloroethene	20.260	1.0	20.00	0	101	63	137	22.88	12.1	20	
trans-1,3-Dichloropropene	21.050	1.0	20.00	0	105	59	135	20.59	2.21	20	
Trichloroethene	19.350	1.0	20.00	0	96.8	70	127	20.60	6.26	20	
Trichlorofluoromethane	22.090	1.0	20.00	0	110	57	129	25.75	15.3	20	
Vinyl chloride	21.650	0.50	20.00	0	108	50	134	22.12	2.15	20	
Xylenes, Total	62.370	2.0	60.00	0	104	75	125	66.86	6.95	20	
Surr: 1,2-Dichloroethane-d4	25.080		25.00		100	72	119		0		
Surr: 4-Bromofluorobenzene	26.150		25.00		105	76	119		0		
Surr: Dibromofluoromethane	25.070		25.00		100	85	115		0		
Surr: Toluene-d8	25.640		25.00		103	81	120		0		

Sample ID: **R171222MB2** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121044**
Client ID: **PBW** Batch ID: **R17VW120** TestNo: **EPA 8260B** Analysis Date: **12/22/2017** SeqNo: **2878194**

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

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **R171222MB2** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121044**
Client ID: **PBW** Batch ID: **R17VW120** TestNo: **EPA 8260B** Analysis Date: **12/22/2017** SeqNo: **2878194**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2-Trichloroethane	ND	1.0									
1,1-Dichloroethane	ND	0.50									
1,1-Dichloroethene	ND	1.0									
1,1-Dichloropropene	ND	1.0									
1,2,3-Trichlorobenzene	ND	1.0									
1,2,3-Trichloropropane	ND	1.0									
1,2,4-Trichlorobenzene	ND	1.0									
1,2,4-Trimethylbenzene	ND	1.0									
1,2-Dibromo-3-chloropropane	ND	2.0									
1,2-Dibromoethane	ND	1.0									
1,2-Dichlorobenzene	ND	1.0									
1,2-Dichloroethane	ND	0.50									
1,2-Dichloropropane	ND	1.0									
1,3,5-Trimethylbenzene	ND	1.0									
1,3-Dichlorobenzene	ND	1.0									
1,3-Dichloropropane	ND	1.0									
1,4-Dichlorobenzene	ND	1.0									
2,2-Dichloropropane	ND	1.0									
2-Butanone	ND	10									
2-Chlorotoluene	ND	1.0									
4-Chlorotoluene	ND	1.0									
4-Isopropyltoluene	ND	1.0									
4-Methyl-2-pentanone	ND	10									
Acetone	ND	10									
Benzene	ND	1.0									
Bromobenzene	ND	1.0									
Bromochloromethane	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	1.0									

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **R171222MB2** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121044**
Client ID: **PBW** Batch ID: **R17VW120** TestNo: **EPA 8260B** Analysis Date: **12/22/2017** SeqNo: **2878194**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon disulfide	ND	1.0									
Carbon tetrachloride	ND	0.50									
Chlorobenzene	ND	1.0									
Chloroethane	ND	1.0									
Chloroform	ND	1.0									
Chloromethane	ND	1.0									
cis-1,2-Dichloroethene	ND	1.0									
cis-1,3-Dichloropropene	ND	1.0									
Di-isopropyl ether	ND	1.0									
Dibromochloromethane	ND	1.0									
Dibromomethane	ND	1.0									
Dichlorodifluoromethane	ND	1.0									
Ethyl tert-butyl ether	ND	1.0									
Ethylbenzene	ND	1.0									
Freon-113	ND	1.0									
Hexachlorobutadiene	ND	1.0									
Isopropylbenzene	ND	1.0									
m,p-Xylene	ND	1.0									
Methylene chloride	ND	2.0									
MTBE	ND	1.0									
n-Butylbenzene	ND	1.0									
n-Propylbenzene	ND	1.0									
Naphthalene	ND	1.0									
o-Xylene	ND	1.0									
sec-Butylbenzene	ND	1.0									
Styrene	ND	1.0									
Tert-amyl methyl ether	ND	1.0									
Tert-Butanol	ND	5.0									
tert-Butylbenzene	ND	1.0									
Tetrachloroethene	ND	1.0									

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N027591
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **R171222MB2** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **121044**
Client ID: **PBW** Batch ID: **R17VW120** TestNo: **EPA 8260B** Analysis Date: **12/22/2017** SeqNo: **2878194**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	ND	2.0									
trans-1,2-Dichloroethene	ND	1.0									
trans-1,3-Dichloropropene	ND	1.0									
Trichloroethene	ND	1.0									
Trichlorofluoromethane	ND	1.0									
Vinyl chloride	ND	0.50									
Xylenes, Total	ND	2.0									
Surr: 1,2-Dichloroethane-d4	29.310		25.00		117	72	119				
Surr: 4-Bromofluorobenzene	24.370		25.00		97.5	76	119				
Surr: Dibromofluoromethane	28.880		25.00		116	85	115				S
Surr: Toluene-d8	26.490		25.00		106	81	120				

Qualifiers:

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

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

CHAIN OF CUSTODY RECORD

DATE: 12/15/17
PAGE: 1 of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Section D Sampler Information:	
Company:	Kinder Morgan Energy Partners Attention: Steve Defibaugh	Report To:	Eric Davis	Attention:	Steve Defibaugh - Ref. AFE# 81195	Sampler Name:	James Dye
Address:	1100 Town & Country Road Orange, CA 92868	Copy To:	Steve Defibaugh	Company Name:	Kinder Morgan Energy Partners	Sampler Signature:	
Email To:	steve_defibaugh@kindermorgan.com eric.davis@ch2m.com	Purchase Order No.:		Address:	1100 Town & Country Road Orange, CA 92868	Sample Date:	12/15/17
Phone: 714-560-4802	Fax: 714-560-4801	Project Name:	SFPP Norwalk	ATL Project Manager:	Marlon Cartin		

Section E Required Sample Information

ITEM #	SAMPLE ID	LOCATION/ DESCRIPTION	MATRIX	SAMPLE TYPE (G=GRAB C=COMP)	SAMPLING DATE	SAMPLING TIME	TOTAL # OF CONTAINERS		Analysis Test	Full VOCs + Oxygenates List (8260B)	TPH-gas (8015B)	TPH-d, TPH-oil, Total TPH (8015B)	Comments
CONTAINER TYPE										V	V	A	
# OF CONTAINERS										3	3	2	
PRESERVATIVE										H	H	--	
VOLUME (mL)										40	40	1000	
1	INF-12-15	INFLUENT	WW	G	12/15/17	1300	8			X	X	X	N027591- 01
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													

Relinquished by (Signature and Printed Name)	Date / Time	Relinquished by (Signature and Printed Name)	Date / Time
	12/15/17 1330		12/15/17 1430
Relinquished by (Signature and Printed Name)	Date / Time	Relinquished by (Signature and Printed Name)	Date / Time
	12/15/17 1442	FEDEX	12/14/17 8:30
Relinquished by (Signature and Printed Name)	Date / Time	Relinquished by (Signature and Printed Name)	Date / Time

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

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

Special Instruction:

12 H2 5.0°C CS: 8797

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

ASSET Laboratories

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

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

Cooler Received/Opened On:	12/15/2017	Workorder:	N027591
Rep sample Temp (Deg C):	5.0	IR Gun ID:	2
Temp Blank:	☑ Yes ☐ No		
Carrier name:	Golden State Overnight		
Last 4 digits of Tracking No.:	8797	Packing Material Used:	Bubble Wrap
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

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

Comments:

For:

Checklist Completed By: FR 12/20/2017

Reviewed By: 12/22/2017

ASSET Laboratories

WORK ORDER Summary

08-Jan-18

WorkOrder: N027591

Client ID: CH2HI03

Project: SFPP Norwalk **QC Level:** RTNE **Date Received:** 12/15/2017

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N027591-001A	INF-12-15	12/15/2017 1:00:00 PM	12/22/2017	Wastewater	EPA 8015B	GASOLINE RANGE ORGANICS BY GC/FID	☐	☐	☐	VW-CA
			12/22/2017		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW-CA
N027591-001B			12/22/2017		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: EXTRACTABLE FUELS	☐	☐	☐	Consumed
			12/22/2017		EPA 8015B	TPH EXTRACTABLE BY GC/FID	☐	☐	☐	Consumed
			12/22/2017		EPA 8015B	Total TPH	☐	☐	☐	Consumed
N027591-002A	FOLDER	12/22/2017	12/22/2017		Folder	Folder	☐	☐	☐	LAB
			12/22/2017		Folder	Folder	☐	☐	☐	LAB

GSO

800-322-5555
www.gso.com

Ship From
ASSET LABORATORIES
MOLKY BRAR
11110 ARTESIA BLVD. SUITE B
CERRITOS, CA 90703

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

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

Delivery Instructions:
HOLD FOR PICKUP
Signature Type: NOT REQUIRED

1 of 1

Tracking #: 538778797

SDS

LVS A

LAS VEGAS

C89102A

76718833

Print Date: 12/15/2017 5:31 PM

LABEL INSTRUCTIONS:

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

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all of the GSO service terms & conditions including, but not limited to; limits of liability, declared value conditions, and claim procedures which are available on our website at www.gso.com.

IR #2 5.0 °C

Subject: FW: SFPP Norwalk (Asset Labs No. N027591)
From: "Carino, Vladimir/SCO" <Vladimir.Carino@CH2M.com>
Date: 01/08/18 4:42 PM
To: "Marlon B. Cartin" <marlon@assetlaboratories.com>, "fernando@assetlaboratories.com" <fernando@assetlaboratories.com>
CC: "Orliczky, Nils/SCO" <Nils.Orliczky@ch2m.com>, "Irvine, Cameron/SAC" <Cameron.Irvine@CH2M.com>, "Davis, Eric/LAC" <Eric.Davis@CH2M.com>

Is the sample ID for this report correct. It looks like this is for the influent, not effluent. The effluent was for Work Order N027588. The COC for this work order (N027591) calls the sample INF-12-15. Can you revise the report to show correct sample ID.

Thanks.
Vladimir

From: Reports ASSET Laboratories [mailto:reports.lv@assetlaboratories.com]
Sent: Thursday, December 28, 2017 5:56 PM
To: Davis, Eric/LAC <Eric.Davis@CH2M.com>
Cc: Irvine, Cameron/SAC <Cameron.Irvine@CH2M.com>; Carino, Vladimir/SCO <Vladimir.Carino@CH2M.com>; Pataray, Benny/SLC <Benny.Pataray@CH2M.com>; James_Dye@kindermorgan.com; Orliczky, Nils/SCO <Nils.Orliczky@ch2m.com>; 'Marlon Cartin' <marlon@assetlaboratories.com>
Subject: SFPP Norwalk (Asset Labs No. N027591) [EXTERNAL]

The original message text is below.
++

Enclosed is the final report for the above project.

Thanks,

Fern Rivera

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

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Attachments:

N027591.pdf	1.0 MB
N027591EDF.zip	10.5 KB