REPORT

Third Quarter 2016 Remediation Progress Report SFPP Norwalk Pump Station Norwalk, California

Prepared for

Kinder Morgan Energy Partners, L.P.

October 19, 2016

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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 licensed professional.

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Acronyms and Abbreviations

µg/L	micrograms per liter
1,2-DCA	1,2-dichloroethane
Air Tech	Air Technology Laboratories
Asset	Asset Laboratories (formerly Advanced Technology Laboratories)
ASTM	ASTM International
BTEX	benzene, toluene, ethylbenzene, and total xylenes
CH2M	CH2M HILL Engineers, Inc.
DAF	dissolved air flotation
EPA	U.S. Environmental Protection Agency
GWE	groundwater extraction
GWTS	groundwater treatment system
LGAC	liquid-phase granular activated carbon
MTBE	methyl tertiary butyl ether
NPDES	National Pollutant Discharge Elimination System
O&M	operations and maintenance
OWS	oil-water separator
PID	photoionization detector
RAB	Restoration Advisory Board
RWQCB	California Regional Water Quality Control Board, Los Angeles Region
SCAQMD	South Coast Air Quality Management District
scfm	standard cubic feet per minute
SF6	sulfur hexafluoride
SFPP	SFPP, L.P., an operating partnership of Kinder Morgan Energy Partners, 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) has prepared this report on behalf of SFPP, L.P. (SFPP), an operating partnership of Kinder Morgan Energy Partners, L.P., 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 third quarter 2016 reporting period.

This progress report is submitted pursuant to a request from the California Regional Water Quality Control Board, Los Angeles Region (RWQCB) in its letter dated October 25, 2006 (RWQCB, 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, 2013a), 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 July through September 2016 with documentation of the following tasks:

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

The remediation activities performed from July through September 2016 and the progress achieved through those activities are summarized in the following sections.

SECTION 2

Remediation Systems

SFPP currently operates remediation systems consisting of soil vapor extraction (SVE), total fluids extraction (TFE) of free product and/or groundwater using top-loading pumps, and treatment of extracted soil vapors and groundwater to address two specific areas at and near the site: the south-central area and the southeastern area. Operation of the West Side Barrier (WSB) groundwater extraction (GWE) system (WSB system) for remediation of the western offsite area was discontinued in August 2008. SFPP also operates a horizontal biosparge system to enhance mass removal of free-phase and dissolved-phase hydrocarbon constituents in the south-central area of the site. Further discussion of this system is provided below.

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

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 fluids pumps are piped to an oil-water separator (OWS). Free product 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) that are not treated in the LGAC. The treated groundwater then passes through polishing LGAC units prior to discharge in accordance with a National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA0063509; Order No. R4-2011-0095).

In August 2014, SFPP completed installation of a horizontal biosparge well (BS-01) in the south-central area of the site. Construction of the biosparge well is documented in the report titled, *Horizontal Biosparge Well and Soil Vapor Monitoring Probe Completion Report* (CH2M, 2015). Installation of the associated mechanical and electrical equipment was completed in December 2015. The biosparge system injects ambient air into the horizontal biosparge well, via a rotary screw air compressor, at a maximum design rate of approximately 500 standard cubic feet per minute (scfm). SFPP's SVE system has an interlock that ensures the biosparge system cannot operate unless the SVE system is operating. Operation of the SVE system reduces the potential for off-gassing of VOCs during biosparge operations. Pilot testing commenced on January 6, 2016, and is anticipated to continue for approximately 1 year in order to evaluate the feasibility of system expansion. Soil vapor and groundwater data collected as part of the pilot testing will be submitted to the RWQCB and Restoration Advisory Board (RAB) under separate cover. 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 third quarter 2016. The remediation system layout is presented in Figure 2.

SECTION 3

Operations and Maintenance

During the third quarter 2016 reporting period, O&M of the remediation systems included the following tasks:

- Performed weekly maintenance and monitoring of the south-central and southeastern SVE and TFE wells, the SVE system, and the horizontal biosparge system.
- Completed the installation of a new dissolved air flotation (DAF) tank/OWS, and associated piping and concrete containment pad.
- Performed ongoing weekly maintenance on the GWTS after restart on September 7, 2016.

The remediation systems operated during the third quarter 2016 with the following exceptions:

- The GWTS, SVE, and biosparging systems were turned off on June 24, 2016, to facilitate collection of biosparge pilot test groundwater monitoring data. The SVE and biosparging systems were restarted on July 1, 2016. The GWTS remained offline for installation of the new DAF/OWS. The GWTS was restarted on September 7, 2016.
- The SVE and biosparging systems were shut down due to an SVE low air pressure alarm on August 9, 2016. The alarm was reset and the system was restarted on August 10, 2016.
- The SVE and biosparging systems were shut down due to a power outage on August 11, 2016. The systems were restarted on August 12, 2016.
- The SVE and biosparging systems were turned off on August 19, 2016, to facilitate collection of biosparge pilot test groundwater monitoring data. The systems were restarted on August 24, 2016.
- The SVE and biosparging systems were shut down due to a power outage on August 26, 2016. The systems were restarted later that day.
- The SVE and biosparging systems were shut down due to an SVE low air pressure alarm on September 5, 2016. The alarm was reset, a blown fuse was replaced, and the systems were restarted on September 6, 2016.
- The GWTS, SVE, and biosparging systems were turned off on September 27, 2016, to facilitate gauging and sampling activities for the second semiannual groundwater monitoring event. The SVE and biosparge systems were restarted on October 7, 2016. The GWTS was restarted on October 11, 2016.

During this reporting period, SVE and biosparge system 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.

Overall, during the third quarter 2016, the SVE and biosparging systems were operational 87 percent of the time (98 percent of the time excluding planned shutdowns), and the GWTS operated 25 percent of the time (100 percent of the time excluding planned shutdowns). The low uptime for the GWTS was due to the planned installation of the new DAF/OWS system. Table 2 presents the SVE system operations summary. Extracted vapor photoionization detector (PID) measurements collected during the third quarter 2016 are summarized in Table 3. Extracted vapor analytical results for the third quarter 2016 are summarized in Table 4. The groundwater remediation system operation activities for the third quarter 2016 are summarized in Table 5. The extracted groundwater analytical results for the third quarter 2016 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.

Vapor samples from the SVE system influent and water samples from the GWTS influent were collected during the third quarter 2016 when the systems were in operation. During the third quarter 2016, influent vapor samples were collected on July 7, August 2, and September 7, 2016. Influent water samples were collected on September 20, 2016, after installation of the new DAF/OWS and once the GWTS was operating. The water samples were delivered to Asset Laboratories (Asset; formerly Advanced Technology Laboratories) of Las Vegas, Nevada, for analysis. Asset is certified by the California Department of Public Health Environmental Laboratory Accreditation Program. The vapor samples were delivered to Air Technology Laboratories (Air Tech) of 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 U.S. Environmental Protection Agency (EPA) Method TO-15
- Total VOCs using EPA Method TO-3

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 EPA Method 8015(M)
- VOCs using EPA Method 8260B

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 30,403 pounds during the third quarter 2016. A significant increase in mass removal was observed during the first and second quarters of 2016 due to higher influent concentrations resulting from operation of the horizontal biosparge system. During the third quarter 2016, influent concentrations declined to less than 1,000 parts per million by volume (ppmv), resulting in mass removal quantities similar to those reported in the second half of 2015. Since SVE implementation in September 1995, the cumulative mass of VOCs removed was 3,472,430 pounds (Table 2). The cumulative mass removed by SVE does not include the mass removed by naturally occurring in situ biodegradation.

A total of 217,956 gallons of groundwater was extracted during the third quarter 2016 (Table 5). No water was extracted from the WSB area during the third quarter 2016. Approximately 97.6 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 third quarter 2016 did not warrant restarting the WSB system.

No free product accumulated in the product holding tank during the third quarter 2016. Since 1995, a total of 14,097 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 2016 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 19,364 pounds. During the third quarter 2016, the mass removal of hydrocarbons was estimated to be 7.4 pounds. This represents a significant decrease in mass removal since the second quarter 2016, when the mass removed was 253 pounds. The decrease is primarily due to lower uptime of the GWTS during the third quarter 2016; the lower uptime is a result of the DAF/OWS installation as previously noted above. Table 6 shows the extracted groundwater analytical results for the sample collected on September 20, 2016. As shown in the table, the TPH concentration has declined by an order of magnitude since the second quarter 2016, and is at an all-time low since total TPH was first measured in 2012. The lower TPH concentrations at the influent are a direct result of continued biosparge operations in the south-central area.

The biosparge system operated for 1,793 hours in the third quarter 2016 (Table 7). The biosparge system flow (air injection) rate ranged from 120 scfm (upon startup events) to a maximum of 559 scfm during the third quarter 2016.

SECTION 5

System Evaluation and Optimization

During the third quarter 2016, all offsite SVE well valves have been fully open to ensure maximum vapor extraction from the offsite area; onsite SVE well valves were 50 percent open to optimize SVE system operation and compliance. Since August 2016, SVE influent concentrations have declined to less than 1,000 ppmv; therefore, in the fourth quarter 2016, operation of the SVE system will include more onsite wells in the fully open position to increase influent concentrations and optimize SVE system performance.

As previously stated in Sections 3 and 4, the GWTS was offline for most of the third quarter 2016 to facilitate installation of the new DAF/OWS system. The DAF/OWS system was successfully installed and brought online on September 7, 2016. The GWTS was then shut down on September 27, 2016, to allow groundwater levels to recover to static conditions prior to sitewide gauging for the second semiannual groundwater monitoring event (scheduled for early October). The GWTS was restarted on October 11, 2016, and will continue to operate during the fourth quarter 2016 for hydraulic control and product recovery in the south-central and southeastern areas. TFE pump inlet depths will be adjusted, as needed, to optimize GWE and product recovery.

The first semiannual 2016 groundwater monitoring event in the WSB region occurred during the second quarter 2016. Monitoring results support the continued shutdown of GWE in the WSB region. 1,2-DCA, MTBE, and TBA concentrations in the western area will continue to be monitored during routine semiannual groundwater monitoring events; the WSB system will be restarted if necessary.

As shown in Table 8, measurable free product was observed in seven remediation wells during the first semiannual groundwater monitoring event (conducted during the second quarter of 2016). Of these, one well (GMW-36) in the southeastern area had measureable product; the remaining six wells (GMW-10, GMW-22, GMWO-11, GMW-O-12, GMW-O-21, and MW-O-2) with measurable product are located in the south-central area. Up to 6.49 feet of measurable product was observed in offsite well GMW-O-12 on April 11, 2016. It is believed that increased product thicknesses, previously observed, are indicative of declining water levels across the site (Figure 3). However, during recent groundwater monitoring conducted in August 2016 (for pilot test data collection), measurable free product was observed in only three remediation wells in the south-central area (GMW-10, GMW-O-11, and GMW-O-12). The product thicknesses ranged from 0.01 foot in GMW-O-11 to 2.49 feet in GMW-O-12. As noted above, approximately 6.5 feet of measurable product had been observed in GMW-O-12 during April 2016. The substantial decline in measurable product in the south-central area is directly attributed to biosparge system operations. Biosparge system operations will continue during the fourth quarter 2016. Air injection rates will be optimized to ensure adequate destruction efficiency of extracted vapors by the SVE system.

SECTION 6

Planned Fourth Quarter 2016 Activities

During the fourth quarter 2016, SFPP 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 fourth quarter 2016:

- Continue weekly maintenance and monitoring of the south-central and southeastern SVE and TFE/GWE treatment systems, and horizontal biosparge system.
- Measure individual well vapor concentrations.
- Collect and analyze system influent vapor and groundwater samples.
- Perform as-needed carbon changeouts of the LGAC vessels.
- 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.
- Deliver new regenerative thermal oxidizer vapor extraction and treatment system, and complete installation.
- Continue biosparge pilot testing, as outlined in the *Horizontal Biosparge System Construction and Pilot Test Work Plan* submitted to the RWQCB on November 18, 2013 (CH2M, 2013b). Soil vapor and groundwater data collected as part of the pilot testing will be submitted to the RWQCB and RAB under separate cover.

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 fourth quarter 2016 will be described in the Fourth Quarter 2016 Remediation Progress Report, to be submitted by January 15, 2017.

Pilot testing of the horizontal biosparge system in the south-central area will continue in the fourth quarter 2016. A comprehensive evaluation report, which includes soil vapor and groundwater data collected as part of the pilot test since January 2016, will be prepared and submitted to the RWQCB in the first quarter 2017. A recommendation for system expansion will be included in the report.

SECTION 7

References

California Regional Water Quality Control Board, Los Angeles Region (RWQCB). 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.

California Regional Water Quality Control Board, Los Angeles Region (RWQCB). 2014. Letter to Mr. Stephen Defibaugh, Kinder Morgan Energy Partners; Approval of Horizontal Biosparge Pilot Test Work Plan, Defense Fuel Support Point Norwalk, 15306 Norwalk Boulevard, Norwalk, California. February 26.

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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 Third Quarter 2016	
						SVE/BS	TFE/GWE
South-Central	MW-SF-1	6/18/1990	78.93	25 - 40	SVE	OFF	--
	MW-SF-2	6/18/1990	78.53	25 - 40	SVE; TFE	OFF	OFF
	MW-SF-3	6/18/1990	78.12	25 - 40	SVE; TFE	OFF	OFF
	MW-SF-4	6/19/1990	79.38	25 - 40	SVE	OFF	--
	MW-SF-5	9/19/1990	79.74	23 - 38	SVE	OFF	--
	MW-SF-6	9/19/1990	76.80	25 - 40	SVE; TFE	OFF	OFF
	MW-SF-9	6/15/1995	74.10	--	SVE	OFF	--
	MW-SF-10	9/23/2003	76.53	10 - 30	SVE	OFF	--
	MW-SF-11	6/19/2007	78.56	20 - 40	SVE; TFE	OFF	OFF
	MW-SF-12	6/18/2007	78.07	20 - 40	SVE; TFE	OFF	OFF
	MW-SF-13	6/19/2007	73.40	20 - 40	SVE; TFE	OFF	OFF
	MW-SF-14	6/21/2007	78.16	20 - 40	SVE; TFE	OFF	OFF
	MW-SF-15	6/21/2007	78.27	20 - 40	SVE; TFE	OFF	OFF
	MW-SF-16	6/20/2007	78.21	20 - 40	SVE; TFE	OFF	OFF
	MW-SF-17	--	--	--	SVE	OFF	--
	GMW-9	7/8/1991	77.16	20 - 50	SVE; TFE	OFF	OFF
	GMW-10	7/8/1991	N/A	25 - 50	SVE; TFE	OFF	OFF
	GMW-22	8/2/1991	77.24	25 - 60	SVE; TFE	OFF	OFF
	GMW-24	8/5/1991	77.48	25 - 60	SVE; TFE	OFF	OFF
	GMW-25	1/10/1992	78.14	20 - 50	SVE; TFE	OFF	OFF
	GWR-3	1/10/1992	77.60	20 - 50	SVE; TFE	OFF	OFF
	VEW-1	09/19/90	--	5 - 25	SVE	OFF	--
	VEW-2	09/19/90	--	5 - 25	SVE	OFF	--
	MW-O-1	1/22/1991	75.48	25 - 40	SVE; TFE	OFF	OFF
	MW-O-2	1/23/1991	71.90	25 - 40	SVE; TFE	OFF	OFF
	GMW-O-11	5/20/1992	74.17	20 - 50	SVE; TFE	OFF	OFF
	GMW-O-12	5/21/1992	73.49	20 - 50	SVE	OFF	--
	GMW-O-20	6/15/1995	73.32	--	SVE; TFE	OFF	OFF
	GMW-O-21	10/1/1997	71.43	26 - 46	TFE	--	OFF
	GMW-O-23	6/25/2007	73.63	20 - 40	SVE; TFE	OFF	OFF
	MW-18 (MID)	6/10/1991	75.67	50 - 60	SVE	OFF	--
	HW-1	09/06/92	--	--	SVE	OFF	--
	HW-2	09/06/92	--	--	SVE	OFF	--
	BS-01	08/27/14	75.06	--	BIOSPARGE	OFF	--
Southeastern	GMW-O-15	4/19/1994	74.23	20 - 50	SVE; TFE	OFF	OFF
	GMW-O-18	7/25/1994	74.36	21 - 40	SVE; TFE	OFF	OFF
	GMW-36	4/11/1994	76.66	20 - 50	SVE; TFE	OFF	OFF
	GMW-SF-9	4/1/2003	73.05	37 - 46	TFE	--	--
	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 192

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[3]	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
First Quarter 2016 Totals	100,105	1,697	--	--	--	74,148
Second Quarter 2016 Totals	101,900	3,492	--	--	--	47,416
7/1/2016	101,900	0	1,780	2,250	65	0
7/7/2016	102,042	142	1,780	1,996	75	4,333
7/12/2016	102,162	120	1,096	1,991	75	2,222
7/19/2016	102,331	170	1,082	1,870	75	2,974
7/26/2016	102,497	166	860	1,953	75	2,461
8/2/2016	102,664	167	658	1,879	80	1,890
8/11/2016	102,858	194	1,044	1,942	80	3,589
8/16/2016	102,966	108	1,012	1,895	80	1,959
8/24/2016	103,033	67	898	2,150	65	1,085
8/25/2016	103,055	21	624	2,045	65	239
8/26/2016	103,069	14	608	2,020	65	154
8/30/2016	103,161	92	796	2,041	75	1,330
9/6/2016	103,300	139	902	2,052	75	2,282
9/13/2016	103,471	171	848	1,931	75	2,590
9/20/2016	103,641	170	806	1,902	80	2,287
9/27/2016	103,808	168	372	1,888	75	1,009
Third Quarter 2016 Totals	103,808	1,908	--	--	--	30,403
Cumulative Totals	**101,900**	--	--	--	--	**3,472,430**

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	07/12/2016 (ppmv as Hexane)[a]
South-Central	MW-SF-1	SVE	420
	MW-SF-2	SVE; TFE	1,234
	MW-SF-3	SVE; TFE	432
	MW-SF-4	SVE	910
	MW-SF-5	SVE	238
	MW-SF-6	SVE; TFE	2,388
	MW-SF-9	SVE	2,692
	MW-SF-10	SVE	624
	MW-SF-11	SVE; TFE	112
	MW-SF-12	SVE; TFE	2,142
	MW-SF-13	SVE; TFE	834
	MW-SF-14	SVE; TFE	256
	MW-SF-15	SVE; TFE	1,146
	MW-SF-16	SVE; TFE	246
	MW-SF-17	SVE; TFE	--
	GMW-9	SVE; TFE	>5000
	GMW-10	SVE	284
	GMW-22	SVE; TFE	>5000
	GMW-24	SVE; TFE	826
	GMW-25	SVE; GWE	826
	GWR-3	SVE; GWE	3,280
	VEW-1	SVE	Water in Line
	VEW-2	SVE	1154
	MW-O-1	SVE; TFE	688
	MW-O-2	SVE; TFE	1,026
	GMW-O-11	SVE; TFE	176
	GMW-O-12	SVE	>5000
	GMW-O-20	SVE; TFE	--
	GMW-O-23	SVE; TFE	--
	MW-18 (MID)	SVE	158
	HW-1	SVE	1,184
	HW-2	SVE	2,158
Southeastern	GMW-36	SVE; TFE	456
	GMW-O-15	SVE; TFE	456
	GMW-O-18	SVE; TFE	456

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

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 (formerly American Society for Testing and Materials)

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	10
2003 Totals	1,607,095	2,281,956	3,889,051	--	65	0
2004 Totals	1,695,361	3,854,470	5,549,831	--	229	83
2005 Totals	1,537,925	4,244,674	5,782,599	--	273	89
2006 Totals	1,699,567	5,089,615	6,789,182	--	684	0
2007 Totals	3,368,481	2,167,724	5,536,205	--		0
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	2,244	3,344,471	--	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	6,439,776	0	6,439,776	--	568	2
2014 Totals	3,410,458	0	3,410,458	--	2,236	2,335
2015 Totals	3,410,458	0	3,410,458	--	5,960	2,605
First Quarter 2016 Totals	**767,657**	**0**	**767,657**	**--**	**4,203**	**201**
Second Quarter 2016 Totals	**856,588**	**0**	**856,588**	**--**	**253**	**37**
7/1/2016	0	0	0	6,580	0.00	
7/2/2016	0	0	0	6,580	0.00	
7/3/2016	0	0	0	6,580	0.00	
7/4/2016	0	0	0	6,580	0.00	
7/5/2016	0	0	0	6,580	0.00	
7/6/2016	0	0	0	6,580	0.00	
7/7/2016	0	0	0	6,580	0.00	
7/8/2016	0	0	0	6,580	0.00	
7/9/2016	0	0	0	6,580	0.00	
7/10/2016	0	0	0	6,580	0.00	
7/11/2016	0	0	0	6,580	0.00	
7/12/2016	0	0	0	6,580	0.00	
7/13/2016	0	0	0	6,580	0.00	

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)
7/14/2016	0	0	0	6,580	0.00	
7/15/2016	0	0	0	6,580	0.00	
7/16/2016	0	0	0	6,580	0.00	
7/17/2016	0	0	0	6,580	0.00	
7/18/2016	0	0	0	6,580	0.00	
7/19/2016	0	0	0	6,580	0.00	
7/20/2016	0	0	0	6,580	0.00	
7/21/2016	0	0	0	6,580	0.00	
7/22/2016	0	0	0	6,580	0.00	
7/23/2016	0	0	0	6,580	0.00	
7/24/2016	0	0	0	6,580	0.00	
7/25/2016	0	0	0	6,580	0.00	
7/26/2016	0	0	0	6,580	0.00	
7/27/2016	0	0	0	6,580	0.00	
7/28/2016	0	0	0	6,580	0.00	
7/29/2016	0	0	0	6,580	0.00	
7/30/2016	0	0	0	6,580	0.00	
7/31/2016	0	0	0	6,580	0.00	
8/1/2016	0	0	0	6,580	0.00	
8/2/2016	0	0	0	6,580	0.00	
8/3/2016	0	0	0	6,580	0.00	
8/4/2016	0	0	0	6,580	0.00	
8/5/2016	0	0	0	6,580	0.00	
8/6/2016	0	0	0	6,580	0.00	
8/7/2016	0	0	0	6,580	0.00	
8/8/2016	0	0	0	6,580	0.00	
8/9/2016	0	0	0	6,580	0.00	
8/10/2016	0	0	0	6,580	0.00	
8/11/2016	0	0	0	6,580	0.00	
8/12/2016	0	0	0	6,580	0.00	
8/13/2016	0	0	0	6,580	0.00	
8/14/2016	0	0	0	6,580	0.00	
8/15/2016	0	0	0	6,580	0.00	
8/16/2016	0	0	0	6,580	0.00	
8/17/2016	0	0	0	6,580	0.00	

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)
8/18/2016	0	0	0	6,580	0.00	
8/19/2016	0	0	0	6,580	0.00	
8/20/2016	0	0	0	6,580	0.00	
8/21/2016	0	0	0	6,580	0.00	
8/22/2016	0	0	0	6,580	0.00	
8/23/2016	0	0	0	6,580	0.00	
8/24/2016	0	0	0	6,580	0.00	
8/25/2016	0	0	0	6,580	0.00	
8/26/2016	0	0	0	6,580	0.00	
8/27/2016	0	0	0	6,580	0.00	
8/28/2016	0	0	0	6,580	0.00	
8/29/2016	0	0	0	6,580	0.00	
8/30/2016	0	0	0	6,580	0.00	
8/31/2016	0	0	0	6,580	0.00	
9/1/2016	0	0	0	6,580	0.00	
9/2/2016	0	0	0	6,580	0.00	
9/3/2016	0	0	0	6,580	0.00	
9/4/2016	0	0	0	6,580	0.00	
9/5/2016	0	0	0	6,580	0.00	
9/6/2016	0	0	0	6,580	0.00	
9/7/2016	1,452	0	1,452	6,580	0.08	
9/8/2016	7,500	0	7,500	6,580	0.41	
9/9/2016	9,398	0	9,398	6,580	0.52	
9/10/2016	8,751	0	8,751	6,580	0.48	
9/11/2016	8,572	0	8,572	6,580	0.47	
9/12/2016	6,461	0	6,461	6,580	0.35	
9/13/2016	7,884	0	7,884	6,580	0.43	
9/14/2016	15,252	0	15,252	6,580	0.84	
9/15/2016	13,971	0	13,971	6,580	0.77	
9/16/2016	13,640	0	13,640	6,580	0.75	
9/17/2016	12,723	0	12,723	6,580	0.70	
9/18/2016	12,156	0	12,156	6,580	0.67	
9/19/2016	12,387	0	12,387	6,580	0.68	
9/20/2016	10,771	0	10,771	390	0.03	
9/21/2016	12,609	0	12,609	390	0.04	

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)
9/22/2016	11,929	0	11,929	390	0.04	
9/23/2016	11,324	0	11,324	390	0.04	
9/24/2016	11,093	0	11,093	390	0.04	
9/25/2016	11,405	0	11,405	390	0.04	
9/26/2016	10,943	0	10,943	390	0.04	
9/27/2016	7,735	0	7,735	390	0.03	
9/28/2016	0	0	0	390	0.00	
9/29/2016	0	0	0	390	0.00	
9/30/2016	0	0	0	390	0.00	
Third Quarter 2016 Totals	**217,956**	**0**	**217,956**	**--**	**7.4**	**0**
Cumulative Total	**70,715,174**	**26,902,604**	**97,617,778**	**--**	**19,364**	**14,097**

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 gas, 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	--	--	--	--
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	--	--	--	--

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)
1/30/2003	--	--	--	--	--	<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	--	--	--	--
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	--	--	--	--

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)
1/4/2008	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	--	--	--	--
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	--	--	--	--

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)
1/14/2011	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
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

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)
1/17/2014	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.														
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
10/8/2016	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

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] July 27, 2011, sample and samples 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) showr
µg/L = micrograms per liter
DIPE = di-isopropyl ether
ETBE = ethyl tertiary butyl ether
J = Analyte was detected above the laboratory method detection limit and below the laboratory RI
MTBE = methyl tertiary butyl ether
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	--	--
Cumulative Totals	**4,775**	--	75.1	--	**--**

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
	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
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

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
	5/24/2010	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
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
	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

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
	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
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

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	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
	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
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

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
	12/19/2014	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
	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
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
	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

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	76.66	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
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
	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

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-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
	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

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
	9/1/2015	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
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
	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

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
	4/18/2014	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
	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
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
	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

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
	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
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
	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
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

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
	10/10/2011	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
	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
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

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
	10/14/2014	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
	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
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
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
	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

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
	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
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
	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
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

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
	4/11/2011	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
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
	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
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

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	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
	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
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

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
	1/9/2012	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
	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
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
	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

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
	10/23/2014	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
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
	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

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
	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
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
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

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	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
	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
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

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	74.10	DRY	---	---	NC	Blaine Tech
	6/6/2013	74.10	28.53	---	---	45.57	Blaine Tech
	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
	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

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	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
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
	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
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

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
	10/17/2008	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
	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
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

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
	4/12/2011	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
	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
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

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
	5/24/2013	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
	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
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
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

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	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

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

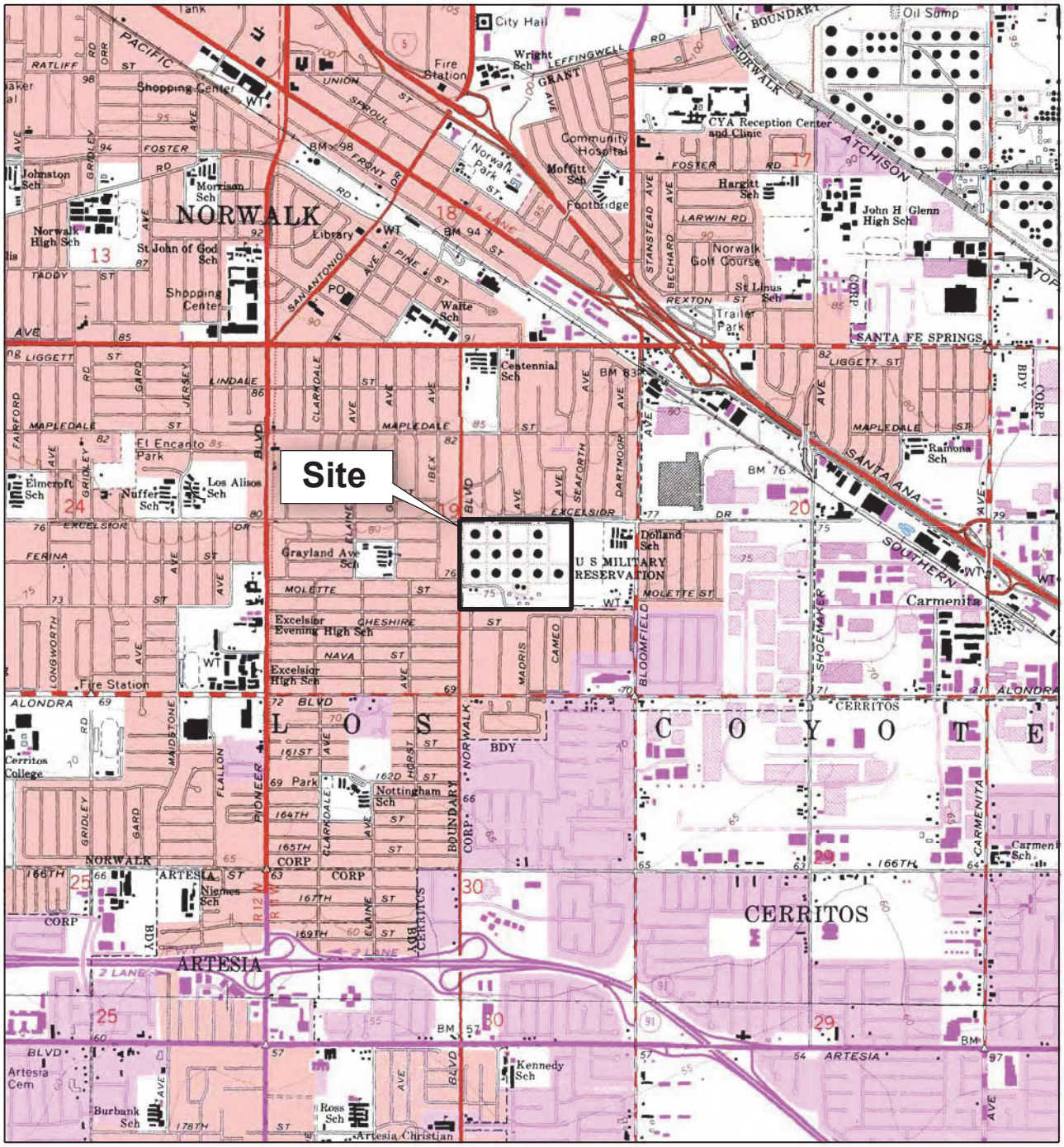
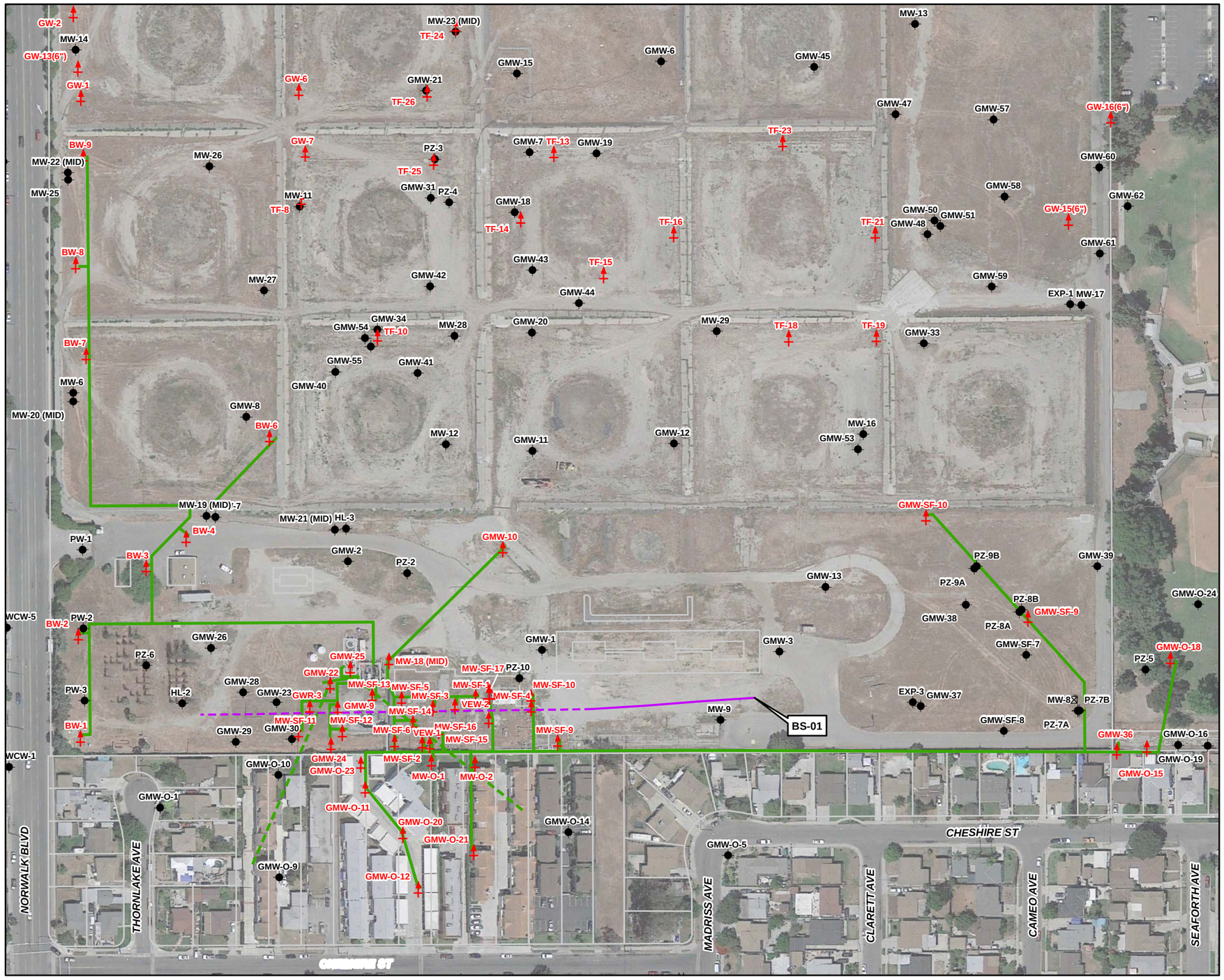


Figure 1
Site Location Map
SFPP Norwalk Pump Station
Norwalk, California

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

- 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

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

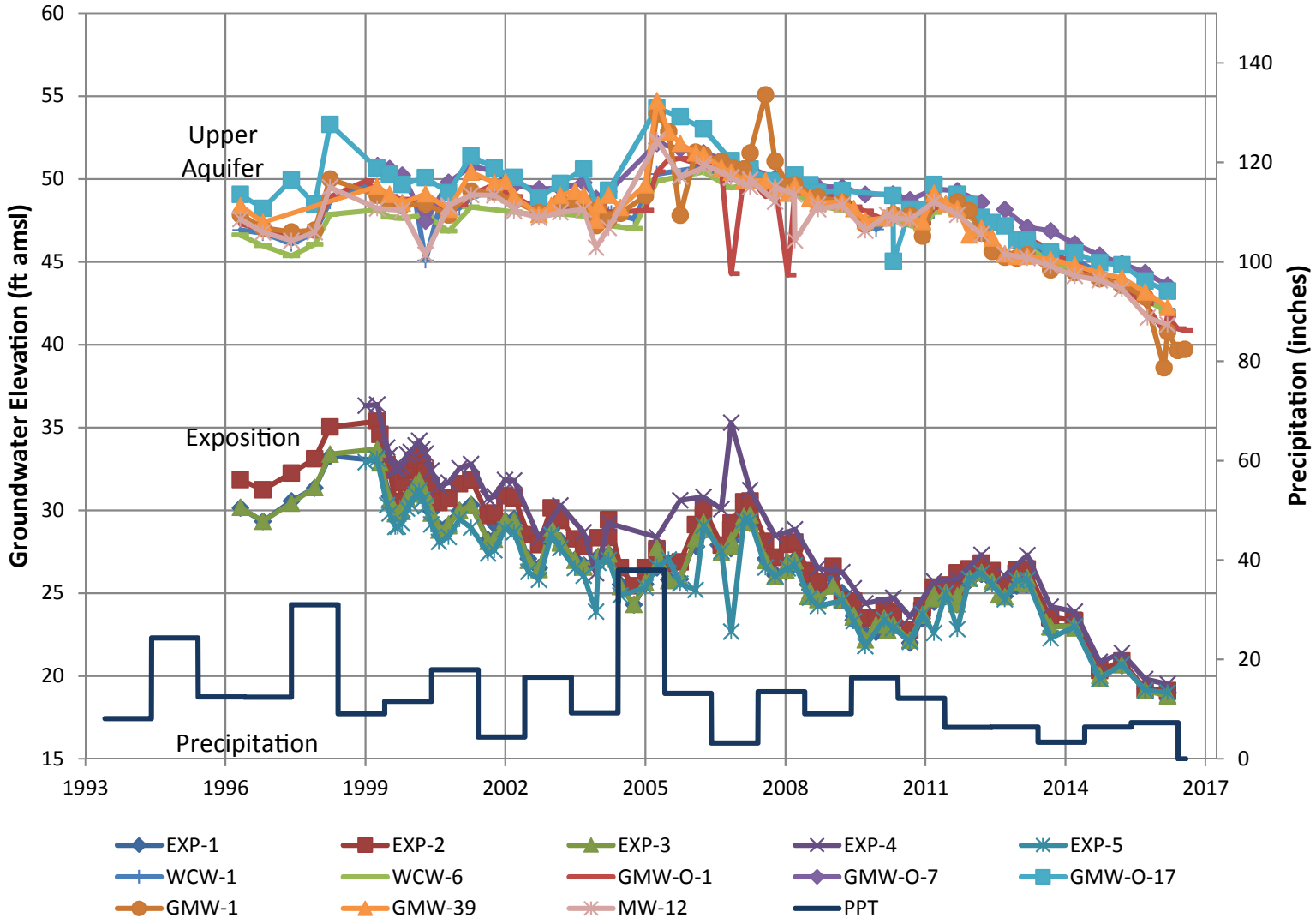


Figure 3
Hydrographs for Select Groundwater Monitoring Wells
SFPP Norwalk Pump Station
Norwalk, California

Appendix A
Laboratory Analytical Reports

Air TECHNOLOGY Laboratories, Inc.

July 18, 2016

ADE-1461
EPA Methods TO3, TO14A, TO15 SIM & SCAN
ASTM D1946

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: Daniel Jablonski
5742 Costello Ave.
Van Nuys, CA 91401

LABORATORY TEST RESULTS

Project Reference: SFPP - Norwalk Site
Lab Number: H070805-01/04

Enclosed are results for sample(s) received 7/08/16 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 Dan Jablonski, Vidal Cortes and Steve Defibaugh on 7/15/16.

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.

H070805-04/04

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: 7/7/16

PAGE: 1 OF 1

LABORATORY CLIENT: **CH2M HILL: Attn - Dan Jablonski**
ADDRESS: **6 Hutton Centre Dr, Suite 700**
CITY: **Santa Ana, CA 92707**
TEL: **714-429-2020** FAX: E-MAIL:

CLIENT PROJECT NAME / NUMBER: **SFPP - Norwalk Site**
PROJECT CONTACT: **James Dye**
SAMPLER(S): (SIGNATURE)
P.O. NO.:
QUOTE NO.:
LAB USE ONLY:

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ■ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS
Report: Jablonski, Daniel/LAC - Daniel.Jablonski@CH2M.com,
Cortes, Vidal/SCO - Vidal.Cortes@CH2M.com
CC: KMEP Steve Defibaugh - Steve_Defibaugh@kindermorgan.com
"J" flags required/Use lowest possible detection limit - all methods.

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING DATE	SAMPLING TIME	INITIAL PRESSURE ("Hg)	FINAL PRESSURE ("Hg)	MAT-RIX	NO. OF CONT.	TO-3 (TPH-g, TPH-d, TPH as hexane)	TO-15 (VOCs Target Analytes)	ASTM-D 1946 (O2/Argon, CO2, CH4, N2)	Comments
01	VEFF-07-07	Outlet (stack)	7/7/16	0944	-30	-10	Air	1	X	X		Individually Certified 1-L SUMMA
02	VEFF-07-07-D	Outlet (stack) Dup	7/7/16	0944	-30	-10	Air	1	X	X		Individually Certified 1-L SUMMA
03	VPOST-07-07	Post-Dilution	7/7/16	1101	-30	-5	Air	1	X	X		Individually Certified 1-L SUMMA
04	VINF-07-07	Influent Vapor (header)	7/7/16	1104	-30	-10	Air	1	X	X	X	Batch Certified 1-L SUMMA
												TAL includes historical VOCs
												and remaining ATLI List per
												subcontract.

Relinquished by: (Signature)	Received by: (Signature) FED EX	Date: 7/7/16	Time: 1530
Relinquished by: (Signature) FED EX	Received by: (Signature)	Date: 7/8/16	Time: 1040
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Revised: 06/29/2015

Client: CH2M Hill
Attn: Dan Jablonski
Project Name: SFPP - Norwalk Site
Project No.: NA
Date Received: 07/08/16
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	H070805-01			H070805-02			H070805-03			H070805-04		
Client Sample I.D.:	VEFF-07-07			VEFF-07-07-D			VPOST-07-07			VINF-07-07		
Date/Time Sampled:	7/7/16 9:44			7/7/16 9:44			7/7/16 11:01			7/7/16 11:06		
Date/Time Analyzed:	7/11/16 22:26			7/11/16 23:26			7/12/16 4:04			7/12/16 13:25		
QC Batch No.:	160711MS2A1			160711MS2A1			160712MS2A1			160712MS2A1		
Analyst Initials:	DT			DT			DT			DT		
Dilution Factor:	2.7			2.7			40			51		
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	0.0027	0.00041	ND	0.0027	0.00041	ND	0.040	0.0062	ND	0.051	0.0078
Chloromethane	ND	0.0053	0.00058	ND	0.0053	0.00058	ND	0.081	0.0089	ND	0.10	0.011
1,2-Cl-1,1,2,2-F ethane (114)	ND	0.0027	0.00053	ND	0.0027	0.00053	ND	0.040	0.0081	ND	0.051	0.010
Vinyl Chloride	ND	0.0027	0.00043	ND	0.0027	0.00043	ND	0.040	0.0066	ND	0.051	0.0082
Bromomethane	ND	0.0027	0.00078	ND	0.0027	0.00078	ND	0.040	0.012	ND	0.051	0.015
Chloroethane	ND	0.0027	0.0022	ND	0.0027	0.0022	ND	0.040	0.034	ND	0.051	0.042
Trichlorofluoromethane (11)	ND	0.0027	0.00057	ND	0.0027	0.00057	ND	0.040	0.0087	ND	0.051	0.011
1,1-Dichloroethene	ND	0.0027	0.00060	ND	0.0027	0.00060	ND	0.040	0.0092	ND	0.051	0.011
Carbon Disulfide	0.017	0.013	0.00064	0.023	0.013	0.00064	0.047 J	0.20	0.0097	0.086 J	0.25	0.012
1,1,2-Cl 1,2,2-F ethane (113)	ND	0.0027	0.00071	ND	0.0027	0.00071	ND	0.040	0.011	ND	0.051	0.014
Acetone	0.0013 J	0.013	0.00077	0.064	0.013	0.00077	0.12 J	0.20	0.012	0.11 J	0.25	0.015
Methylene Chloride	ND	0.0027	0.00076	ND	0.0027	0.00076	ND	0.040	0.012	ND	0.051	0.014
t-1,2-Dichloroethene	ND	0.0027	0.00080	ND	0.0027	0.00080	ND	0.040	0.012	ND	0.051	0.015
1,1-Dichloroethane	ND	0.0027	0.00036	ND	0.0027	0.00036	ND	0.040	0.0055	ND	0.051	0.0069
c-1,2-Dichloroethene	ND	0.0027	0.00051	ND	0.0027	0.00051	ND	0.040	0.0078	ND	0.051	0.0098
2-Butanone	0.13	0.0027	0.0016	0.13	0.0027	0.0016	0.049	0.040	0.025	ND	0.051	0.031
t-Butyl Methyl Ether (MTBE)	ND	0.0027	0.00059	ND	0.0027	0.00059	ND	0.040	0.0090	ND	0.051	0.011
Chloroform	ND	0.0027	0.00037	ND	0.0027	0.00037	ND	0.040	0.0057	ND	0.051	0.0071
1,1,1-Trichloroethane	ND	0.0027	0.00027	ND	0.0027	0.00027	ND	0.040	0.0041	ND	0.051	0.0051
Carbon Tetrachloride	ND	0.0027	0.00046	ND	0.0027	0.00046	ND	0.040	0.0070	ND	0.051	0.0088
Benzene	0.0016 J	0.0027	0.00026	0.0017 J	0.0027	0.00026	1.1	0.040	0.0039	1.0	0.051	0.0049
1,2-Dichloroethane	ND	0.0027	0.00020	ND	0.0027	0.00020	ND	0.040	0.0030	ND	0.051	0.0038
Trichloroethene	ND	0.0027	0.00038	ND	0.0027	0.00038	ND	0.040	0.0057	ND	0.051	0.0071
1,2-Dichloropropane	ND	0.0027	0.00048	ND	0.0027	0.00048	ND	0.040	0.0073	ND	0.051	0.0091
Bromodichloromethane	ND	0.0027	0.00016	ND	0.0027	0.00016	ND	0.040	0.0024	0.019 J	0.051	0.0030
c-1,3-Dichloropropene	ND	0.0027	0.00032	ND	0.0027	0.00032	ND	0.040	0.0048	ND	0.051	0.0060
4-Methyl-2-Pentanone	ND	0.0027	0.00018	ND	0.0027	0.00018	ND	0.040	0.0027	ND	0.051	0.0034
Toluene	0.026	0.0027	0.00021	0.028	0.0027	0.00021	1.5	0.040	0.0032	2.5	0.051	0.0040
t-1,3-Dichloropropene	ND	0.0027	0.00027	ND	0.0027	0.00027	ND	0.040	0.0042	ND	0.051	0.0052
1,1,2-Trichloroethane	ND	0.0027	0.00043	ND	0.0027	0.00043	ND	0.040	0.0065	ND	0.051	0.0082
1,3-Dichloropropane	ND	0.0027	0.00013	ND	0.0027	0.00013	ND	0.040	0.0020	ND	0.051	0.0025
Tetrachloroethene	ND	0.0027	0.00032	ND	0.0027	0.00032	ND	0.040	0.0049	ND	0.051	0.0061
2-Hexanone	ND	0.0027	0.00055	ND	0.0027	0.00055	ND	0.040	0.0083	ND	0.051	0.010
Dibromochloromethane	ND	0.0027	0.00048	ND	0.0027	0.00048	ND	0.040	0.0074	ND	0.051	0.0092
1,2-Dibromoethane	ND	0.0027	0.00024	ND	0.0027	0.00024	ND	0.040	0.0037	ND	0.051	0.0046
Chlorobenzene	ND	0.0027	0.00021	ND	0.0027	0.00021	ND	0.040	0.0031	ND	0.051	0.0039
Ethylbenzene	0.0090	0.0027	0.00015	0.0094	0.0027	0.00015	0.073	0.040	0.0023	0.22	0.051	0.0029
p,&m-Xylene	0.059	0.0027	0.00030	0.059	0.0027	0.00030	0.34	0.040	0.0046	1.2	0.051	0.0057
o-Xylene	0.030	0.0027	0.00032	0.030	0.0027	0.00032	0.12	0.040	0.0049	0.43	0.051	0.0061

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: Dan Jablonski
Project Name: SFPP - Norwalk Site
Project No.: NA
Date Received: 07/08/16
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	H070805-01			H070805-02			H070805-03			H070805-04		
Client Sample I.D.:	VEFF-07-07			VEFF-07-07-D			VPOST-07-07			VINF-07-07		
Date/Time Sampled:	7/7/16 9:44			7/7/16 9:44			7/7/16 11:01			7/7/16 11:06		
Date/Time Analyzed:	7/11/16 22:26			7/11/16 23:26			7/12/16 4:04			7/12/16 13:25		
QC Batch No.:	160711MS2A1			160711MS2A1			160712MS2A1			160712MS2A1		
Analyst Initials:	DT			DT			DT			DT		
Dilution Factor:	2.7			2.7			40			51		
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	0.0015 J	0.0027	0.00034	0.0017 J	0.0027	0.00034	ND	0.040	0.0052	0.017 J	0.051	0.0065
Bromoform	ND	0.0027	0.00015	ND	0.0027	0.00015	ND	0.040	0.0023	ND	0.051	0.0028
Isopropyl benzene	0.00035 J	0.0027	0.00028	0.00040 J	0.0027	0.00028	ND	0.040	0.0042	0.0098 J	0.051	0.0053
1,1,2,2-Tetrachloroethane	ND	0.0053	0.00016	ND	0.0053	0.00016	ND	0.081	0.0025	ND	0.10	0.0031
Benzyl Chloride	ND	0.0027	0.00049	ND	0.0027	0.00049	ND	0.040	0.0074	ND	0.051	0.0093
1,2,3-Trichloropropane	ND	0.0027	0.00071	ND	0.0027	0.00071	ND	0.040	0.011	ND	0.051	0.014
n-Propyl Benzene	0.00043 J	0.0027	0.00015	0.00044 J	0.0027	0.00015	ND	0.040	0.0024	0.011 J	0.051	0.0029
4-Ethyl Toluene	0.0028	0.0027	0.00017	0.0030	0.0027	0.00017	0.020 J	0.040	0.0026	0.063	0.051	0.0032
1,3,5-Trimethylbenzene	0.0011 J	0.0053	0.00046	0.0012 J	0.0053	0.00046	0.0073 J	0.081	0.0070	0.025 J	0.10	0.0087
4-Chlorotoluene	ND	0.0027	0.00032	ND	0.0027	0.00032	ND	0.040	0.0048	ND	0.051	0.0060
tert-Butylbenzene	ND	0.0027	0.00024	ND	0.0027	0.00024	ND	0.040	0.0037	ND	0.051	0.0046
1,2,4-Trimethylbenzene	0.0034 J	0.0053	0.00030	0.0033 J	0.0053	0.00030	0.020 J	0.081	0.0046	0.023 J	0.10	0.0057
sec-Butylbenzene	ND	0.0027	0.00026	ND	0.0027	0.00026	ND	0.040	0.0039	ND	0.051	0.0049
p-Isopropyltoluene	0.00055 J	0.0027	0.00035	0.00084 J	0.0027	0.00035	ND	0.040	0.0053	ND	0.051	0.0066
1,3-Dichlorobenzene	ND	0.0027	0.00032	ND	0.0027	0.00032	ND	0.040	0.0049	ND	0.051	0.0061
1,4-Dichlorobenzene	ND	0.0027	0.00039	ND	0.0027	0.00039	ND	0.040	0.0059	ND	0.051	0.0074
n-Butylbenzene	0.00037 J	0.0027	0.00019	0.00041 J	0.0027	0.00019	ND	0.040	0.0030	ND	0.051	0.0037
1,2-Dichlorobenzene	ND	0.0027	0.00033	ND	0.0027	0.00033	ND	0.040	0.0050	ND	0.051	0.0063
1,2,4-Trichlorobenzene	ND	0.0053	0.00044	ND	0.0053	0.00044	ND	0.081	0.0067	ND	0.10	0.0084
Hexachlorobutadiene	ND	0.0027	0.00016	ND	0.0027	0.00016	ND	0.040	0.0024	ND	0.051	0.0030
t-Butanol	ND	0.013	0.00051	0.0027 J	0.013	0.00051	0.025 J	0.20	0.0078	0.011 J	0.25	0.0097
n-Hexane	ND	0.013	0.00036	ND	0.013	0.00036	7.3	0.20	0.0054	5.1	0.25	0.0068
Isopropyl ether	ND	0.013	0.00030	ND	0.013	0.00030	ND	0.20	0.0045	ND	0.25	0.0056
t-Butyl ethyl ether	ND	0.013	0.00053	ND	0.013	0.00053	ND	0.20	0.0081	ND	0.25	0.010
2,2-Dichloropropane	ND	0.013	0.00025	ND	0.013	0.00025	ND	0.20	0.0038	ND	0.25	0.0048
t-Amyl methyl ether	ND	0.013	0.00019	ND	0.013	0.00019	ND	0.20	0.0029	ND	0.25	0.0036
1,4-Dioxane	ND	0.013	0.00046	ND	0.013	0.00046	ND	0.20	0.0071	ND	0.25	0.0088
Naphthalene	ND	0.013	0.0010	ND	0.013	0.0010	ND	0.20	0.016	ND	0.25	0.019
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 7/15/16
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

Client: CH2M Hill
Attn: Dan Jablonski
Project Name: SFPP - Norwalk Site
Project No.: NA
Date Received: 07/08/16
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	METHOD BLANK			METHOD BLANK		
Client Sample I.D.:	--			--		
Date/Time Sampled:	--			--		
Date/Time Analyzed:	7/11/16 21:38			7/12/16 11:35		
QC Batch No.:	160711MS2A1			160712MS2A1		
Analyst Initials:	DT			DT		
Dilution Factor:	0.20			0.20		
ANALYTE	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv
Dichlorodifluoromethane (12)	ND	0.00020	0.000031	ND	0.00020	0.000031
Chloromethane	ND	0.00040	0.000044	ND	0.00040	0.000044
1,2-Cl-1,1,2,2-F ethane (114)	ND	0.00020	0.000040	ND	0.00020	0.000040
Vinyl Chloride	ND	0.00020	0.000032	ND	0.00020	0.000032
Bromomethane	0.00021	0.00020	0.000059	ND	0.00020	0.000059
Chloroethane	ND	0.00020	0.00017	ND	0.00020	0.00017
Trichlorofluoromethane (11)	ND	0.00020	0.000043	ND	0.00020	0.000043
1,1-Dichloroethene	ND	0.00020	0.000045	ND	0.00020	0.000045
Carbon Disulfide	ND	0.0010	0.000048	ND	0.0010	0.000048
1,1,2-Cl 1,2,2-F ethane (113)	ND	0.00020	0.000054	ND	0.00020	0.000054
Acetone	0.00023 J	0.0010	0.000058	ND	0.0010	0.000058
Methylene Chloride	ND	0.00020	0.000057	ND	0.00020	0.000057
t-1,2-Dichloroethene	ND	0.00020	0.000060	ND	0.00020	0.000060
1,1-Dichloroethane	ND	0.00020	0.000027	ND	0.00020	0.000027
c-1,2-Dichloroethene	ND	0.00020	0.000039	ND	0.00020	0.000039
2-Butanone	ND	0.00020	0.00012	ND	0.00020	0.00012
t-Butyl Methyl Ether (MTBE)	ND	0.00020	0.000045	ND	0.00020	0.000045
Chloroform	ND	0.00020	0.000028	ND	0.00020	0.000028
1,1,1-Trichloroethane	ND	0.00020	0.000020	ND	0.00020	0.000020
Carbon Tetrachloride	ND	0.00020	0.000035	ND	0.00020	0.000035
Benzene	0.000037 J	0.00020	0.000019	0.000035 J	0.00020	0.000019
1,2-Dichloroethane	ND	0.00020	0.000015	ND	0.00020	0.000015
Trichloroethene	ND	0.00020	0.000028	ND	0.00020	0.000028
1,2-Dichloropropane	ND	0.00020	0.000036	ND	0.00020	0.000036
Bromodichloromethane	ND	0.00020	0.000012	ND	0.00020	0.000012
c-1,3-Dichloropropene	ND	0.00020	0.000024	ND	0.00020	0.000024
4-Methyl-2-Pentanone	ND	0.00020	0.000013	ND	0.00020	0.000013
Toluene	ND	0.00020	0.000016	ND	0.00020	0.000016
t-1,3-Dichloropropene	ND	0.00020	0.000021	ND	0.00020	0.000021
1,1,2-Trichloroethane	ND	0.00020	0.000032	ND	0.00020	0.000032
1,3-Dichloropropane	ND	0.00020	0.0000099	ND	0.00020	0.0000099
Tetrachloroethene	ND	0.00020	0.000024	ND	0.00020	0.000024
2-Hexanone	ND	0.00020	0.000041	ND	0.00020	0.000041
Dibromochloromethane	ND	0.00020	0.000036	ND	0.00020	0.000036
1,2-Dibromoethane	ND	0.00020	0.000018	ND	0.00020	0.000018
Chlorobenzene	ND	0.00020	0.000016	ND	0.00020	0.000016
Ethylbenzene	ND	0.00020	0.000011	ND	0.00020	0.000011
p,&m-Xylene	ND	0.00020	0.000023	ND	0.00020	0.000023
o-Xylene	ND	0.00020	0.000024	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: Dan Jablonski
Project Name: SFPP - Norwalk Site
Project No.: NA
Date Received: 07/08/16
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	METHOD BLANK			METHOD BLANK		
Client Sample I.D.:	--			--		
Date/Time Sampled:	--			--		
Date/Time Analyzed:	7/11/16 21:38			7/12/16 11:35		
QC Batch No.:	160711MS2A1			160712MS2A1		
Analyst Initials:	DT			DT		
Dilution Factor:	0.20			0.20		
ANALYTE	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv
Styrene	ND	0.00020	0.000026	ND	0.00020	0.000026
Bromoform	ND	0.00020	0.000011	ND	0.00020	0.000011
Isopropyl benzene	ND	0.00020	0.000021	ND	0.00020	0.000021
1,1,2,2-Tetrachloroethane	ND	0.00040	0.000012	ND	0.00040	0.000012
Benzyl Chloride	ND	0.00020	0.000037	ND	0.00020	0.000037
1,2,3-Trichloropropane	ND	0.00020	0.000054	ND	0.00020	0.000054
n-Propyl Benzene	ND	0.00020	0.000012	ND	0.00020	0.000012
4-Ethyl Toluene	ND	0.00020	0.000013	ND	0.00020	0.000013
1,3,5-Trimethylbenzene	ND	0.00040	0.000035	ND	0.00040	0.000035
4-Chlorotoluene	ND	0.00020	0.000024	ND	0.00020	0.000024
tert-Butylbenzene	ND	0.00020	0.000018	ND	0.00020	0.000018
1,2,4-Trimethylbenzene	ND	0.00040	0.000023	ND	0.00040	0.000023
sec-Butylbenzene	ND	0.00020	0.000019	ND	0.00020	0.000019
p-Isopropyltoluene	ND	0.00020	0.000026	ND	0.00020	0.000026
1,3-Dichlorobenzene	ND	0.00020	0.000024	ND	0.00020	0.000024
1,4-Dichlorobenzene	ND	0.00020	0.000029	ND	0.00020	0.000029
n-Butylbenzene	ND	0.00020	0.000015	ND	0.00020	0.000015
1,2-Dichlorobenzene	ND	0.00020	0.000025	ND	0.00020	0.000025
1,2,4-Trichlorobenzene	ND	0.00040	0.000033	ND	0.00040	0.000033
Hexachlorobutadiene	0.000017 J	0.00020	0.000012	ND	0.00020	0.000012
t-Butanol	ND	0.0010	0.000038	ND	0.0010	0.000038
n-Hexane	ND	0.0010	0.000027	ND	0.0010	0.000027
Isopropyl ether	ND	0.0010	0.000022	ND	0.0010	0.000022
t-Butyl ethyl ether	ND	0.0010	0.000040	ND	0.0010	0.000040
2,2-Dichloropropane	ND	0.0010	0.000019	ND	0.0010	0.000019
t-Amyl methyl ether	ND	0.0010	0.000014	ND	0.0010	0.000014
1,4-Dioxane	ND	0.0010	0.000035	ND	0.0010	0.000035
Naphthalene	ND	0.0010	0.000077	ND	0.0010	0.000077
1,2,3-Trichlorobenzene (TIC)	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 7/15/16
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch #: 160711MS2A1

Matrix: Air

EPA Method TO-14/TO-15

Lab No:	Method Blank		LCS		LCSD						
Date/Time Analyzed:	7/11/16 21:38		7/11/16 20:07		7/11/16 20:51						
Data File ID:	11JUL018.D		11JUL016.D		11JUL017.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	9.0	90	9.4	94	4.3	70	130	30	Pass
Methylene Chloride	0.0	10.0	9.4	94	10.0	100	6.4	70	130	30	Pass
Trichloroethene	0.0	10.0	9.0	90	9.2	92	2.8	70	130	30	Pass
Toluene	0.0	10.0	9.0	90	9.2	92	2.4	70	130	30	Pass
1,1,2,2-Tetrachloroethane	0.0	10.0	9.9	99	9.7	97	2.0	70	130	30	Pass

RPD = Relative Percent Difference

Reviewed/Approved By: _____ Date: 7/15/16

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch #: 160712MS2A1

Matrix: Air

EPA Method TO-14/TO-15

Lab No:	Method Blank		LCS		LCSD						
Date/Time Analyzed:	7/12/16 11:35		7/12/16 9:36		7/12/16 10:15						
Data File ID:	12JUL006.D		12JUL003.D		12JUL004.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	9.0	90	9.4	94	3.7	70	130	30	Pass
Methylene Chloride	0.0	10.0	9.2	92	9.7	97	6.1	70	130	30	Pass
Trichloroethene	0.0	10.0	8.7	87	8.5	85	1.8	70	130	30	Pass
Toluene	0.0	10.0	9.1	91	8.9	89	2.7	70	130	30	Pass
1,1,2,2-Tetrachloroethane	0.0	10.0	10.0	100	9.9	99	1.4	70	130	30	Pass

RPD = Relative Percent Difference

Reviewed/Approved By: _____ Date: 7/15/16

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

Client: CH2M Hill
Attn: Dan Jablonski
Project Name: SFPP - Norwalk Site
Project No.: NA
Date Received: 07/08/16
Matrix: Air
Reporting Units: ppmv

EPA METHOD TO3

Lab No.:	H070805-01			H070805-02			H070805-03			H070805-04		
Client Sample I.D.:	VEFF-07-07			VEFF-07-07-D			VPOST-07-07			VINF-07-07		
Date/Time Sampled:	7/7/16 9:44			7/7/16 9:44			7/7/16 11:01			7/7/16 11:06		
Date/Time Analyzed:	7/11/16 9:51			7/11/16 10:15			7/11/16 11:25			7/11/16 11:49		
QC Batch No.:	160711GC11A1			160711GC11A1			160711GC11A1			160711GC11A1		
Analyst Initials:	AS			AS			AS			AS		
Dilution Factor:	2.7			2.7			2.0			2.5		
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	0.72 J	2.7	0.47	0.65 J	2.7	0.47	210	2.0	0.36	170	2.5	0.44

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 7-15-16
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: 160711GC11A1
Matrix: Air
Reporting Units: ppmv

EPA METHOD TO3
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	7/11/16 9:27			7/11/16 8:41		7/11/16 9:04					
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	4.62	92	4.64	93	0.4	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 7-15-16

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: Dan Jablonski
Project Name: SFPP - Norwalk Site
Project No.: NA
Date Received: 07/08/16
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	**H070805-04**								
Client Sample I.D.:	**VINF-07-07**								
Date/Time Sampled:	**7/7/16 11:06**								
Date/Time Analyzed:	**7/8/16 11:49**								
QC Batch No.:	**160708GC8A1**								
Analyst Initials:	**AS**								
Dilution Factor:	**2.5**								
ANALYTE	**Result % v/v**	**RL % v/v**	**MDL % v/v**						
Carbon Dioxide	**0.48**	0.025	0.0011						
Oxygen/Argon	**21**	1.3	0.093						
Nitrogen	**78**	2.5	0.37						
Methane	**0.014**	0.0025	0.00012						

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** 7-15-16

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.: 160708GC8A1
Matrix: Air
Units: % v/v

QC for ASTM D1946

Lab No.:	Method Blank			LCS		LCSD			
Date/Time Analyzed:	7/8/16 8:51			7/8/16 8:06		7/8/16 8:21			
Analyst Initials:	AS			AS		AS			
Datafile:	08jul003			08jul.ru		08jul001			
Dilution Factor:	1.0			1.0		1.0			
ANALYTE	Results	RL	MDL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Carbon Dioxide	ND	0.010	0.00042	109	70-130%	114	70-130%	4.5	<30
Oxygen/Argon	0.10	0.50	0.03677	114	70-130%	118	70-130%	3.3	<30
Nitrogen	0.32	1.0	0.14494	106	70-130%	110	70-130%	3.5	<30
Methane	ND	0.0010	0.00005	95	70-130%	94	70-130%	1.6	<30

PQL = Practical Quantitation Limit
ND = Not Detected (Below MDL)
RL = PQL X Dilution Factor
J = Trace amount. Analyte concentration between RL and MDL.

Reviewed/Approved By: _____ **Date:** 7-15-16

Mark J. Johnson
Operations Manager

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

AirTECHNOLOGY
Laboratories, Inc.

August 10, 2016

ADE-1461
EPA Methods TO3, TO14A, TO15 SIM & SCAN
ASTM D1946

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: Daniel Jablonski
5742 Costello Ave.
Van Nuys, CA 91401

LABORATORY TEST RESULTS

Project Reference: SFPP - Norwalk Site
Lab Number: H080307-01/04

Enclosed are results for sample(s) received 8/03/16 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 Dan Jablonski, Vidal Cortes and Steve Defibaugh on 8/10/16.

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.

H080307-01/04

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: 08/2/16
PAGE: 1 OF 1

LABORATORY CLIENT: **CH2M HILL: Attn - Dan Jablonski**
ADDRESS: **6 Hutton Centre Dr, Suite 700**
CITY: **Santa Ana, CA 92707**
TEL: **714-429-2020** FAX: E-MAIL: Daniel.Jablonski@CH2M.com

CLIENT PROJECT NAME / NUMBER: **SFPP - Norwalk Site**
PROJECT CONTACT: **James Dye**
SAMPLER(S): (SIGNATURE)
P.O. NO.:
QUOTE NO.:
LAB USE ONLY:

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ■ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS
Report: Jablonski, Daniel/LAC - Daniel.Jablonski@CH2M.com,
Cortes, Vidal/SCO - Vidal.Cortes@CH2M.com
CC: KMEP Steve Defibaugh - Steve_Defibaugh@kindermorgan.com
"J" flags required/Use lowest possible detection limit - all methods.

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING DATE	SAMPLING TIME	INITIAL PRESSURE ("Hg)	FINAL PRESSURE ("Hg)	MAT-RIX	NO. OF CONT.	TO-3 (TPH-g, ~~TPH-d, TPH-as hexane~~)	TO-15 (VOCs Target Analytes)	ASTM-D 1946 (O2/Argon, CO2, CH4, N2)	Comments
01	VEFF-08-02	Outlet (stack)	8/2/16	0950	-30	-5	Air	1	X	X		Individually Certified 6-L SUMMA
02	VEFF-08-02-D	Outlet (stack) Dup	8/2/16	0950	-30	-5	Air	1	X	X		Individually Certified 6-L SUMMA
03	VPOST-08-02	Post-Dilution	8/2/16	1105	-30	-5	Air	1	X	X		Individually Certified 1-L SUMMA
04	VINF-08-02	Influent Vapor (header)	8/2/16	1115	-30	-5	Air	1	X	X	X	Batch Certified 1-L SUMMA
												TAL includes historical VOCs
												and remaining ATLI List per
												subcontract.

Relinquished by: (Signature)	Received by: (Signature) FED EX	Date: 8/2/16	Time: 1530
Relinquished by: (Signature) FED EX	Received by: (Signature)	Date: 8/3/16	Time: 1129
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Revised: 06/29/2015

Client: CH2M Hill
Attn: Dan Jablonski
Project Name: SFPP - Norwalk Site
Project No.: NA
Date Received: 08/03/16
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	H080307-01			H080307-02			H080307-03			H080307-04		
Client Sample I.D.:	VEFF-08-02			VEFF-08-02-D			VPOST-08-02			VINF-08-02		
Date/Time Sampled:	8/2/16 9:50			8/2/16 9:50			8/2/16 11:05			8/2/16 11:15		
Date/Time Analyzed:	8/8/16 23:43			8/9/16 0:25			8/8/16 21:37			8/8/16 22:19		
QC Batch No.:	160808MS2A1			160809MS2A1			160808MS2A1			160808MS2A1		
Analyst Initials:	DT			DT			DT			DT		
Dilution Factor:	2.0			2.0			40			22		
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	0.0020	0.00031	ND	0.0020	0.00031	ND	0.040	0.0062	ND	0.022	0.0034
Chloromethane	ND	0.0040	0.00044	0.0015 J	0.0040	0.00044	ND	0.081	0.0089	ND	0.044	0.0048
1,2-Cl-1,1,2,2-F ethane (114)	ND	0.0020	0.00041	ND	0.0020	0.00041	ND	0.040	0.0081	ND	0.022	0.0044
Vinyl Chloride	ND	0.0020	0.00033	ND	0.0020	0.00033	0.042	0.040	0.0066	ND	0.022	0.0036
Bromomethane	0.00093 J	0.0020	0.00059	0.00096 J	0.0020	0.00059	ND	0.040	0.012	ND	0.022	0.0064
Chloroethane	ND	0.0020	0.0017	ND	0.0020	0.0017	ND	0.040	0.034	ND	0.022	0.018
Trichlorofluoromethane (11)	ND	0.0020	0.00044	ND	0.0020	0.00044	ND	0.040	0.0087	ND	0.022	0.0047
1,1-Dichloroethene	ND	0.0020	0.00046	ND	0.0020	0.00046	ND	0.040	0.0092	ND	0.022	0.0050
Carbon Disulfide	0.14	0.010	0.00048	0.25	0.010	0.00048	0.25	0.20	0.0097	ND	0.11	0.0053
1,1,2-Cl 1,2,2-F ethane (113)	ND	0.0020	0.00054	ND	0.0020	0.00054	ND	0.040	0.011	ND	0.022	0.0059
Acetone	0.036	0.010	0.00058	0.033	0.010	0.00058	0.19 J	0.20	0.012	ND	0.11	0.0063
Methylene Chloride	ND	0.0020	0.00058	ND	0.0020	0.00058	ND	0.040	0.012	ND	0.022	0.0063
t-1,2-Dichloroethene	ND	0.0020	0.00060	ND	0.0020	0.00060	ND	0.040	0.012	ND	0.022	0.0066
1,1-Dichloroethane	ND	0.0020	0.00028	ND	0.0020	0.00028	0.013 J	0.040	0.0055	ND	0.022	0.0030
c-1,2-Dichloroethene	ND	0.0020	0.00039	ND	0.0020	0.00039	0.030 J	0.040	0.0078	ND	0.022	0.0042
2-Butanone	0.047	0.0020	0.0012	0.055	0.0020	0.0012	0.14	0.040	0.025	0.063	0.022	0.014
t-Butyl Methyl Ether (MTBE)	ND	0.0020	0.00045	ND	0.0020	0.00045	ND	0.040	0.0090	ND	0.022	0.0049
Chloroform	ND	0.0020	0.00028	ND	0.0020	0.00028	ND	0.040	0.0057	ND	0.022	0.0031
1,1,1-Trichloroethane	ND	0.0020	0.00020	ND	0.0020	0.00020	ND	0.040	0.0041	ND	0.022	0.0022
Carbon Tetrachloride	ND	0.0020	0.00035	ND	0.0020	0.00035	ND	0.040	0.0070	ND	0.022	0.0038
Benzene	0.0016 J	0.0020	0.00019	0.0017 J	0.0020	0.00019	2.7	0.040	0.0039	1.9	0.022	0.0021
1,2-Dichloroethane	ND	0.0020	0.00015	ND	0.0020	0.00015	0.019 J	0.040	0.0030	0.0097 J	0.022	0.0016
Trichloroethene	ND	0.0020	0.00029	ND	0.0020	0.00029	0.022 J	0.040	0.0057	0.0032 J	0.022	0.0031
1,2-Dichloropropane	ND	0.0020	0.00037	ND	0.0020	0.00037	ND	0.040	0.0073	ND	0.022	0.0040
Bromodichloromethane	ND	0.0020	0.00012	ND	0.0020	0.00012	ND	0.040	0.0024	ND	0.022	0.0013
c-1,3-Dichloropropene	ND	0.0020	0.00024	ND	0.0020	0.00024	ND	0.040	0.0048	ND	0.022	0.0026
4-Methyl-2-Pentanone	ND	0.0020	0.00014	ND	0.0020	0.00014	ND	0.040	0.0027	ND	0.022	0.0015
Toluene	0.0072	0.0020	0.00016	0.0064	0.0020	0.00016	7.6	0.040	0.0032	5.0	0.022	0.0017
t-1,3-Dichloropropene	ND	0.0020	0.00021	0.00034 J	0.0020	0.00021	ND	0.040	0.0042	ND	0.022	0.0023
1,1,2-Trichloroethane	ND	0.0020	0.00033	ND	0.0020	0.00033	ND	0.040	0.0065	ND	0.022	0.0036
1,3-Dichloropropane	ND	0.0020	0.00010	ND	0.0020	0.00010	ND	0.040	0.0020	ND	0.022	0.0011
Tetrachloroethene	ND	0.0020	0.00024	ND	0.0020	0.00024	ND	0.040	0.0049	ND	0.022	0.0026
2-Hexanone	ND	0.0020	0.00042	ND	0.0020	0.00042	ND	0.040	0.0083	ND	0.022	0.0045
Dibromochloromethane	ND	0.0020	0.00037	ND	0.0020	0.00037	ND	0.040	0.0074	ND	0.022	0.0040
1,2-Dibromoethane	ND	0.0020	0.00018	ND	0.0020	0.00018	ND	0.040	0.0037	ND	0.022	0.0020
Chlorobenzene	ND	0.0020	0.00016	ND	0.0020	0.00016	0.18	0.040	0.0031	0.017 J	0.022	0.0017
Ethylbenzene	0.00091 J	0.0020	0.00012	0.00085 J	0.0020	0.00012	1.4	0.040	0.0023	0.72	0.022	0.0013
p,&m-Xylene	0.0064	0.0020	0.00023	0.0062	0.0020	0.00023	8.7	0.040	0.0046	4.8	0.022	0.0025
o-Xylene	0.0028	0.0020	0.00025	0.0025	0.0020	0.00025	4.9	0.040	0.0049	2.6	0.022	0.0027

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

Client: CH2M Hill
Attn: Dan Jablonski
Project Name: SFPP - Norwalk Site
Project No.: NA
Date Received: 08/03/16
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	H080307-01			H080307-02			H080307-03			H080307-04		
Client Sample I.D.:	VEFF-08-02			VEFF-08-02-D			VPOST-08-02			VINF-08-02		
Date/Time Sampled:	8/2/16 9:50			8/2/16 9:50			8/2/16 11:05			8/2/16 11:15		
Date/Time Analyzed:	8/8/16 23:43			8/9/16 0:25			8/8/16 21:37			8/8/16 22:19		
QC Batch No.:	160808MS2A1			160809MS2A1			160808MS2A1			160808MS2A1		
Analyst Initials:	DT			DT			DT			DT		
Dilution Factor:	2.0			2.0			40			22		
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	0.00048 J	0.0020	0.00026	0.00036 J	0.0020	0.00026	0.16	0.040	0.0052	0.084	0.022	0.0028
Bromoform	ND	0.0020	0.00011	ND	0.0020	0.00011	ND	0.040	0.0023	ND	0.022	0.0012
Isopropyl benzene	ND	0.0020	0.00021	ND	0.0020	0.00021	0.11	0.040	0.0042	0.048	0.022	0.0023
1,1,2,2-Tetrachloroethane	ND	0.0040	0.00012	ND	0.0040	0.00012	ND	0.081	0.0025	ND	0.044	0.0013
Benzyl Chloride	ND	0.0020	0.00037	ND	0.0020	0.00037	ND	0.040	0.0074	ND	0.022	0.0040
1,2,3-Trichloropropane	ND	0.0020	0.00054	ND	0.0020	0.00054	0.020 J	0.040	0.011	ND	0.022	0.0059
n-Propyl Benzene	ND	0.0020	0.00012	ND	0.0020	0.00012	0.18	0.040	0.0024	0.076	0.022	0.0013
4-Ethyl Toluene	0.0012 J	0.0020	0.00013	0.0012 J	0.0020	0.00013	1.9	0.040	0.0026	0.82	0.022	0.0014
1,3,5-Trimethylbenzene	0.00049 J	0.0040	0.00035	0.00048 J	0.0040	0.00035	1.1	0.081	0.0070	0.47	0.044	0.0038
4-Chlorotoluene	ND	0.0020	0.00024	ND	0.0020	0.00024	ND	0.040	0.0048	ND	0.022	0.0026
tert-Butylbenzene	0.00026 J	0.0020	0.00018	ND	0.0020	0.00018	0.20	0.040	0.0037	0.068	0.022	0.0020
1,2,4-Trimethylbenzene	0.0018 J	0.0040	0.00023	0.0017 J	0.0040	0.00023	1.3	0.081	0.0046	0.45	0.044	0.0025
sec-Butylbenzene	ND	0.0020	0.00020	ND	0.0020	0.00020	0.027 J	0.040	0.0039	0.012 J	0.022	0.0021
p-Isopropyltoluene	0.0027	0.0020	0.00026	0.0012 J	0.0020	0.00026	0.11	0.040	0.0053	0.012 J	0.022	0.0029
1,3-Dichlorobenzene	ND	0.0020	0.00025	ND	0.0020	0.00025	ND	0.040	0.0049	ND	0.022	0.0027
1,4-Dichlorobenzene	ND	0.0020	0.00030	ND	0.0020	0.00030	0.026 J	0.040	0.0059	ND	0.022	0.0032
n-Butylbenzene	0.00019 J	0.0020	0.00015	ND	0.0020	0.00015	ND	0.040	0.0030	ND	0.022	0.0016
1,2-Dichlorobenzene	ND	0.0020	0.00025	ND	0.0020	0.00025	ND	0.040	0.0050	ND	0.022	0.0027
1,2,4-Trichlorobenzene	ND	0.0040	0.00033	ND	0.0040	0.00033	ND	0.081	0.0067	ND	0.044	0.0036
Hexachlorobutadiene	ND	0.0020	0.00012	ND	0.0020	0.00012	ND	0.040	0.0024	ND	0.022	0.0013
t-Butanol	ND	0.010	0.00039	ND	0.010	0.00039	0.039 J	0.20	0.0078	ND	0.11	0.0042
n-Hexane	ND	0.010	0.00027	ND	0.010	0.00027	17 d	0.40	0.011	11 d	0.27	0.0074
Isopropyl ether	ND	0.010	0.00022	ND	0.010	0.00022	ND	0.20	0.0045	ND	0.11	0.0024
t-Butyl ethyl ether	ND	0.010	0.00040	ND	0.010	0.00040	ND	0.20	0.0081	ND	0.11	0.0044
2,2-Dichloropropane	ND	0.010	0.00019	ND	0.010	0.00019	ND	0.20	0.0038	ND	0.11	0.0021
t-Amyl methyl ether	ND	0.010	0.00014	ND	0.010	0.00014	ND	0.20	0.0029	ND	0.11	0.0016
1,4-Dioxane	ND	0.010	0.00035	ND	0.010	0.00035	ND	0.20	0.0071	ND	0.11	0.0038
Naphthalene	ND	0.010	0.00078	ND	0.010	0.00078	ND	0.20	0.016	ND	0.11	0.0084
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.
d = Analyte reporte from secondary dilution. Batch ID:160809MS2A1

Reviewed/Approved By: _____ Date 8/05/16
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

Client: CH2M Hill
Attn: Dan Jablonski
Project Name: SFPP - Norwalk Site
Project No.: NA
Date Received: 08/03/16
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	METHOD BLANK			METHOD BLANK		
Client Sample I.D.:	-			-		
Date/Time Sampled:	-			-		
Date/Time Analyzed:	8/8/16 12:55			8/9/16 13:20		
QC Batch No.:	160808MS2A1			160809MS2A1		
Analyst Initials:	DT			DT		
Dilution Factor:	0.20			0.20		

ANALYTE	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv
Dichlorodifluoromethane (12)	ND	0.00020	0.000031	ND	0.00020	0.000031
Chloromethane	ND	0.00040	0.000044	ND	0.00040	0.000044
1,2-Cl-1,1,2,2-F ethane (114)	ND	0.00020	0.000040	ND	0.00020	0.000040
Vinyl Chloride	ND	0.00020	0.000032	ND	0.00020	0.000032
Bromomethane	ND	0.00020	0.000059	ND	0.00020	0.000059
Chloroethane	ND	0.00020	0.00017	ND	0.00020	0.00017
Trichlorofluoromethane (11)	ND	0.00020	0.000043	ND	0.00020	0.000043
1,1-Dichloroethene	ND	0.00020	0.000045	ND	0.00020	0.000045
Carbon Disulfide	ND	0.0010	0.000048	ND	0.0010	0.000048
1,1,2-Cl 1,2,2-F ethane (113)	ND	0.00020	0.000054	ND	0.00020	0.000054
Acetone	ND	0.0010	0.000058	0.00010 J	0.0010	0.000058
Methylene Chloride	ND	0.00020	0.000057	ND	0.00020	0.000057
t-1,2-Dichloroethene	ND	0.00020	0.000060	ND	0.00020	0.000060
1,1-Dichloroethane	ND	0.00020	0.000027	ND	0.00020	0.000027
c-1,2-Dichloroethene	ND	0.00020	0.000039	ND	0.00020	0.000039
2-Butanone	ND	0.00020	0.00012	ND	0.00020	0.00012
t-Butyl Methyl Ether (MTBE)	ND	0.00020	0.000045	ND	0.00020	0.000045
Chloroform	ND	0.00020	0.000028	ND	0.00020	0.000028
1,1,1-Trichloroethane	ND	0.00020	0.000020	ND	0.00020	0.000020
Carbon Tetrachloride	ND	0.00020	0.000035	ND	0.00020	0.000035
Benzene	0.00012 J	0.00020	0.000019	0.000071 J	0.00020	0.000019
1,2-Dichloroethane	ND	0.00020	0.000015	ND	0.00020	0.000015
Trichloroethene	ND	0.00020	0.000028	ND	0.00020	0.000028
1,2-Dichloropropane	ND	0.00020	0.000036	ND	0.00020	0.000036
Bromodichloromethane	ND	0.00020	0.000012	ND	0.00020	0.000012
c-1,3-Dichloropropene	ND	0.00020	0.000024	ND	0.00020	0.000024
4-Methyl-2-Pentanone	ND	0.00020	0.000013	ND	0.00020	0.000013
Toluene	ND	0.00020	0.000016	ND	0.00020	0.000016
t-1,3-Dichloropropene	ND	0.00020	0.000021	ND	0.00020	0.000021
1,1,2-Trichloroethane	ND	0.00020	0.000032	ND	0.00020	0.000032
1,3-Dichloropropane	ND	0.00020	0.0000099	ND	0.00020	0.0000099
Tetrachloroethene	ND	0.00020	0.000024	ND	0.00020	0.000024
2-Hexanone	ND	0.00020	0.000041	ND	0.00020	0.000041
Dibromochloromethane	ND	0.00020	0.000036	ND	0.00020	0.000036
1,2-Dibromoethane	ND	0.00020	0.000018	ND	0.00020	0.000018
Chlorobenzene	ND	0.00020	0.000016	ND	0.00020	0.000016
Ethylbenzene	ND	0.00020	0.000011	ND	0.00020	0.000011
p,&m-Xylene	ND	0.00020	0.000023	ND	0.00020	0.000023
o-Xylene	ND	0.00020	0.000024	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: Dan Jablonski
Project Name: SFPP - Norwalk Site
Project No.: NA
Date Received: 08/03/16
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	METHOD BLANK			METHOD BLANK								
Client Sample I.D.:	-			-								
Date/Time Sampled:	-			-								
Date/Time Analyzed:	8/8/16 12:55			8/9/16 13:20								
QC Batch No.:	160808MS2A1			160809MS2A1								
Analyst Initials:	DT			DT								
Dilution Factor:	0.20			0.20								
ANALYTE	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv						
Styrene	ND	0.00020	0.000026	ND	0.00020	0.000026						
Bromoform	ND	0.00020	0.000011	ND	0.00020	0.000011						
Isopropyl benzene	ND	0.00020	0.000021	ND	0.00020	0.000021						
1,1,2,2-Tetrachloroethane	ND	0.00040	0.000012	ND	0.00040	0.000012						
Benzyl Chloride	ND	0.00020	0.000037	ND	0.00020	0.000037						
1,2,3-Trichloropropane	ND	0.00020	0.000054	ND	0.00020	0.000054						
n-Propyl Benzene	ND	0.00020	0.000012	ND	0.00020	0.000012						
4-Ethyl Toluene	ND	0.00020	0.000013	ND	0.00020	0.000013						
1,3,5-Trimethylbenzene	ND	0.00040	0.000035	ND	0.00040	0.000035						
4-Chlorotoluene	ND	0.00020	0.000024	ND	0.00020	0.000024						
tert-Butylbenzene	ND	0.00020	0.000018	ND	0.00020	0.000018						
1,2,4-Trimethylbenzene	ND	0.00040	0.000023	ND	0.00040	0.000023						
sec-Butylbenzene	ND	0.00020	0.000019	ND	0.00020	0.000019						
p-Isopropyltoluene	ND	0.00020	0.000026	ND	0.00020	0.000026						
1,3-Dichlorobenzene	ND	0.00020	0.000024	ND	0.00020	0.000024						
1,4-Dichlorobenzene	ND	0.00020	0.000029	ND	0.00020	0.000029						
n-Butylbenzene	ND	0.00020	0.000015	ND	0.00020	0.000015						
1,2-Dichlorobenzene	ND	0.00020	0.000025	ND	0.00020	0.000025						
1,2,4-Trichlorobenzene	ND	0.00040	0.000033	ND	0.00040	0.000033						
Hexachlorobutadiene	ND	0.00020	0.000012	ND	0.00020	0.000012						
t-Butanol	ND	0.0010	0.000038	ND	0.0010	0.000038						
n-Hexane	ND	0.0010	0.000027	ND	0.0010	0.000027						
Isopropyl ether	ND	0.0010	0.000022	ND	0.0010	0.000022						
t-Butyl ethyl ether	ND	0.0010	0.000040	ND	0.0010	0.000040						
2,2-Dichloropropane	ND	0.0010	0.000019	ND	0.0010	0.000019						
t-Amyl methyl ether	ND	0.0010	0.000014	ND	0.0010	0.000014						
1,4-Dioxane	ND	0.0010	0.000035	ND	0.0010	0.000035						
Naphthalene	ND	0.0010	0.000077	ND	0.0010	0.000077						
1,2,3-Trichlorobenzene (TIC)	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 8/10/16
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 #: 160808MS2A1

Matrix: Air

EPA Method TO-14/TO-15

Lab No:	Method Blank		LCS		LCSD						
Date/Time Analyzed:	8/8/16 12:55		8/8/16 11:31		8/8/16 12:10						
Data File ID:	08AUG005.D		08AUG003.D		08AUG004.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	12.1	121	11.8	118	2.0	70	130	30	Pass
Methylene Chloride	0.0	10.0	12.2	122	11.4	114	6.7	70	130	30	Pass
Trichloroethene	0.0	10.0	11.3	113	11.4	114	0.5	70	130	30	Pass
Toluene	0.0	10.0	10.9	109	11.1	111	1.9	70	130	30	Pass
1,1,2,2-Tetrachloroethane	0.0	10.0	9.2	92	9.4	94	2.2	70	130	30	Pass

RPD = Relative Percent Difference

Reviewed/Approved By: _____ Date: 8/10/16

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 160809MS2A1

Matrix: Air

EPA Method TO-14/TO-15

Lab No:	Method Blank		LCS		LCSD						
Date/Time Analyzed:	8/9/16 13:20		8/9/16 12:00		8/9/16 12:38						
Data File ID:	09AUG006.D		09AUG004.D		09AUG005.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	11.4	114	11.3	113	1.3	70	130	30	Pass
Methylene Chloride	0.0	10.0	11.4	114	11.2	112	2.3	70	130	30	Pass
Trichloroethene	0.0	10.0	10.6	106	10.6	106	0.3	70	130	30	Pass
Toluene	0.0	10.0	10.7	107	10.6	106	0.7	70	130	30	Pass
1,1,2,2-Tetrachloroethane	0.0	10.0	9.3	93	9.4	94	0.7	70	130	30	Pass

RPD = Relative Percent Difference

Reviewed/Approved By: Mark Johnson — Date: 8/10/16

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

Client: CH2M Hill
Attn: Dan Jablonski
Project Name: SFPP - Norwalk Site
Project No.: NA
Date Received: 08/03/16
Matrix: Air
Reporting Units: ppmv

EPA METHOD TO3

Lab No.:	H080307-01			H080307-02			H080307-03			H080307-04		
Client Sample I.D.:	VEFF-08-02			VEFF-08-02-D			VPOST-08-02			VINF-08-02		
Date/Time Sampled:	8/2/16 9:50			8/2/16 9:50			8/2/16 11:05			8/2/16 11:15		
Date/Time Analyzed:	8/4/16 14:40			8/4/16 15:03			8/4/16 16:59			8/4/16 15:50		
QC Batch No.:	160804GC11A1			160804GC11A1			160804GC11A1			160804GC11A1		
Analyst Initials:	AS			AS			AS			AS		
Dilution Factor:	2.0			2.0			4.0			2.2		
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	0.41 J	2.0	0.36	0.39 J	2.0	0.36	270	4.0	0.71	260	2.2	0.39

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 8-10-16

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

QC Batch No: 160804GC11A1
Matrix: Air
Reporting Units: ppmv

EPA METHOD TO3
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	8/4/16 11:08			8/4/16 10:21		8/4/16 10:44					
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	5.94	119	5.91	118	0.5	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 8-10-16

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

Client: CH2M Hill
Attn: Dan Jablonski
Project Name: SFPP - Norwalk Site
Project No.: NA
Date Received: 08/03/16
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	H080307-04		
Client Sample I.D.:	VINF-08-02		
Date/Time Sampled:	8/2/16 11:15		
Date/Time Analyzed:	8/4/16 10:15		
QC Batch No.:	160804GC8A1		
Analyst Initials:	AS		
Dilution Factor:	2.2		

ANALYTE	Result % v/v	RL % v/v	MDL % v/v
Carbon Dioxide	0.54	0.022	0.00093
Oxygen/Argon	21	1.1	0.081
Nitrogen	78	2.2	0.32
Methane	0.0047	0.0022	0.00010

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 8-9-16
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

QC for ASTM D1946

Lab No.:	Method Blank			LCS		LCSD			
Date/Time Analyzed:	8/4/16 8:47			8/4/16 8:03		8/4/16 8:18			
Analyst Initials:	AS			AS		AS			
Datafile:	04aug003			04aug.ru		04aug001			
Dilution Factor:	1.0			1.0		1.0			
ANALYTE	Results	RL	MDL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Carbon Dioxide	0.0011 J	0.010	0.00042	92	70-130%	93	70-130%	1.1	<30
Oxygen/Argon	0.17 J	0.50	0.037	102	70-130%	102	70-130%	0.2	<30
Nitrogen	0.55 J	1.0	0.14	99	70-130%	99	70-130%	0.3	<30
Methane	0.00042 J	0.0010	0.000050	103	70-130%	101	70-130%	1.9	<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: 8-9-16

Mark J. Johnson
Operations Manager

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

Air TECHNOLOGY
Laboratories, Inc.

September 23, 2016

ADE-1461
EPA Methods TO3, TO14A, TO15 SIM & SCAN
ASTM D1946

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: Daniel Jablonski
5742 Costello Ave.
Van Nuys, CA 91401

LABORATORY TEST RESULTS

Project Reference: SFPP - Norwalk Site
Lab Number: H090808-01/04

Enclosed are results for sample(s) received 9/08/16 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 Dan Jablonski, Vidal Cortes and Steve Defibaugh, Kinder Morgan, on 9/15/16.

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.

HJ90808-01/04

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: 9/7/16

PAGE: 1 OF 1

LABORATORY CLIENT: **CH2M HILL: Attn - Dan Jablonski**
ADDRESS: **6 Hutton Centre Dr, Suite 700**
CITY: **Santa Ana, CA 92707**
TEL: **714-429-2020** FAX: E-MAIL: Daniel.Jablonski@CH2M.com

CLIENT PROJECT NAME / NUMBER: **SFPP - Norwalk Site**
PROJECT CONTACT: **James Dye**
SAMPLER(S): (SIGNATURE)
P.O. NO.:
QUOTE NO.:
LAB USE ONLY:

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ■ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS
Report: Jablonski, Daniel/LAC - Daniel.Jablonski@CH2M.com,
Cortes, Vidal/SCO - Vidal.Cortes@CH2M.com
CC: KMEP Steve Defibaugh - Steve_Defibaugh@kindermorgan.com
"J" flags required/Use lowest possible detection limit - all methods.

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING DATE	SAMPLING TIME	INITIAL PRESSURE ("Hg)	FINAL PRESSURE ("Hg)	MAT-RIX	NO. OF CONT.	TO-3 (~~TPH-g, TPHd~~, TPH as hexane)	TO-15 (VOCs Target Analytes)	ASTM-D 1946 (O2/Argon, CO2, CH4, N2)	Comments
01	VEFF-09-07	Outlet (stack)	9/7/16	1030	-30	-5	Air	1	X	X		Individually Certified 6-L SUMMA
02	VEFF-09-07-D	Outlet (stack) Dup	9/7/16	1030	-30	-5	Air	1	X	X		Individually Certified 6-L SUMMA
03	VPOST-09-07	Post-Dilution		1250	-30	-5	Air	1	X	X		Individually Certified 1-L SUMMA
04	VINF-09-07	Influent Vapor (header)		1210	-30	-5	Air	1	X	X	X	Batch Certified 1-L SUMMA
												TAL includes historical VOCs
												and remaining ATLI List per
												subcontract.

Relinquished by: (Signature)	Received by: (Signature) FED EX	Date: 9/7/16	Time: 1530
Relinquished by: (Signature) FED EX	Received by: (Signature)	Date: 9/8/16	Time: 1105
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Revised: 06/29/2015

Client: CH2M Hill
Attn: Dan Jablonski
Project Name: SFPP - Norwalk Site
Project No.: NA
Date Received: 09/08/16
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	H090808-01			H090808-02			H090808-03			H090808-04		
Client Sample I.D.:	VEFF-09-07			VEFF-09-07-D			VPOST-09-07			VINF-09-07		
Date/Time Sampled:	9/7/16 10:30			9/7/16 10:30			9/7/16 12:00			9/7/16 12:10		
Date/Time Analyzed:	9/9/16 17:08			9/9/16 17:47			9/9/16 18:26			9/9/16 19:06		
QC Batch No.:	160909MS2A1			160909MS2A1			160909MS2A1			160909MS2A1		
Analyst Initials:	VM			VM			VM			VM		
Dilution Factor:	2.0			2.0			40			21		
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	0.0020	0.00031	ND	0.0020	0.00031	ND	0.040	0.0062	ND	0.021	0.0032
Chloromethane	ND	0.0040	0.00044	ND	0.0040	0.00044	ND	0.081	0.0089	ND	0.042	0.0046
1,2-Cl-1,1,2,2-F ethane (114)	ND	0.0020	0.00041	ND	0.0020	0.00041	ND	0.040	0.0081	ND	0.021	0.0042
Vinyl Chloride	ND	0.0020	0.00033	ND	0.0020	0.00033	ND	0.040	0.0066	ND	0.021	0.0034
Bromomethane	0.0014 J	0.0051	0.00059	0.0011 J	0.0051	0.00059	0.020 J	0.10	0.012	ND	0.053	0.0062
Chloroethane	ND	0.0020	0.0017	ND	0.0020	0.0017	ND	0.040	0.034	ND	0.021	0.018
Trichlorofluoromethane (11)	ND	0.0020	0.00044	ND	0.0020	0.00044	ND	0.040	0.0087	ND	0.021	0.0045
1,1-Dichloroethene	ND	0.0020	0.00046	ND	0.0020	0.00046	ND	0.040	0.0092	ND	0.021	0.0048
Carbon Disulfide	0.039	0.010	0.00048	0.18	0.010	0.00048	0.097 J	0.20	0.0097	0.025 J	0.11	0.0050
1,1,2-Cl 1,2,2-F ethane (113)	ND	0.0020	0.00054	ND	0.0020	0.00054	ND	0.040	0.011	ND	0.021	0.0057
Acetone	0.0065 J	0.010	0.00058	0.0063 J	0.010	0.00058	ND	0.20	0.012	0.071 J	0.11	0.0061
Methylene Chloride	ND	0.0020	0.00058	ND	0.0020	0.00058	ND	0.040	0.012	ND	0.021	0.0060
t-1,2-Dichloroethene	ND	0.0020	0.00060	ND	0.0020	0.00060	ND	0.040	0.012	ND	0.021	0.0063
1,1-Dichloroethane	ND	0.0020	0.00028	ND	0.0020	0.00028	ND	0.040	0.0055	ND	0.021	0.0029
c-1,2-Dichloroethene	ND	0.0020	0.00039	ND	0.0020	0.00039	0.035 J	0.040	0.0078	ND	0.021	0.0041
2-Butanone	ND	0.0020	0.0012	0.0015 J	0.0020	0.0012	ND	0.040	0.025	0.057	0.021	0.013
t-Butyl Methyl Ether (MTBE)	ND	0.0020	0.00045	ND	0.0020	0.00045	ND	0.040	0.0090	ND	0.021	0.0047
Chloroform	ND	0.0020	0.00028	ND	0.0020	0.00028	ND	0.040	0.0057	ND	0.021	0.0029
1,1,1-Trichloroethane	ND	0.0020	0.00020	ND	0.0020	0.00020	ND	0.040	0.0041	ND	0.021	0.0021
Carbon Tetrachloride	ND	0.0020	0.00035	ND	0.0020	0.00035	ND	0.040	0.0070	ND	0.021	0.0037
Benzene	0.00061 J	0.0020	0.00019	0.00063 J	0.0020	0.00019	2.4	0.040	0.0039	1.6	0.021	0.0020
1,2-Dichloroethane	ND	0.0020	0.00015	ND	0.0020	0.00015	0.015 J	0.040	0.0030	0.011 J	0.021	0.0016
Trichloroethene	ND	0.0020	0.00029	ND	0.0020	0.00029	0.12	0.040	0.0057	ND	0.021	0.0030
1,2-Dichloropropane	ND	0.0020	0.00037	ND	0.0020	0.00037	ND	0.040	0.0073	ND	0.021	0.0038
Bromodichloromethane	ND	0.0020	0.00012	ND	0.0020	0.00012	ND	0.040	0.0024	ND	0.021	0.0013
c-1,3-Dichloropropene	ND	0.0020	0.00024	ND	0.0020	0.00024	ND	0.040	0.0048	ND	0.021	0.0025
4-Methyl-2-Pentanone	ND	0.0020	0.00014	ND	0.0020	0.00014	ND	0.040	0.0027	ND	0.021	0.0014
Toluene	0.00051 J	0.0020	0.00016	0.00059 J	0.0020	0.00016	6.0	0.040	0.0032	3.8	0.021	0.0017
t-1,3-Dichloropropene	ND	0.0020	0.00021	ND	0.0020	0.00021	ND	0.040	0.0042	ND	0.021	0.0022
1,1,2-Trichloroethane	ND	0.0020	0.00033	ND	0.0020	0.00033	ND	0.040	0.0065	ND	0.021	0.0034
1,3-Dichloropropane	ND	0.0020	0.00010	ND	0.0020	0.00010	ND	0.040	0.0020	ND	0.021	0.0010
Tetrachloroethene	0.00052 J	0.0020	0.00024	ND	0.0020	0.00024	0.053	0.040	0.0049	0.023	0.021	0.0025
2-Hexanone	ND	0.0020	0.00042	ND	0.0020	0.00042	ND	0.040	0.0083	ND	0.021	0.0043
Dibromochloromethane	ND	0.0020	0.00037	ND	0.0020	0.00037	ND	0.040	0.0074	ND	0.021	0.0038
1,2-Dibromoethane	ND	0.0020	0.00018	ND	0.0020	0.00018	ND	0.040	0.0037	ND	0.021	0.0019
Chlorobenzene	ND	0.0020	0.00016	ND	0.0020	0.00016	0.017 J	0.040	0.0031	0.011 J	0.021	0.0016
Ethylbenzene	ND	0.0020	0.00012	ND	0.0020	0.00012	0.97	0.040	0.0023	0.68	0.021	0.0012
p,&m-Xylene	0.00038 J	0.0020	0.00023	0.00026 J	0.0020	0.00023	6.3	0.040	0.0046	3.8	0.021	0.0024
o-Xylene	ND	0.0020	0.00025	ND	0.0020	0.00025	3.5	0.040	0.0049	2.2	0.021	0.0026

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: Dan Jablonski
Project Name: SFPP - Norwalk Site
Project No.: NA
Date Received: 09/08/16
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	H090808-01			H090808-02			H090808-03			H090808-04		
Client Sample I.D.:	VEFF-09-07			VEFF-09-07-D			VPOST-09-07			VINF-09-07		
Date/Time Sampled:	9/7/16 10:30			9/7/16 10:30			9/7/16 12:00			9/7/16 12:10		
Date/Time Analyzed:	9/9/16 17:08			9/9/16 17:47			9/9/16 18:26			9/9/16 19:06		
QC Batch No.:	160909MS2A1			160909MS2A1			160909MS2A1			160909MS2A1		
Analyst Initials:	VM			VM			VM			VM		
Dilution Factor:	2.0			2.0			40			21		
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	ND	0.0020	0.00026	ND	0.0020	0.00026	0.11	0.040	0.0052	0.078	0.021	0.0027
Bromoform	ND	0.010	0.00011	ND	0.010	0.00011	ND	0.20	0.0023	ND	0.11	0.0012
Isopropyl benzene	ND	0.0020	0.00021	ND	0.0020	0.00021	0.078	0.040	0.0042	0.057	0.021	0.0022
1,1,2,2-Tetrachloroethane	ND	0.0040	0.00012	ND	0.0040	0.00012	ND	0.081	0.0025	ND	0.042	0.0013
Benzyl Chloride	ND	0.0020	0.00037	ND	0.0020	0.00037	ND	0.040	0.0074	ND	0.021	0.0039
1,2,3-Trichloropropane	ND	0.0020	0.00054	ND	0.0020	0.00054	ND	0.040	0.011	ND	0.021	0.0057
n-Propyl Benzene	ND	0.0020	0.00012	ND	0.0020	0.00012	0.16	0.040	0.0024	0.10	0.021	0.0012
4-Ethyl Toluene	ND	0.0020	0.00013	ND	0.0020	0.00013	1.8	0.040	0.0026	1.2	0.021	0.0013
1,3,5-Trimethylbenzene	ND	0.0040	0.00035	ND	0.0040	0.00035	0.88	0.081	0.0070	0.57	0.042	0.0036
4-Chlorotoluene	ND	0.0020	0.00024	ND	0.0020	0.00024	ND	0.040	0.0048	ND	0.021	0.0025
tert-Butylbenzene	ND	0.0020	0.00018	ND	0.0020	0.00018	ND	0.040	0.0037	ND	0.021	0.0019
1,2,4-Trimethylbenzene	ND	0.0040	0.00023	ND	0.0040	0.00023	1.1	0.081	0.0046	0.72	0.042	0.0024
sec-Butylbenzene	ND	0.0020	0.00020	ND	0.0020	0.00020	0.022 J	0.040	0.0039	0.015 J	0.021	0.0020
p-Isopropyltoluene	0.00065 J	0.0020	0.00026	0.00085 J	0.0020	0.00026	0.025 J	0.040	0.0053	0.017 J	0.021	0.0027
1,3-Dichlorobenzene	ND	0.0020	0.00025	ND	0.0020	0.00025	ND	0.040	0.0049	ND	0.021	0.0026
1,4-Dichlorobenzene	ND	0.0020	0.00030	ND	0.0020	0.00030	ND	0.040	0.0059	ND	0.021	0.0031
n-Butylbenzene	ND	0.0020	0.00015	ND	0.0020	0.00015	ND	0.040	0.0030	ND	0.021	0.0015
1,2-Dichlorobenzene	ND	0.0020	0.00025	ND	0.0020	0.00025	ND	0.040	0.0050	ND	0.021	0.0026
1,2,4-Trichlorobenzene	ND	0.0040	0.00033	ND	0.0040	0.00033	ND	0.081	0.0067	ND	0.042	0.0035
Hexachlorobutadiene	ND	0.0020	0.00012	ND	0.0020	0.00012	ND	0.040	0.0024	ND	0.021	0.0012
t-Butanol	ND	0.010	0.00039	ND	0.010	0.00039	ND	0.20	0.0078	ND	0.11	0.0040
n-Hexane	ND	0.010	0.00027	ND	0.010	0.00027	9.1	0.40	0.011	6.8 d	0.27	0.0074
Isopropyl ether	ND	0.010	0.00022	ND	0.010	0.00022	ND	0.20	0.0045	ND	0.11	0.0023
t-Butyl ethyl ether	ND	0.010	0.00040	ND	0.010	0.00040	ND	0.20	0.0081	ND	0.11	0.0042
2,2-Dichloropropane	ND	0.010	0.00019	ND	0.010	0.00019	ND	0.20	0.0038	ND	0.11	0.0020
t-Amyl methyl ether	ND	0.010	0.00014	ND	0.010	0.00014	ND	0.20	0.0029	ND	0.11	0.0015
1,4-Dioxane	ND	0.010	0.00035	ND	0.010	0.00035	ND	0.20	0.0071	ND	0.11	0.0037
Naphthalene	ND	0.010	0.00078	ND	0.010	0.00078	ND	0.20	0.016	ND	0.11	0.0081
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.
d = Result obtained from secondary dilution. QC Batch ID: 160915MS2A1

Reviewed/Approved By: _____ Date 9/15/16
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: Dan Jablonski
Project Name: SFPP - Norwalk Site
Project No.: NA
Date Received: 09/08/16
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	METHOD BLANK			METHOD BLANK		
Client Sample I.D.:	--			--		
Date/Time Sampled:	--			--		
Date/Time Analyzed:	9/9/16 14:53			9/15/16 13:11		
QC Batch No.:	160909MS2A1			160915MS2A1		
Analyst Initials:	VM			VM		
Dilution Factor:	0.20			0.20		
ANALYTE	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv
Dichlorodifluoromethane (12)	ND	0.00020	0.000031	ND	0.00020	0.000031
Chloromethane	ND	0.00040	0.000044	ND	0.00040	0.000044
1,2-Cl-1,1,2,2-F ethane (114)	ND	0.00020	0.000040	ND	0.00020	0.000040
Vinyl Chloride	ND	0.00020	0.000032	ND	0.00020	0.000032
Bromomethane	0.000069 J	0.00050	0.000059	ND	0.00050	0.000059
Chloroethane	ND	0.00020	0.00017	ND	0.00020	0.00017
Trichlorofluoromethane (11)	ND	0.00020	0.000043	ND	0.00020	0.000043
1,1-Dichloroethene	ND	0.00020	0.000045	ND	0.00020	0.000045
Carbon Disulfide	ND	0.0010	0.000048	ND	0.0010	0.000048
1,1,2-Cl 1,2,2-F ethane (113)	ND	0.00020	0.000054	ND	0.00020	0.000054
Acetone	ND	0.0010	0.000058	0.00030 J	0.0010	0.000058
Methylene Chloride	ND	0.00020	0.000057	ND	0.00020	0.000057
t-1,2-Dichloroethene	ND	0.00020	0.000060	ND	0.00020	0.000060
1,1-Dichloroethane	ND	0.00020	0.000027	ND	0.00020	0.000027
c-1,2-Dichloroethene	ND	0.00020	0.000039	ND	0.00020	0.000039
2-Butanone	ND	0.00020	0.00012	ND	0.00020	0.00012
t-Butyl Methyl Ether (MTBE)	ND	0.00020	0.000045	ND	0.00020	0.000045
Chloroform	ND	0.00020	0.000028	ND	0.00020	0.000028
1,1,1-Trichloroethane	ND	0.00020	0.000020	ND	0.00020	0.000020
Carbon Tetrachloride	ND	0.00020	0.000035	ND	0.00020	0.000035
Benzene	0.000052 J	0.00020	0.000019	ND	0.00020	0.000019
1,2-Dichloroethane	ND	0.00020	0.000015	ND	0.00020	0.000015
Trichloroethene	ND	0.00020	0.000028	ND	0.00020	0.000028
1,2-Dichloropropane	ND	0.00020	0.000036	ND	0.00020	0.000036
Bromodichloromethane	ND	0.00020	0.000012	ND	0.00020	0.000012
c-1,3-Dichloropropene	ND	0.00020	0.000024	ND	0.00020	0.000024
4-Methyl-2-Pentanone	ND	0.00020	0.000013	ND	0.00020	0.000013
Toluene	ND	0.00020	0.000016	0.000019 J	0.00020	0.000016
t-1,3-Dichloropropene	ND	0.00020	0.000021	ND	0.00020	0.000021
1,1,2-Trichloroethane	ND	0.00020	0.000032	ND	0.00020	0.000032
1,3-Dichloropropane	ND	0.00020	0.0000099	ND	0.00020	0.0000099
Tetrachloroethene	ND	0.00020	0.000024	ND	0.00020	0.000024
2-Hexanone	ND	0.00020	0.000041	ND	0.00020	0.000041
Dibromochloromethane	ND	0.00020	0.000036	ND	0.00020	0.000036
1,2-Dibromoethane	ND	0.00020	0.000018	ND	0.00020	0.000018
Chlorobenzene	ND	0.00020	0.000016	ND	0.00020	0.000016
Ethylbenzene	ND	0.00020	0.000011	ND	0.00020	0.000011
p,&m-Xylene	ND	0.00020	0.000023	ND	0.00020	0.000023
o-Xylene	ND	0.00020	0.000024	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: Dan Jablonski
Project Name: SFPP - Norwalk Site
Project No.: NA
Date Received: 09/08/16
Matrix: Air
Reporting Units: ppmv

EPA Method TO15

Lab No.:	METHOD BLANK			METHOD BLANK		
Client Sample I.D.:	--			--		
Date/Time Sampled:	--			--		
Date/Time Analyzed:	9/9/16 14:53			9/15/16 13:11		
QC Batch No.:	160909MS2A1			160915MS2A1		
Analyst Initials:	VM			VM		
Dilution Factor:	0.20			0.20		
ANALYTE	Result ppmv	RL ppmv	MDL ppmv	Result ppmv	RL ppmv	MDL ppmv
Styrene	ND	0.00020	0.000026	ND	0.00020	0.000026
Bromoform	ND	0.0010	0.000011	ND	0.0010	0.000011
Isopropyl benzene	ND	0.00020	0.000021	ND	0.00020	0.000021
1,1,2,2-Tetrachloroethane	ND	0.00040	0.000012	ND	0.00040	0.000012
Benzyl Chloride	ND	0.00020	0.000037	ND	0.00020	0.000037
1,2,3-Trichloropropane	ND	0.00020	0.000054	ND	0.00020	0.000054
n-Propyl Benzene	ND	0.00020	0.000012	ND	0.00020	0.000012
4-Ethyl Toluene	ND	0.00020	0.000013	ND	0.00020	0.000013
1,3,5-Trimethylbenzene	ND	0.00040	0.000035	ND	0.00040	0.000035
4-Chlorotoluene	ND	0.00020	0.000024	ND	0.00020	0.000024
tert-Butylbenzene	ND	0.00020	0.000018	ND	0.00020	0.000018
1,2,4-Trimethylbenzene	ND	0.00040	0.000023	ND	0.00040	0.000023
sec-Butylbenzene	ND	0.00020	0.000019	ND	0.00020	0.000019
p-Isopropyltoluene	ND	0.00020	0.000026	ND	0.00020	0.000026
1,3-Dichlorobenzene	ND	0.00020	0.000024	ND	0.00020	0.000024
1,4-Dichlorobenzene	ND	0.00020	0.000029	ND	0.00020	0.000029
n-Butylbenzene	ND	0.00020	0.000015	ND	0.00020	0.000015
1,2-Dichlorobenzene	ND	0.00020	0.000025	ND	0.00020	0.000025
1,2,4-Trichlorobenzene	ND	0.00040	0.000033	ND	0.00040	0.000033
Hexachlorobutadiene	ND	0.00020	0.000012	ND	0.00020	0.000012
t-Butanol	ND	0.0010	0.000038	ND	0.0010	0.000038
n-Hexane	ND	0.0010	0.000027	ND	0.0010	0.000027
Isopropyl ether	ND	0.0010	0.000022	ND	0.0010	0.000022
t-Butyl ethyl ether	ND	0.0010	0.000040	ND	0.0010	0.000040
2,2-Dichloropropane	ND	0.0010	0.000019	ND	0.0010	0.000019
t-Amyl methyl ether	ND	0.0010	0.000014	ND	0.0010	0.000014
1,4-Dioxane	ND	0.0010	0.000035	ND	0.0010	0.000035
Naphthalene	ND	0.0010	0.000077	ND	0.0010	0.000077
1,2,3-Trichlorobenzene (TIC)	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: Mark Johnson
Operations Manager

Date 9/15/16

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 #: 160909MS2A1

Matrix: Air

EPA Method TO-14/TO-15

Lab No:	Method Blank		LCS		LCSD						
Date/Time Analyzed:	9/9/16 14:53		9/9/16 12:53		9/9/16 13:32						
Data File ID:	09SEP007.D		09SEP004.D		09SEP005.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	9.5	95	4.5	70	130	30	Pass
Methylene Chloride	0.0	10.0	10.0	100	9.5	95	5.0	70	130	30	Pass
Trichloroethene	0.0	10.0	10.3	103	10.5	105	1.9	70	130	30	Pass
Toluene	0.0	10.0	10.0	100	10.1	101	1.2	70	130	30	Pass
1,1,2,2-Tetrachloroethane	0.0	10.0	8.9	89	8.7	87	3.1	70	130	30	Pass

RPD = Relative Percent Difference

Reviewed/Approved By: _____ Date: 9/15/16

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch #: 160915MS2A1

Matrix: Air

EPA Method TO-14/TO-15

Lab No:	Method Blank		LCS		LCSD						
Date/Time Analyzed:	9/15/16 13:11		9/15/16 11:49		9/15/16 12:28						
Data File ID:	15SEP005.D		15SEP003.D		15SEP004.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	10.0	100	9.4	94	6.6	70	130	30	Pass
Methylene Chloride	0.0	10.0	9.7	97	8.9	89	8.7	70	130	30	Pass
Trichloroethene	0.0	10.0	10.0	100	9.9	99	1.4	70	130	30	Pass
Toluene	0.0	10.0	9.9	99	9.6	96	2.9	70	130	30	Pass
1,1,2,2-Tetrachloroethane	0.0	10.0	8.8	88	8.6	86	2.9	70	130	30	Pass

RPD = Relative Percent Difference

Reviewed/Approved By: _____ Date: 9/20/16

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

Client: CH2M Hill
Attn: Dan Jablonski
Project Name: SFPP - Norwalk Site
Project No.: NA
Date Received: 09/08/16
Matrix: Air
Reporting Units: ppmv

EPA METHOD TO3

Lab No.:	H090808-01			H090808-02			H090808-03			H090808-04		
Client Sample I.D.:	VEFF-09-07			VEFF-09-07-D			VPOST-09-07			VINF-09-07		
Date/Time Sampled:	9/7/16 10:30			9/7/16 10:30			9/7/16 12:00			9/7/16 12:10		
Date/Time Analyzed:	9/15/16 9:09			9/15/16 9:32			9/15/16 10:18			9/15/16 10:41		
QC Batch No.:	160914GC11A2			160914GC11A2			160914GC11A2			160914GC11A2		
Analyst Initials:	AS			AS			AS			AS		
Dilution Factor:	2.0			2.0			2.0			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	ND	2.0	0.36	ND	2.0	0.36	360	2.0	0.36	250	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 9/15/16
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: 160914GC11A2
Matrix: Air
Reporting Units: ppmv

EPA METHOD TO3
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	9/14/16 15:17			9/14/16 14:43		9/14/16 15:02					
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	4.57	91	4.46	89	2.4	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 9/15/16
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: Dan Jablonski
Project Name: SFPP - Norwalk Site
Project No.: NA
Date Received: 09/08/16
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	H090808-04		
Client Sample I.D.:	VINF-09-07		
Date/Time Sampled:	9/7/16 12:10		
Date/Time Analyzed:	9/9/16 10:21		
QC Batch No.:	160909GC8A1		
Analyst Initials:	AS		
Dilution Factor:	2.1		

ANALYTE	Result % v/v	RL % v/v	MDL % v/v
Carbon Dioxide	0.53	0.021	0.00089
Oxygen/Argon	21	1.1	0.077
Nitrogen	78	2.1	0.31
Methane	0.0066	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 9/15/16
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.: 160909GC8A1
Matrix: Air
Units: % v/v

QC for ASTM D1946

Lab No.:	Method Blank			LCS		LCSD			
Date/Time Analyzed:	9/9/16 9:49			9/9/16 9:03		9/9/16 9:20			
Analyst Initials:	AS			AS		AS			
Datafile:	09sep007			09sep004		09sep005			
Dilution Factor:	1.0			1.0		1.0			
ANALYTE	Results	RL	MDL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Carbon Dioxide	0.00096 J	0.010	0.00042	94	70-130%	96	70-130%	2.2	<30
Oxygen/Argon	0.144 J	0.50	0.037	103	70-130%	105	70-130%	2.0	<30
Nitrogen	0.47 J	1.0	0.14	99	70-130%	101	70-130%	2.0	<30
Methane	ND	0.0010	0.000050	103	70-130%	103	70-130%	0.0	<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: 9/15/16

Mark J. Johnson
Operations Manager

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

September 27, 2016

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

TEL:
FAX:

Workorder No.: N020999

RE: SFPP - Norwalk Site

Attention: Dan Jablonski

Enclosed are the results for sample(s) received on September 20, 2016 by ASSET Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

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

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

Sincerely,

Nancy Liburdi for

Puri Romualdo
Laboratory Director

CLIENT: CH2MHill
Project: SFPP - Norwalk Site
Lab Order: N020999

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 Comments for EPA 8260B:

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

ASSET LABORATORIES
"Serving Clients with Passion and Professionalism"
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3151 W. Post Rd., Las Vegas, NV 89118
ELAP Cert 2676 | NV Cert NV00922
ORELAP/NELAP Cert 4046

ASSET Laboratories

Date: *27-Sep-16*

CLIENT: CH2MHill
Project: SFPP - Norwalk Site
Lab Order: N020999
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N020999-001A	INF-09-20	Wastewater	9/20/2016 12:15:00 PM	9/20/2016	9/27/2016
N020999-001B	INF-09-20	Wastewater	9/20/2016 12:15:00 PM	9/20/2016	9/27/2016

CLIENT:	CH2MHill	**Client Sample ID:**	INF-09-20
Lab Order:	N020999	**Collection Date:**	9/20/2016 12:15:00 PM
Project:	SFPP - Norwalk Site	**Matrix:**	WASTEWATER
Lab ID:	N020999-001		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: **CA01638-MS08_160920A** QC Batch: **CA16VW008** PrepDate: Analyst: **RB**

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.066	1.0		ug/L	1	9/20/2016 10:37 PM
1,1,1-Trichloroethane	ND	0.068	1.0		ug/L	1	9/20/2016 10:37 PM
1,1,2,2-Tetrachloroethane	ND	0.031	1.0		ug/L	1	9/20/2016 10:37 PM
1,1,2-Trichloroethane	ND	0.062	1.0		ug/L	1	9/20/2016 10:37 PM
1,1-Dichloroethane	ND	0.022	0.50		ug/L	1	9/20/2016 10:37 PM
1,1-Dichloroethene	ND	0.087	1.0		ug/L	1	9/20/2016 10:37 PM
1,1-Dichloropropene	ND	0.044	1.0		ug/L	1	9/20/2016 10:37 PM
1,2,3-Trichlorobenzene	ND	0.056	1.0		ug/L	1	9/20/2016 10:37 PM
1,2,3-Trichloropropane	ND	0.059	1.0		ug/L	1	9/20/2016 10:37 PM
1,2,4-Trichlorobenzene	ND	0.060	1.0		ug/L	1	9/20/2016 10:37 PM
1,2,4-Trimethylbenzene	0.77	0.042	1.0	J	ug/L	1	9/20/2016 10:37 PM
1,2-Dibromo-3-chloropropane	ND	0.047	2.0		ug/L	1	9/20/2016 10:37 PM
1,2-Dibromoethane	ND	0.057	1.0		ug/L	1	9/20/2016 10:37 PM
1,2-Dichlorobenzene	ND	0.040	1.0		ug/L	1	9/20/2016 10:37 PM
1,2-Dichloroethane	0.41	0.064	0.50	J	ug/L	1	9/20/2016 10:37 PM
1,2-Dichloropropane	ND	0.062	1.0		ug/L	1	9/20/2016 10:37 PM
1,3,5-Trimethylbenzene	0.63	0.015	1.0	J	ug/L	1	9/20/2016 10:37 PM
1,3-Dichlorobenzene	0.060	0.057	1.0	J	ug/L	1	9/20/2016 10:37 PM
1,3-Dichloropropane	ND	0.040	1.0		ug/L	1	9/20/2016 10:37 PM
1,4-Dichlorobenzene	ND	0.030	1.0		ug/L	1	9/20/2016 10:37 PM
2,2-Dichloropropane	ND	0.026	1.0		ug/L	1	9/20/2016 10:37 PM
2-Butanone	ND	0.48	10		ug/L	1	9/20/2016 10:37 PM
2-Chlorotoluene	ND	0.040	1.0		ug/L	1	9/20/2016 10:37 PM
4-Chlorotoluene	ND	0.036	1.0		ug/L	1	9/20/2016 10:37 PM
4-Isopropyltoluene	ND	0.022	1.0		ug/L	1	9/20/2016 10:37 PM
4-Methyl-2-pentanone	ND	0.17	10		ug/L	1	9/20/2016 10:37 PM
Acetone	5.8	1.1	10	J	ug/L	1	9/20/2016 10:37 PM
Benzene	ND	0.036	1.0		ug/L	1	9/20/2016 10:37 PM
Bromobenzene	ND	0.043	1.0		ug/L	1	9/20/2016 10:37 PM
Bromochloromethane	ND	0.22	1.0		ug/L	1	9/20/2016 10:37 PM
Bromodichloromethane	ND	0.031	1.0		ug/L	1	9/20/2016 10:37 PM
Bromoform	ND	0.32	1.0		ug/L	1	9/20/2016 10:37 PM
Bromomethane	0.44	0.32	1.0	J	ug/L	1	9/20/2016 10:37 PM
Carbon disulfide	ND	0.025	1.0		ug/L	1	9/20/2016 10:37 PM
Carbon tetrachloride	ND	0.057	0.50		ug/L	1	9/20/2016 10:37 PM
Chlorobenzene	ND	0.036	1.0		ug/L	1	9/20/2016 10:37 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: N020999
Project: SFPP - Norwalk Site
Lab ID: N020999-001

Client Sample ID: INF-09-20
Collection Date: 9/20/2016 12:15:00 PM
Matrix: WASTEWATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: **CA01638-MS08_160920A** QC Batch: **CA16VW008** PrepDate: Analyst: **RB**

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
Chloroethane	ND	0.099	1.0		ug/L	1	9/20/2016 10:37 PM
Chloroform	ND	0.036	1.0		ug/L	1	9/20/2016 10:37 PM
Chloromethane	0.26	0.12	1.0	J	ug/L	1	9/20/2016 10:37 PM
cis-1,2-Dichloroethene	ND	0.051	1.0		ug/L	1	9/20/2016 10:37 PM
cis-1,3-Dichloropropene	ND	0.044	1.0		ug/L	1	9/20/2016 10:37 PM
Di-isopropyl ether	10	0.017	1.0		ug/L	1	9/20/2016 10:37 PM
Dibromochloromethane	ND	0.072	1.0		ug/L	1	9/20/2016 10:37 PM
Dibromomethane	ND	0.17	1.0		ug/L	1	9/20/2016 10:37 PM
Dichlorodifluoromethane	ND	0.070	1.0		ug/L	1	9/20/2016 10:37 PM
Ethyl tert-butyl ether	ND	0.039	1.0		ug/L	1	9/20/2016 10:37 PM
Ethylbenzene	0.18	0.036	1.0	J	ug/L	1	9/20/2016 10:37 PM
Freon-113	ND	0.074	1.0		ug/L	1	9/20/2016 10:37 PM
Hexachlorobutadiene	ND	0.11	1.0		ug/L	1	9/20/2016 10:37 PM
Isopropylbenzene	0.060	0.034	1.0	J	ug/L	1	9/20/2016 10:37 PM
m,p-Xylene	1.8	0.024	1.0		ug/L	1	9/20/2016 10:37 PM
Methylene chloride	ND	0.28	2.0		ug/L	1	9/20/2016 10:37 PM
MTBE	2.2	0.062	1.0		ug/L	1	9/20/2016 10:37 PM
n-Butylbenzene	ND	0.031	1.0		ug/L	1	9/20/2016 10:37 PM
n-Propylbenzene	0.090	0.018	1.0	J	ug/L	1	9/20/2016 10:37 PM
Naphthalene	ND	0.048	1.0		ug/L	1	9/20/2016 10:37 PM
o-Xylene	0.89	0.042	1.0	J	ug/L	1	9/20/2016 10:37 PM
sec-Butylbenzene	0.070	0.025	1.0	J	ug/L	1	9/20/2016 10:37 PM
Styrene	ND	0.035	1.0		ug/L	1	9/20/2016 10:37 PM
Tert-amyl methyl ether	ND	0.039	1.0		ug/L	1	9/20/2016 10:37 PM
Tert-Butanol	150	0.30	5.0		ug/L	1	9/20/2016 10:37 PM
tert-Butylbenzene	ND	0.030	1.0		ug/L	1	9/20/2016 10:37 PM
Tetrachloroethene	ND	0.16	1.0		ug/L	1	9/20/2016 10:37 PM
Toluene	0.080	0.042	2.0	J	ug/L	1	9/20/2016 10:37 PM
trans-1,2-Dichloroethene	ND	0.070	1.0		ug/L	1	9/20/2016 10:37 PM
trans-1,3-Dichloropropene	ND	0.039	1.0		ug/L	1	9/20/2016 10:37 PM
Trichloroethene	ND	0.12	1.0		ug/L	1	9/20/2016 10:37 PM
Trichlorofluoromethane	ND	0.031	1.0		ug/L	1	9/20/2016 10:37 PM
Vinyl chloride	ND	0.095	0.50		ug/L	1	9/20/2016 10:37 PM
Xylenes, Total	2.6	1.5	2.0		ug/L	1	9/20/2016 10:37 PM
Surr: 1,2-Dichloroethane-d4	101	0	72-119		%REC	1	9/20/2016 10:37 PM
Surr: 4-Bromofluorobenzene	101	0	76-119		%REC	1	9/20/2016 10:37 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	**Client Sample ID:**	INF-09-20
Lab Order:	N020999	**Collection Date:**	9/20/2016 12:15:00 PM
Project:	SFPP - Norwalk Site	**Matrix:**	WASTEWATER
Lab ID:	N020999-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **CA01638-MS08_160920A**	QC Batch: **CA16VW008**			PrepDate:			Analyst: **RB**
Surr: Dibromofluoromethane	99.3	0	85-115		%REC	1	9/20/2016 10:37 PM
Surr: Toluene-d8	103	0	81-120		%REC	1	9/20/2016 10:37 PM
TPH EXTRACTABLE BY GC/FID							
	EPA 3510C				**EPA 8015B**		
RunID: **GC3_160922C**	QC Batch: **59728**			PrepDate:	**9/22/2016**		Analyst: **FJ**
TPH-Diesel (C13-C22)	230	16	26		ug/L	1	9/22/2016 11:39 PM
TPH-Oil (C23-C36)	130	14	26		ug/L	1	9/22/2016 11:39 PM
Surr: Octacosane	65.3	0	26-152		%REC	1	9/22/2016 11:39 PM
Surr: p-Terphenyl	67.1	0	57-132		%REC	1	9/22/2016 11:39 PM
GASOLINE RANGE ORGANICS BY GC/FID							
			EPA 8015B				
RunID: **GC4_160923A**	QC Batch: **E16VW061**			PrepDate:			Analyst: **QBM**
TPH-Gasoline (C4-C12)	32	16	50	J	ug/L	1	9/23/2016 01:36 PM
Surr: Chlorobenzene - d5	115	0	74-138		%REC	1	9/23/2016 01:36 PM
TOTAL TPH							
			EPA 8015B				
RunID: **GC3_160922C**	QC Batch: **R110692**			PrepDate:			Analyst: **FJ**
Total TPH	390	16	50		ug/L	1	9/22/2016

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: N020999
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_FP_SFPP

Sample ID: **MB-59728**	SampType: **MBLK**	TestCode: **8015_W_FP_**	Units: **ug/L**	Prep Date: **9/22/2016**	RunNo: **110692**
Client ID: **PBW**	Batch ID: **59728**	TestNo: **EPA 8015B**	**EPA 3510C**	Analysis Date: **9/22/2016**	SeqNo: **2431487**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Diesel (C13-C22)	ND	25									
TPH-Oil (C23-C36)	24.608	25									J
Surr: Octacosane	61.997		80.00		77.5	26	152				
Surr: p-Terphenyl	63.450		80.00		79.3	57	132				

Qualifiers:

B	Analyte detected in the associated Method Blank	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: N020999
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GAS_WSFPP

Sample ID: **E160923LCS**	SampType: **LCS**	TestCode: **8015GAS_WS**	Units: **ug/L**	Prep Date:	RunNo: **110712**
Client ID: **LCSW**	Batch ID: **E16VW061**	TestNo: **EPA 8015B**		Analysis Date: **9/23/2016**	SeqNo: **2431943**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	967.000	50	1000	0	96.7	67	136				
Surr: Chlorobenzene - d5	52138.000		50000		104	74	138				

Sample ID: **E160923MB2**	SampType: **MBLK**	TestCode: **8015GAS_WS**	Units: **ug/L**	Prep Date:	RunNo: **110712**
Client ID: **PBW**	Batch ID: **E16VW061**	TestNo: **EPA 8015B**		Analysis Date: **9/23/2016**	SeqNo: **2431945**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	ND	50									
Surr: Chlorobenzene - d5	57927.000		50000		116	74	138				

Sample ID: **N020998-001BDUP**	SampType: **DUP**	TestCode: **8015GAS_WS**	Units: **ug/L**	Prep Date:	RunNo: **110712**
Client ID: **ZZZZZZ**	Batch ID: **E16VW061**	TestNo: **EPA 8015B**		Analysis Date: **9/23/2016**	SeqNo: **2431947**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	ND	50						0	0	0	
Surr: Chlorobenzene - d5	60344.000		50000		121	74	138		0	0	

Sample ID: **N020998-001BMS**	SampType: **MS**	TestCode: **8015GAS_WS**	Units: **ug/L**	Prep Date:	RunNo: **110712**
Client ID: **ZZZZZZ**	Batch ID: **E16VW061**	TestNo: **EPA 8015B**		Analysis Date: **9/23/2016**	SeqNo: **2431949**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	915.000	50	1000	0	91.5	67	136				
Surr: Chlorobenzene - d5	54459.000		50000		109	74	138				

Sample ID: **N020998-001BMSD**	SampType: **MSD**	TestCode: **8015GAS_WS**	Units: **ug/L**	Prep Date:	RunNo: **110712**
Client ID: **ZZZZZZ**	Batch ID: **E16VW061**	TestNo: **EPA 8015B**		Analysis Date: **9/23/2016**	SeqNo: **2431950**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	932.000	50	1000	0	93.2	67	136	915.0	1.84	30	

Qualifiers:

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: N020999
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GAS_WSFPP

Sample ID: **N020998-001BMSD** SampType: **MSD** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **110712**
Client ID: **ZZZZZZ** Batch ID: **E16VW061** TestNo: **EPA 8015B** Analysis Date: **9/23/2016** SeqNo: **2431950**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Chlorobenzene - d5	55652.000		50000		111	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: N020999
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **CA160920LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **110595**
Client ID: **LCSW** Batch ID: **CA16VW008** TestNo: **EPA 8260B** Analysis Date: **9/20/2016** SeqNo: **2429081**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	20.070	1.0	20.00	0	100	81	129				
1,1,1-Trichloroethane	19.910	1.0	20.00	0	99.6	67	132				
1,1,2,2-Tetrachloroethane	20.040	1.0	20.00	0	100	63	128				
1,1,2-Trichloroethane	20.160	1.0	20.00	0	101	75	125				
1,1-Dichloroethane	19.670	0.50	20.00	0	98.4	69	133				
1,1-Dichloroethene	19.430	1.0	20.00	0	97.2	68	130				
1,1-Dichloropropene	21.440	1.0	20.00	0	107	73	132				
1,2,3-Trichlorobenzene	21.710	1.0	20.00	0	109	67	137				
1,2,3-Trichloropropane	19.940	1.0	20.00	0	99.7	73	124				
1,2,4-Trichlorobenzene	20.340	1.0	20.00	0	102	66	134				
1,2,4-Trimethylbenzene	20.670	1.0	20.00	0	103	74	132				
1,2-Dibromo-3-chloropropane	20.240	2.0	20.00	0	101	50	132				
1,2-Dibromoethane	20.840	1.0	20.00	0	104	80	121				
1,2-Dichlorobenzene	21.610	1.0	20.00	0	108	71	122				
1,2-Dichloroethane	20.170	0.50	20.00	0	101	69	132				
1,2-Dichloropropane	20.250	1.0	20.00	0	101	75	125				
1,3,5-Trimethylbenzene	22.300	1.0	20.00	0	112	74	131				
1,3-Dichlorobenzene	21.220	1.0	20.00	0	106	75	124				
1,3-Dichloropropane	20.580	1.0	20.00	0	103	73	126				
1,4-Dichlorobenzene	20.100	1.0	20.00	0	101	74	123				
2,2-Dichloropropane	20.380	1.0	20.00	0	102	69	137				
2-Butanone	205.180	10	200.0	0	103	49	136				
2-Chlorotoluene	21.400	1.0	20.00	0	107	73	126				
4-Chlorotoluene	21.540	1.0	20.00	0	108	74	128				
4-Isopropyltoluene	20.580	1.0	20.00	0	103	73	130				
4-Methyl-2-pentanone	222.640	10	200.0	0	111	58	134				
Acetone	184.800	10	200.0	0	92.4	40	135				
Benzene	20.530	1.0	20.00	0	103	81	122				
Bromobenzene	20.210	1.0	20.00	0	101	76	124				
Bromochloromethane	19.600	1.0	20.00	0	98.0	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: N020999
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **CA160920LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **110595**
Client ID: **LCSW** Batch ID: **CA16VW008** TestNo: **EPA 8260B** Analysis Date: **9/20/2016** SeqNo: **2429081**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromodichloromethane	19.760	1.0	20.00	0	98.8	76	121				
Bromoform	20.610	1.0	20.00	0	103	69	128				
Bromomethane	20.830	1.0	20.00	0	104	53	141				
Carbon disulfide	19.270	1.0	20.00	0	96.4	75	125				
Carbon tetrachloride	20.310	0.50	20.00	0	102	66	138				
Chlorobenzene	20.260	1.0	20.00	0	101	81	122				
Chloroethane	24.200	1.0	20.00	0	121	58	133				
Chloroform	19.290	1.0	20.00	0	96.5	69	128				
Chloromethane	15.910	1.0	20.00	0	79.6	56	131				
cis-1,2-Dichloroethene	19.560	1.0	20.00	0	97.8	72	126				
cis-1,3-Dichloropropene	20.940	1.0	20.00	0	105	69	131				
Di-isopropyl ether	20.710	1.0	20.00	0	104	70	130				
Dibromochloromethane	20.530	1.0	20.00	0	103	66	133				
Dibromomethane	20.200	1.0	20.00	0	101	76	125				
Dichlorodifluoromethane	18.800	1.0	20.00	0	94.0	53	153				
Ethyl tert-butyl ether	21.380	1.0	20.00	0	107	70	130				
Ethylbenzene	20.500	1.0	20.00	0	103	73	127				
Freon-113	20.260	1.0	20.00	0	101	75	125				
Hexachlorobutadiene	20.360	1.0	20.00	0	102	67	131				
Isopropylbenzene	22.290	1.0	20.00	0	111	75	127				
m,p-Xylene	43.020	1.0	40.00	0	108	76	128				
Methylene chloride	18.780	2.0	20.00	0	93.9	63	137				
MTBE	19.280	1.0	20.00	0	96.4	65	123				
n-Butylbenzene	20.690	1.0	20.00	0	103	69	137				
n-Propylbenzene	22.050	1.0	20.00	0	110	72	129				
Naphthalene	22.710	1.0	20.00	0	114	54	138				
o-Xylene	21.420	1.0	20.00	0	107	80	121				
sec-Butylbenzene	22.530	1.0	20.00	0	113	72	127				
Styrene	20.010	1.0	20.00	0	100	65	134				
Tert-amyl methyl ether	20.690	1.0	20.00	0	103	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: N020999
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **CA160920LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **110595**
Client ID: **LCSW** Batch ID: **CA16VW008** TestNo: **EPA 8260B** Analysis Date: **9/20/2016** SeqNo: **2429081**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tert-Butanol	105.430	5.0	100.0	0	105	70	130				
tert-Butylbenzene	22.270	1.0	20.00	0	111	70	129				
Tetrachloroethene	20.750	1.0	20.00	0	104	66	128				
Toluene	20.070	2.0	20.00	0	100	77	122				
trans-1,2-Dichloroethene	19.360	1.0	20.00	0	96.8	63	137				
trans-1,3-Dichloropropene	20.970	1.0	20.00	0	105	59	135				
Trichloroethene	20.520	1.0	20.00	0	103	70	127				
Trichlorofluoromethane	19.170	1.0	20.00	0	95.9	57	129				
Vinyl chloride	19.410	0.50	20.00	0	97.0	50	134				
Xylenes, Total	64.440	2.0	60.00	0	107	75	125				
Surr: 1,2-Dichloroethane-d4	24.200		25.00		96.8	72	119				
Surr: 4-Bromofluorobenzene	26.360		25.00		105	76	119				
Surr: Dibromofluoromethane	23.940		25.00		95.8	85	115				
Surr: Toluene-d8	25.340		25.00		101	81	120				

Sample ID: **CA160920LCSD** SampType: **LCSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **110595**
Client ID: **LCSS02** Batch ID: **CA16VW008** TestNo: **EPA 8260B** Analysis Date: **9/20/2016** SeqNo: **2429082**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	20.010	1.0	20.00	0	100	81	129	20.07	0.299	20	
1,1,1-Trichloroethane	19.640	1.0	20.00	0	98.2	67	132	19.91	1.37	20	
1,1,2,2-Tetrachloroethane	20.230	1.0	20.00	0	101	63	128	20.04	0.944	20	
1,1,2-Trichloroethane	19.790	1.0	20.00	0	99.0	75	125	20.16	1.85	20	
1,1-Dichloroethane	19.720	0.50	20.00	0	98.6	69	133	19.67	0.254	20	
1,1-Dichloroethene	19.030	1.0	20.00	0	95.2	68	130	19.43	2.08	20	
1,1-Dichloropropene	20.930	1.0	20.00	0	105	73	132	21.44	2.41	20	
1,2,3-Trichlorobenzene	21.270	1.0	20.00	0	106	67	137	21.71	2.05	20	
1,2,3-Trichloropropane	20.150	1.0	20.00	0	101	73	124	19.94	1.05	20	
1,2,4-Trichlorobenzene	20.350	1.0	20.00	0	102	66	134	20.34	0.0492	20	
1,2,4-Trimethylbenzene	20.470	1.0	20.00	0	102	74	132	20.67	0.972	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: N020999
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **CA160920LCSD** SampType: **LCSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **110595**
Client ID: **LCSS02** Batch ID: **CA16VW008** TestNo: **EPA 8260B** Analysis Date: **9/20/2016** SeqNo: **2429082**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	20.150	2.0	20.00	0	101	50	132	20.24	0.446	20	
1,2-Dibromoethane	20.430	1.0	20.00	0	102	80	121	20.84	1.99	20	
1,2-Dichlorobenzene	21.690	1.0	20.00	0	108	71	122	21.61	0.370	20	
1,2-Dichloroethane	19.950	0.50	20.00	0	99.8	69	132	20.17	1.10	20	
1,2-Dichloropropane	20.180	1.0	20.00	0	101	75	125	20.25	0.346	20	
1,3,5-Trimethylbenzene	21.920	1.0	20.00	0	110	74	131	22.30	1.72	20	
1,3-Dichlorobenzene	20.970	1.0	20.00	0	105	75	124	21.22	1.19	20	
1,3-Dichloropropane	20.630	1.0	20.00	0	103	73	126	20.58	0.243	20	
1,4-Dichlorobenzene	19.230	1.0	20.00	0	96.2	74	123	20.10	4.42	20	
2,2-Dichloropropane	19.410	1.0	20.00	0	97.0	69	137	20.38	4.88	20	
2-Butanone	214.560	10	200.0	0	107	49	136	205.2	4.47	20	
2-Chlorotoluene	21.040	1.0	20.00	0	105	73	126	21.40	1.70	20	
4-Chlorotoluene	21.310	1.0	20.00	0	107	74	128	21.54	1.07	20	
4-Isopropyltoluene	20.200	1.0	20.00	0	101	73	130	20.58	1.86	20	
4-Methyl-2-pentanone	222.270	10	200.0	0	111	58	134	222.6	0.166	20	
Acetone	200.740	10	200.0	0	100	40	135	184.8	8.27	20	
Benzene	20.240	1.0	20.00	0	101	81	122	20.53	1.42	20	
Bromobenzene	20.240	1.0	20.00	0	101	76	124	20.21	0.148	20	
Bromochloromethane	19.460	1.0	20.00	0	97.3	65	129	19.60	0.717	20	
Bromodichloromethane	19.570	1.0	20.00	0	97.9	76	121	19.76	0.966	20	
Bromoform	20.360	1.0	20.00	0	102	69	128	20.61	1.22	20	
Bromomethane	19.480	1.0	20.00	0	97.4	53	141	20.83	6.70	20	
Carbon disulfide	19.220	1.0	20.00	0	96.1	75	125	19.27	0.260	20	
Carbon tetrachloride	20.010	0.50	20.00	0	100	66	138	20.31	1.49	20	
Chlorobenzene	20.180	1.0	20.00	0	101	81	122	20.26	0.396	20	
Chloroethane	23.860	1.0	20.00	0	119	58	133	24.20	1.41	20	
Chloroform	19.330	1.0	20.00	0	96.7	69	128	19.29	0.207	20	
Chloromethane	17.230	1.0	20.00	0	86.2	56	131	15.91	7.97	20	
cis-1,2-Dichloroethene	19.650	1.0	20.00	0	98.2	72	126	19.56	0.459	20	
cis-1,3-Dichloropropene	20.580	1.0	20.00	0	103	69	131	20.94	1.73	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: N020999
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **CA160920LCSD** SampType: **LCSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **110595**
Client ID: **LCSS02** Batch ID: **CA16VW008** TestNo: **EPA 8260B** Analysis Date: **9/20/2016** SeqNo: **2429082**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Di-isopropyl ether	20.760	1.0	20.00	0	104	70	130	20.71	0.241	20	
Dibromochloromethane	20.280	1.0	20.00	0	101	66	133	20.53	1.23	20	
Dibromomethane	20.300	1.0	20.00	0	102	76	125	20.20	0.494	20	
Dichlorodifluoromethane	18.470	1.0	20.00	0	92.4	53	153	18.80	1.77	20	
Ethyl tert-butyl ether	21.160	1.0	20.00	0	106	70	130	21.38	1.03	20	
Ethylbenzene	20.310	1.0	20.00	0	102	73	127	20.50	0.931	20	
Freon-113	19.990	1.0	20.00	0	100	75	125	20.26	1.34	20	
Hexachlorobutadiene	20.120	1.0	20.00	0	101	67	131	20.36	1.19	20	
Isopropylbenzene	22.160	1.0	20.00	0	111	75	127	22.29	0.585	20	
m,p-Xylene	42.060	1.0	40.00	0	105	76	128	43.02	2.26	20	
Methylene chloride	18.880	2.0	20.00	0	94.4	63	137	18.78	0.531	20	
MTBE	19.220	1.0	20.00	0	96.1	65	123	19.28	0.312	20	
n-Butylbenzene	20.180	1.0	20.00	0	101	69	137	20.69	2.50	20	
n-Propylbenzene	21.630	1.0	20.00	0	108	72	129	22.05	1.92	20	
Naphthalene	21.450	1.0	20.00	0	107	54	138	22.71	5.71	20	
o-Xylene	20.750	1.0	20.00	0	104	80	121	21.42	3.18	20	
sec-Butylbenzene	22.150	1.0	20.00	0	111	72	127	22.53	1.70	20	
Styrene	19.680	1.0	20.00	0	98.4	65	134	20.01	1.66	20	
Tert-amyl methyl ether	20.590	1.0	20.00	0	103	70	130	20.69	0.484	20	
Tert-Butanol	79.400	5.0	100.0	0	79.4	70	130	105.4	28.2	20	R
tert-Butylbenzene	22.140	1.0	20.00	0	111	70	129	22.27	0.585	20	
Tetrachloroethene	20.180	1.0	20.00	0	101	66	128	20.75	2.79	20	
Toluene	19.790	2.0	20.00	0	99.0	77	122	20.07	1.40	20	
trans-1,2-Dichloroethene	18.940	1.0	20.00	0	94.7	63	137	19.36	2.19	20	
trans-1,3-Dichloropropene	20.670	1.0	20.00	0	103	59	135	20.97	1.44	20	
Trichloroethene	19.900	1.0	20.00	0	99.5	70	127	20.52	3.07	20	
Trichlorofluoromethane	18.630	1.0	20.00	0	93.2	57	129	19.17	2.86	20	
Vinyl chloride	19.120	0.50	20.00	0	95.6	50	134	19.41	1.51	20	
Xylenes, Total	62.810	2.0	60.00	0	105	75	125	64.44	2.56	20	
Surr: 1,2-Dichloroethane-d4	24.250		25.00		97.0	72	119		0		

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: N020999
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **CA160920LCSD** SampType: **LCSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **110595**
Client ID: **LCSS02** Batch ID: **CA16VW008** TestNo: **EPA 8260B** Analysis Date: **9/20/2016** SeqNo: **2429082**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	26.510		25.00		106	76	119		0		
Surr: Dibromofluoromethane	23.920		25.00		95.7	85	115		0		
Surr: Toluene-d8	25.470		25.00		102	81	120		0		

Sample ID: **CA160920MB3** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **110595**
Client ID: **PBW** Batch ID: **CA16VW008** TestNo: **EPA 8260B** Analysis Date: **9/20/2016** SeqNo: **2429085**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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	0.060	1.0									J
1,3-Dichlorobenzene	0.080	1.0									J
1,3-Dichloropropane	ND	1.0									
1,4-Dichlorobenzene	ND	1.0									
2,2-Dichloropropane	ND	1.0									
2-Butanone	ND	10									

Qualifiers:

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

CLIENT: CH2MHill
Work Order: N020999
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **CA160920MB3** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **110595**
Client ID: **PBW** Batch ID: **CA16VW008** TestNo: **EPA 8260B** Analysis Date: **9/20/2016** SeqNo: **2429085**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Chlorotoluene	ND	1.0									
4-Chlorotoluene	ND	1.0									
4-Isopropyltoluene	0.160	1.0									J
4-Methyl-2-pentanone	0.200	10									J
Acetone	2.440	10									J
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	0.130	1.0									J
Carbon tetrachloride	ND	0.50									
Chlorobenzene	ND	1.0									
Chloroethane	ND	1.0									
Chloroform	ND	1.0									
Chloromethane	0.130	1.0									J
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	0.170	1.0									J
Isopropylbenzene	0.040	1.0									J
m,p-Xylene	0.150	1.0									J
Methylene chloride	ND	2.0									

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: N020999
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **CA160920MB3** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **110595**
Client ID: **PBW** Batch ID: **CA16VW008** TestNo: **EPA 8260B** Analysis Date: **9/20/2016** SeqNo: **2429085**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	ND	1.0									
n-Butylbenzene	ND	1.0									
n-Propylbenzene	0.070	1.0									J
Naphthalene	ND	1.0									
o-Xylene	0.090	1.0									J
sec-Butylbenzene	0.080	1.0									J
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	0.110	2.0									J
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	25.420		25.00		102	72	119				
Surr: 4-Bromofluorobenzene	24.990		25.00		100	76	119				
Surr: Dibromofluoromethane	24.440		25.00		97.8	85	115				
Surr: Toluene-d8	25.380		25.00		102	81	120				

Qualifiers:

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

N020999

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

CHAIN OF CUSTODY RECORD

DATE: 9/20/16
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:	Dan Jablonski	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 dan_jablonski@kinder...	Purchase Order No.:		Address:	1100 Town & Country Road Orange, CA 92868	Sample Date:	9/20/16
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)	Analysis Test: TPH-g, TPH-d, and TPH-oil (8015B)	Comments
	CONTAINER TYPE								V	A	
	# OF CONTAINERS								6	2	
	PRESERVATIVE								H		
	VOLUME (mL)								40	1000	
1	INF-08-20	INFLUENT	WW	G	9/20/16	1215	8		X	X	N020999 - 01
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											

4°C 2.2°C @ Las Vegas Lab

Relinquished by (Signature and Printed Name)	Date / Time	Relinquished by (Signature and Printed Name)	Date / Time
	9/20/16 1245		9/20/16 15:15
Relinquished by (Signature and Printed Name):	Date / Time	Relinquished by (Signature and Printed Name):	Date / Time
	9/20/16 1542	Yoandra Rodriguez	9/21/16 7:42 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 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
O = Oil	P = Product	S = Soil	Z = Zn(AC)2	O = NaOH	T = Na2S2O3	A=Amber Glass	B = Tedlar	J=Jar
Others/Specify:			Others/Specify:			M = Metal	P = Plastic	C = Can

ASSET Laboratories

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

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

Cooler Received/Opened On:	9/20/2016	Workorder:	N020999
Rep sample Temp (Deg C):	4.0/2.2	IR Gun ID:	2
Temp Blank:	☑ Yes ☐ No		
Carrier name:	Golden State Overnight		
Last 4 digits of Tracking No.:	3392	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 9/21/2016

Reviewed By: 9/21/2016

ASSET Laboratories

WORK ORDER Summary

21-Sep-16

WorkOrder: N020999

Client ID: CH2HI03

Project: SFPP - Norwalk Site **QC Level:** RTNE **Date Received:** 9/20/2016

Comments: Report to D. Jablonski/CH2M HILL, cc:KMEP

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N020999-001A	INF-09-20	9/20/2016 12:15:00 PM	9/27/2016	Wastewater	EPA 8015B	GASOLINE RANGE ORGANICS BY GC/FID	☐	☐	☐	VW
			9/27/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N020999-001B			9/27/2016		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: EXTRACTABLE FUELS	☐	☐	☐	WW
			9/27/2016		EPA 8015B	TPH EXTRACTABLE BY GC/FID	☐	☐	☐	WW
			9/27/2016		EPA 8015B	Total TPH	☐	☐	☐	WW
N020999-002A	FOLDER		9/27/2016		Folder	Folder	☐	☐	☐	LAB

GSO
GOLDEN STATE OVERNIGHT

800-322-5555 www.gso.com

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

Ship To
ATL INC
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: REQUIRED

Tracking #: 533353392

CPS

LVS A

LAS VEGAS

C89102A

56747913

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

LABEL INSTRUCTIONS:

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

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

2.2°C
DR# 2