Final

Third Quarter 2010 Remediation Progress Report Defense Fuel Support Point Norwalk, California

Prepared for

Kinder Morgan Energy Partners, L.P.

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October 15, 2010

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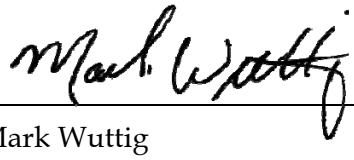
The material and data presented in this report were prepared consistent with current and generally accepted consulting principles and practices. This work was supervised by the following CH2M HILL licensed professional.



10/15/2010

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Contents

Acronyms and Abbreviations

µg/L	micrograms per liter
1,2-DCA	1,2-dichloroethane
ASTM	American Society for Testing and Materials
Calscience	Calscience Environmental Laboratories, Inc.
DFSP	Defense Fuel Support Point
DPE	dual-phase extraction
EPA	United States Environmental Protection Agency
Geomatrix	Geomatrix Consultants, Inc.
GWE	groundwater extraction
KMEP	Kinder Morgan Energy Partners, L.P.
LGAC	liquid-phase granular activated carbon
MTBE	methyl tertiary butyl ether
NPDES	National Pollutant Discharge Elimination System
O&M	operations and maintenance
PID	photoionization detector
ppmv	parts per million by volume
RBCA	Risk-Based Corrective Action
RWQCB	California Regional Water Quality Control Board, Los Angeles Region
SCAQMD	South Coast Air Quality Management District
Second Addendum	Second Addendum to the Remedial Action Plan, November 30, 2006
SFPP	SFPP, L.P.
SVE	soil vapor extraction
TFE	total fluids extraction
TPH-fp	total petroleum hydrocarbons characterized as fuel products
TPH-g	total petroleum hydrocarbons quantified as gasoline
VOC	volatile organic compound
WSB	West Side Barrier

1. Introduction

CH2M HILL has prepared this report on behalf of SFPP, L.P. (SFPP), an operating partnership of Kinder Morgan Energy Partners, L.P. (KMEP), to summarize remediation activities performed at the Defense Fuel Support Point (DFSP) located at 15306 Norwalk Boulevard, Norwalk, California (the site; Figure 1) during the third quarter 2010 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), and in accordance with the Second Addendum to the Remedial Action Plan (Second Addendum) dated November 30, 2006 (Geomatrix Consultants, Inc. [Geomatrix], 2006). Implementation of the Second Addendum was approved by the RWQCB on April 2, 2007. Additional background information can be found in the Second Addendum and in previously submitted semiannual groundwater monitoring reports for the site.

This report summarizes the remediation systems present at the site and describes implementation of the Second Addendum for the period July through September 2010 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 during July through September 2010 and the progress achieved through those activities are summarized in the following sections.

2. Remediation Systems

SFPP currently operates remediation systems consisting of soil vapor extraction (SVE), total fluids extraction (TFE; extraction of free product and/or groundwater using a top-loading pump), groundwater extraction (GWE; extraction of groundwater using a bottom-loading pump), and treatment of extracted soil vapors and groundwater to address two specific areas at and near the site: the south-central area and the southeastern area. Operation of the West Side Barrier groundwater extraction system (WSB system) for remediation of the western offsite area was discontinued in August 2008. During the second quarter 2010, two WSB wells were temporarily operated to control the selenium concentration in extracted groundwater as discussed in the Selenium Management Evaluation Update submitted to the RWQCB on June 10, 2010. Blending of extracted groundwater from the WSB system with groundwater from the south-central and southeastern areas was discontinued on June 22, 2010.

Remediation in the south-central and southeastern areas consists of SVE and TFE (GWE is also performed at two well locations in the south-central area). At several well locations, SVE is coupled with TFE (or GWE at two locations) in a process referred to as dual-phase extraction (DPE). 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 described below. The soil vapors are then preheated in a heat exchanger and treated in a catalytic oxidizer where volatile organic compounds (VOCs) are converted to carbon dioxide and water prior to being discharged to the atmosphere. Operation of the SVE and treatment system is conducted in accordance with Permit to Operate No. F13759 issued by the South Coast Air Quality Management District (SCAQMD).

The main groundwater treatment system handles free product and groundwater recovered from the south-central and southeastern parts of the site. Free product and groundwater recovered by pneumatically operated top-loading total fluids pumps and bottom-loading groundwater pumps are piped to an oil-water separator. Free product, if any, from the oil-water separator is collected in a storage tank and recycled at an offsite location. Water from the oil-water separator is treated using liquid-phase granular activated carbon (LGAC). Treated water is routed through an onsite 8,000-gallon effluent storage tank prior to discharge in accordance with a National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA0063509, CI No. 7497).

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 2010. The remediation system layout is presented in Figure 2.

3. Operations and Maintenance

Tasks performed for O&M of the remediation systems during the reporting period included:

- Weekly maintenance and monitoring of the south-central and southeastern SVE, TFE/GWE, and soil vapor and groundwater treatment systems (collectively referred to as remediation systems)
- Inspection of GWE pumps
- Measurements of individual well vapor concentrations
- Collection and analysis of system influent vapor and groundwater samples
- Gauging of selected remediation wells
- Troubleshooting of the SVE system

In addition, system effluent vapor and water samples were collected and analyzed for compliance with the SCAQMD and NPDES permits. The effluent water sampling results will be provided under separate cover in the NPDES effluent monitoring report for the third quarter 2010 period.

During this reporting period, remediation system inspections were performed on a weekly basis. For these inspections, vapor flow rate, vacuum, volumes of extracted groundwater, hours of operation, and other system parameters were recorded during system operation. Remediation system operation activities for the third quarter 2010 are summarized in Tables 2 and 3. The remediation systems operated during the third quarter 2010 with the following exceptions.

- On July 9, 2010, the TFE/GWE system was shut down for routine carbon change-out. It was restarted on the same day.
- On July 20, 2010, the TFE/GWE system was shut down due to high-level alarms for the transfer tank. The bag filters were clogged and replaced.
- On August 18, 2010, the TFE/GWE system was shut down due to extracted groundwater flowing out of the transfer tank and onto the treatment pad. The water was contained and did not leave the treatment pad. The high-level float switch on the transfer tank malfunctioned and was replaced on August 19, 2010.
- On August 24, 2010, the remediation system was shut down to replace the power source of the system from the generator to the main power house at the site.
- The SVE system was shut down from June 29, 2010, to August 3, 2010, to troubleshoot the high-temperature and no-flame alarms that occurred at the end of the second quarter. On August 6, 2010, the SVE system was shut down due to a tripped circuit breaker. The circuit breaker was reset and the SVE system restarted. On August 10, 2010, the SVE system was shut down due to a high-temperature alarm. The SVE system

remained off for further troubleshooting. On August 31, 2010, the system was restarted temporarily to collect vapor samples at different points of the SVE system.

- On September 1, 2010, the SVE system was turned on and back online. However, on September 3 and 10, 2010, the SVE system was shut down due to a high-temperature alarm. The SVE system was reset and restarted within the same day.
- On September 7, 2010, the SVE system was shut down to replace the dilution and process valves and clean the catalytic oxidizer beds. The system was restarted on the same day.
- On September 21, 2010, the SVE system was shut down to replace and attach the linkage to the actuator, dilution valve, and process valves. The system was restarted on the same day.
- On September 27, 2010, the remediation system was off due to a city-wide power outage. The systems were shut down for the remainder of the week to allow groundwater levels to reach static conditions prior to the second semiannual groundwater sampling event, scheduled for early October 2010.

Overall, during third quarter 2010, the SVE system operated approximately 20 percent of the time while the TFE/GWE system operated approximately 96 percent of the time.

Vapor samples from the SVE system influent and water samples from TFE/GWE system influent were collected during the third quarter 2010 when the systems were in operation. During the third quarter 2010, influent vapor samples were collected on August 3, August 31, and September 14, 2010, when the SVE system was operating. Influent water samples were collected on July 20, August 3, August 10, and September 14, 2010, when the TFE/GWE systems were operating. The vapor and water samples were delivered to Calscience Environmental Laboratories, Inc. (Calscience), a laboratory certified by the California Department of Public Health Environmental Laboratory Accreditation Program, for analysis. Calscience analyzed the vapor samples for the following:

- Fixed gases (methane, carbon dioxide, oxygen, and argon) using American Society for Testing and Materials (ASTM) D-1946 and SCAQMD 25.1M
- Total petroleum hydrocarbons quantified as gasoline (TPH-g) using United States Environmental Protection Agency (EPA) Method TO-3
- VOCs using EPA Method TO-15

Calscience analyzed the water samples for the following:

- TPH-g and TPH characterized as fuel products (TPH-fp) using EPA Method 8015(M)
- VOCs using EPA Method 8260B

Analytical results for the influent vapor and water samples are summarized in Tables 4 and 5, respectively. The laboratory analytical reports and chain-of-custody documents for these samples are included in Appendix A.

VOC concentrations in vapors extracted from individual SVE wells were measured in the field using a photoionization detector (PID) calibrated using 50 parts per million by volume (ppmv) of hexane. The individual well vapor readings are summarized in Table 6. Depths to product and groundwater were measured to the nearest 0.01 foot from the top of the well casing using an interface probe in selected wells. The gauging results are summarized in Table 7.

In addition, groundwater, system water influent, and system water effluent samples were sent to the following laboratories during the third quarter 2010 for further analysis of total selenium, dissolved selenium, and selenium speciation:

- Applied Speciation and Consulting, LLC
- Advanced Technology Laboratories
- Alpha Analytical, Inc.
- TestAmerica Laboratories, Inc.

The purpose of these additional analyses was to assess whether historical concentrations of selenium in NPDES discharge compliance samples analyzed by Calscience actually exceeded the NPDES discharge limits for selenium. The results of this additional sampling and analysis to assess selenium concentrations will be provided in a future letter to the RWQCB.

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 approximately 104 pounds during the third quarter of 2010, for a cumulative mass removal of approximately 19,735 pounds since implementing the Second Addendum system upgrades, and over 3 million pounds since the SVE system began operation in 1995. The cumulative mass removed by SVE does not include the mass removed by biodegradation.

Approximately 1,543,274 gallons of groundwater was extracted during the third quarter 2010. This total includes approximately 736,007 gallons of water from the south-central area and 807,267 gallons of water from the southeastern area. No water was extracted from the WSB area.

Groundwater extraction was discontinued in the WSB region during the third quarter 2008 based on the reduced lateral extent and low concentrations of methyl tertiary butyl ether (MTBE) and 1,2-dichloroethane (1,2-DCA) west of the site. Detected concentrations of MTBE and 1,2-DCA in wells west of the site have been below the conservative, site-specific, Risk-Based Corrective Action (RBCA) goals (Geomatrix, 1999) since August 2005. The lower (more conservative) RBCA goals for MTBE and 1,2-DCA are 40 micrograms per liter (µg/L) and 70 µg/L, respectively. 1,2-DCA and MTBE concentrations in the western area continue to be monitored; other wells in the WSB system will be restarted if necessary.

Removal of free product using TFE continued during the third quarter 2010. Because the amount of free product removed by TFE was significantly less than the volume of groundwater extracted, free product was emulsified in the relatively larger volume of groundwater extracted and was not observed to accumulate in the product holding tank of the groundwater treatment system. Therefore, the amount of free product removed by TFE was not estimated.

Based on the TPH-g results for influent water samples and total groundwater extracted, the mass of TPH-g removed by TFE and GWE in the south-central and southeastern areas was approximately 119 pounds during the third quarter 2010, for a cumulative mass removed from these areas of approximately 1,117 pounds since implementing the system upgrades described in the Second Addendum. TPH-fp also was detected in the influent water samples; however, TPH-fp results were not used to calculate mass removal for dissolved petroleum hydrocarbons because the ranges of hydrocarbons for TPH-g and TPH-fp overlap. Because the non-overlapping portion of the TPH-fp range was not used in the mass removal calculation, and the amount of free product removed by TFE was not estimated, the total mass of petroleum hydrocarbons removed by TFE may be underestimated.

5. System Evaluation and Optimization

For the SVE treatment system, during the third quarter 2010, vapor-phase VOC concentrations were measured in individual wells using a PID on September 17, 2010, as shown in Table 6. The operation status of the SVE wells at the end of the third quarter 2010 is also shown on Table 6. Because PID readings recorded on September 17, 2010, indicate VOC concentrations are close to or higher than 100 ppmv in several SVE wells, the SVE system will be operated until influent VOC concentrations reach low asymptotic levels.

Groundwater monitoring in the WSB region during the third quarter 2010 supports the continued shutdown of GWE in the region. 1,2-DCA and MTBE concentrations in the western area continue to be monitored; the WSB system will be restarted if necessary.

As shown in Table 7, groundwater elevations and product thicknesses in the south-central area have generally decreased since implementing the Second Addendum. During the third quarter 2010, free product was detected in three remediation wells. TFE will continue to be performed in areas with remaining free product. Selected remediation wells will continue to be monitored quarterly to assess remediation performance; remediation pump settings will be adjusted accordingly to optimize free product recovery and enhance hydraulic control of dissolved plumes.

The systems currently consist of 20 wells operated for product recovery and hydraulic control in the south-central part of the site (including 18 wells operated for TFE and two wells operated for GWE), and 3 wells equipped with TFE pumps operated for product recovery and hydraulic control in the southeastern part of the site (Table 1). Currently (at the end of the third quarter 2010), there are nine TFE/GWE wells online from the south-central area (GMW-O-11, GMW-22, MW-O-2, MW-SF-11, MW-SF-12, MW-SF-13, MW-SF-14, MW-SF-15, and MW-SF-16) and three wells online from the southeastern area (GMW-O-15, GMW-O-18, and GMW-36). Wells MW-SF-3 and MW-SF-24 also are anticipated to be online during the fourth quarter 2010 after further troubleshooting of the pumps is complete. Additional extraction wells may be brought online during the fourth quarter 2010 as necessary.

6. Planned Fourth Quarter 2010 Activities

During the fourth quarter 2010, SFPP plans to continue to focus remedial efforts on the south-central and southeastern areas. Concentrations of 1,2 DCA and MTBE in the western area will continue to be monitored; the WSB system will be restarted if necessary. 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 2010 will be described in the fourth quarter 2010 remediation progress report to be submitted by January 15, 2010.

7. References

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Geomatrix Consultants, Inc. 1999. *Risk-Based Corrective Action, Western 1,2-DCA and MTBE Plumes*. February.

Geomatrix Consultants, Inc. 2006. *Second Addendum to Remedial Action Plan, Defense Fuel Support Point Norwalk, Norwalk, California*. November 30.

Kinder Morgan Energy Partners. 2010. Letter to Mr. Paul Cho, California Regional Water Quality Control Board. Transmittal of Selenium Management Summary Report for the SFPP, L.P. Norwalk Station, 15306 Norwalk Boulevard, Norwalk, California. April 1.

Tables

TABLE 1
Remediation Well Construction and Status
SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Remediation Area	Remediation Well ID	Installation Date	Top of Well Casing Elevation (ft msl)	Well Screen Interval (ft bgs)	Remediation Well Function	Well Operation Status at End of Third Quarter 2010[1]
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	ON; 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	ON
	MW-SF-11	6/19/2007	78.56	20 - 40	SVE; TFE	OFF; ON
	MW-SF-12	6/18/2007	78.07	20 - 40	SVE; TFE	ON; ON
	MW-SF-13	6/19/2007	73.40	20 - 40	SVE; TFE	OFF; ON
	MW-SF-14	6/21/2007	78.16	20 - 40	SVE; TFE	OFF; ON
	MW-SF-15	6/21/2007	78.27	20 - 40	SVE; TFE	ON; ON
	MW-SF-16	6/20/2007	78.21	20 - 40	SVE; TFE	ON; ON
	GMW-9	7/8/1991	74.44	20 - 50	SVE; TFE	OFF; OFF
	GMW-10	7/8/1991	74.67	25 - 50	SVE	OFF
	GMW-22	8/2/1991	74.17	25 - 60	SVE; TFE	OFF; ON
	GMW-24	8/5/1991	74.04	25 - 60	SVE; TFE	OFF; OFF
	GMW-25	1/10/1992	74.29	20 - 50	SVE; GWE	OFF; OFF
	GWR-3	1/10/1992	74.93	20 - 50	SVE; GWE	ON; OFF
	VEW-1	--	--	--	SVE	ON
	VEW-2	--	--	--	SVE	ON
	MW-O-1	1/22/1991	75.48	25 - 40	SVE; TFE	ON; OFF
	MW-O-2	1/23/1991	71.90	25 - 40	SVE; TFE	ON; ON
	GMW-O-11	5/20/1992	74.17	20 - 50	SVE; TFE	ON; ON
	GMW-O-12	5/21/1992	73.49	20 - 50	SVE	ON
	GMW-O-20	6/15/1995	73.32	--	SVE; TFE	ON; 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	ON; OFF
	MW-18 (MID)	6/10/1991	75.67	50 - 60	SVE	OFF
	HW-2	--	--	--	SVE	OFF
Southeastern	GMW-O-15	4/19/1994	74.23	20 - 50	SVE; TFE	ON; ON
	GMW-O-18	7/25/1994	74.36	21 - 40	SVE; TFE	ON; ON
	GMW-36	4/11/1994	74.53	20 - 50	TFE	ON
	GMW-SF-9	4/1/2003	73.00	37 - 46	GWE	OFF
	GMW-SF-10	4/2/2003	75.77	37 - 46	GWE	OFF
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
1. The well operations listed correspond to the well functions indicated in the previous column. Based on information provided by SFPP, L.P.

Abbreviations
-- = information not available
ft msl = feet above mean sea level based on the National Geodetic Vertical Datum of 1929.
ft bgs = feet below ground surface
GWE = groundwater extraction
SVE = soil vapor extraction
TFE = total fluids extraction

TABLE 2
Vapor Remediation System Operation Summary
SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

System Inspection Date	Cumulative Hours of Operation (hours)	Incremental Hours of Operation (hours)	Influent TPH-g Concentration (ppmv)1	Influent FID or PID Reading (ppmv as hexane)	System Flow (scfm)	Header Vacuum ("H_2O)	Mass Removed (pounds)[2]
2007 Totals[3]	**58,319**	**2,058**	--	**--**	**--**	**--**	**3,742**
2008 Totals	**64,233**	**5,915**	**--**	**--**	**--**	**--**	**5,878**
2009 Totals	**68,858**	**4,625**	**--**	**--**	**--**	**--**	**9,387**
First Quarter 2010 Totals	**70,038**	**1,180**	**--**	**--**	**--**	**--**	**144**
Second Quarter 2010 Totals	**71,268**	**1,230**	**--**	**--**	**--**	**--**	**480**
07/07/10	71,267.8	0.0	--	--	--	--	--
08/03/10	71,274.0	6.2	29	63	1,890	30	11
08/31/10	71,327.5	53.5	11	27	1,669	20	36
09/08/10	71,355.2	27.7	--	84	864	10	30
09/14/10	71,496.9	141.7	6	10	339	30	7
09/24/10	71,660.8	163.9	--	23	359	25	20
Third Quarter 2010 Totals	**71,661**	**393**	**--**	**--**	**--**	**--**	**104**
Cumulative Mass Removed Since Implementation of RAP Upgrades[4]							**19,735**

Notes
1. The TPH-g concentration reflects analytical results for vapor samples collected from the influent of the Vapor Remediation System. Refer to Table 4 for a summary of analytical results for influent vapor samples.
2. The total mass removed is based on influent FID or PID readings, hours of operation, and flow rate.
3. The 2007 total includes only operation after upgrades were made to the South-Central system.
4. Upgrades to the South-Central system are described in the Second Addendum to Remedial Action Plan.

Data reported based on information provided by SFPP, L.P.

Abbreviations
TPH-g = total petroleum hydrocarbons as gasoline (C4-C12)
ppmv = parts per million by volume
FID = flame ionization detector
PID = photo ionization detector
scfm = standard cubic feet per minute
H_20 = inches of water
-- = not applicable or not available

TABLE 3
Groundwater Remediation System Operation Summary
SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

System Inspection Date	Groundwater Removed from the South-Central Area (gallons)	Groundwater Removed from the Southeastern Area (gallons)	Groundwater Removed from the West Side Barrier Area (gallons)	Influent TPH-g Concentration (µg/L)[1]	TPH-g Removed from the South-Central, Southeastern, and West Side Barrier Areas (pounds)[2]
2007 Totals[3]	**2,080,762**	**529,411**	**630,877**	**--**	**395**
2008 Totals	**5,391,860**	**700,882**	**405,954[4]**	**--**	**311**
2009 Totals	**8,044,836**	**770,869**	**0**	**--**	**161**
First Quarter 2010 Totals	**739,900**	**193,233**	**0**	**--**	**58**
Second Quarter 2010 Totals	**791,007**	**285,776**	**2,244**	**--**	**73**
07/02/10	18,221	24,548	0	4,600	1.64
07/07/10	5,406	42,729	0	4,600	1.84
07/09/10	1,815	16,382	0	4,600	0.70
07/13/10	3,621	33,944	0	4,600	1.44
07/16/10	2,562	25,183	0	4,600	1.06
07/20/10	4,918	25,575	0	21,000	5.33
07/23/10	30,233	37,982	0	21,000	11.91
07/27/10	101,481	33,839	0	21,000	23.63
07/30/10	70,250	23,704	0	21,000	16.41
08/03/10	95,925	32,935	0	3,400	3.64
08/06/10	69,695	23,815	0	3,400	2.64
08/10/10	11,225	31,500	0	5,800	2.06
08/12/10	7,654	16,359	0	5,800	1.16
08/17/10	18,327	39,604	0	5,800	2.79
08/19/10	1,719	4,105	0	5,800	0.28
08/20/10	2,256	7,682	0	5,800	0.48
08/24/10	9,214	29,865	0	5,800	1.88
08/27/10	n/a[6]	52,847	0	5,800	2.55
08/31/10	74,067	31,975	0	5,800	5.11
09/03/10	31,642	23,297	0	5,800	2.65
09/08/10	54,573	40,168	0	5,800	4.57
09/10/10	16,686	15,447	0	5,800	1.55
09/14/10	29,093	31,943	0	9,400	4.77
09/17/10	28,347	24,033	0	9,400	4.09
09/21/10	19,839	39,946	0	9,400	4.67
09/24/10	n/a[6]	81,766	0	9,400	6.39
09/27/10	27,238	16,094	0	9,400	3.39
Third Quarter 2010 Totals	**736,007**	**807,267**	**0**	**--**	**119**
Cumulative TPH-g Removed Since Implementation of RAP Upgrades[5]					**1,117**

Notes
1. The TPH-g concentration reflects analytical results for samples collected from the influent of the Total Fluids Extractions (TFE) system that extracts groundwater from the south-central, southeastern, and West Side Barrier areas. Refer to Table 5 for a summary of analytical results for the groundwater samples. For a given period, the most recent analytical result available is used to calculate TPH-g removed.
2. The mass of TPH-g removed (pounds) is based on concentrations of dissolved TPH-g in the most recent TFE system influent samples and the volume of groundwater extracted by TFE. Total petroleum hydrocarbons characterized as fuel products (TPH-fp) also were detected in the TFE system influent samples (see Table 5) but were not used in estimating the mass of petroleum hydrocarbons removed from groundwater.
3. The 2007 total includes only operation after upgrades were made to the south-central system.
4. Groundwater removal in the West Side Barrier Area was discontinued in August, 2008. 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.
5. Upgrades to the south-central remediation system are described in the Second Addendum to Remedial Action Plan.
6. No data due to totalizer malfunction.

Data reported based on information provided by SFPP, L.P.

Abbreviations
TPH-g = total petroleum hydrocarbons as gasoline (C4-C12).
µg/L = micrograms per liter

TABLE 4

Extracted Vapor Analytical Results[1]

SFPP, L.P.

Defense Fuel Support Point Norwalk

Norwalk, California

Date Sampled	Total Fluids Extraction System Status	ASTM D-1946			EPA TO-3	EPA TO-15 (VOCs)[2]				
		Methane (%v)	Carbon Dioxide (%v)	Oxygen & Argon (%v)	TPH-g (ppmv)	Benzene (ppbv)	Ethylbenzene (ppbv)	Toluene (ppbv)	Xylenes (ppbv)	MTBE (ppbv)
8/3/2007	ON	<0.5[8]	<0.5	22.0	63	650	220	1,100	1,420	55
9/5/2007	OFF	<0.5	<0.5	22.0	9	32	48	140	320	18
10/2/2007	ON	<0.5	<0.5	21.9	27	250	75	430	610	20
11/2/2007	ON	<0.5	<0.5	22.1	5	40	10	74	95	7
2/1/2008	ON	<0.5	<0.5	21.8	100	830	260	2,200	1,850	<50
3/4/2008	ON	<0.5	<0.5	21.7	50	380	98	570	1,250	36
4/8/2008	OFF	<0.5	<0.5	22.2	69	290	110	480	1,040	41
5/23/2008	OFF	<0.5	<0.5	21.8	14	180	24	190	280	23
6/3/2008	OFF	<0.5	<0.5	21.7	30	380	42	400	330	70
7/2/2008	ON	<0.5	<0.5	21.4	49	32	6	34	45	10
8/19/2008	ON	<0.5	1.7	20.8	50	390	63	230	450	40
9/5/2008	ON	<0.5	2.0	21.2	22	130	39	130	340	42
10/7/2008	ON	<0.5	1.43	21.4	10	41	15	54	181	6.8
11/4/2008	ON	<0.5	2.08	21.1	7.5	31	47	190	242	<2.0
3/6/2009	ON	<0.5	<0.5	22.0	83	1,900	180	990	770	240
4/17/2009	ON	<0.5	<0.5	22.2	3.1	140	8	37	68	26
5/29/2009	ON	<0.5	1.08	21.0	130	1,700	640	3,700	3,100	100
8/18/2009	ON	<0.5	0.78	21.7	28	380	37	290	310	33
8/25/2009	ON	<0.5	0.87	20.6	37	500	44	320	293	20
9/18/2009	ON	<0.5	0.37	21.6	11	75	11	39	107	3
10/29/2009	ON	<0.5	1.80	18.2	77	350	45	250	440	4
11/25/2009	ON	<0.5	<0.5	21.1	14	110	12	110	164	11
12/15/2009	OFF	<0.5	<0.5	21.7	7	28	3	20	47	<3.2
2/26/2010	ON	<0.5	0.4	21.2	20	300	18	220	260	21
3/26/2010	ON	<0.5	1.0	20.2	18	380	20	110	90	5
5/4/2010	ON	<0.5	0.4	21.4	13	100	42	170	222	3
6/29/2010	ON	<0.5	0.4	21.3	9	74	13	66	82	<5.0
8/3/2010	ON	<0.5	0.6	20.4	29	210	13	64	85	9
8/31/2010	ON	0.0039	<0.5	21.4	11	72	12	66	87	8
9/14/2010	ON	<0.5	<0.5	21.6	6	63	15	57	84	<3.2

Notes:

1. Influent vapor samples were collected from the manifold conveying soil vapors extracted from the south-central and southeastern areas.
2. Other detected volatile organic compounds (VOCs) are included in the laboratory analytical reports in Appendix A.
3. Method used is SCAQMD 25.1M

Abbreviations:

%v = percent by volume
TPH-g = total petroleum hydrocarbons as gasoline (C4-C12)
ppmv = parts per million by volume
ppbv = parts per billion by volume
MTBE = methyl tertiary butyl ether
<0.5 = not detected at or above the laboratory reporting limit shown

TABLE 5

Extracted Groundwater Analytical Results[1]

SFPP, L.P.

Defense Fuel Support Point Norwalk

Norwalk, California

Date Sampled	EPA 8015M		EPA 8260B Volatile Organic Compounds (VOCs)[2]				
	TPH-g (µg/L)	TPH-fp (µg/L)	Benzene (µg/L)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
7/11/2007	--	--	4,800	130	890	1,040	690
8/7/2007	14,000	11,000	5,400	140	1,100	770	540
9/25/2007	12,000	30,000	3,400	310	1,600	2,390	540
10/16/2007	8,900	8,400	3,400	94	520	660	390
11/2/2007	44,000	6,500	3,200	130	860	1,160	570
11/30/2007	6,000	5,200	1,800	48	170	490	450
12/21/2007	7,200	4,200	2,100	41	170	430	750
1/4/2008	4,300	7,200	3,300	49	300	540	620
1/18/2008	11,000	2,200	3,600	140	650	850	620
2/1/2008	8,700	5,700	3,600	100	440	930	560
3/4/2008	7,200	4,900	3,900	120	510	770	620
4/8/2008	8,100	10,000	2,800	96	280	580	640
5/6/2008	5,300	2,800	2,900	76	190	328	430
6/3/2008	8,400	6,800	3,700	110	450	480	320
7/2/2008	9,200	4,300 [3]	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

Notes

1. Influent samples were collected from the manifold conveying groundwater extracted from the south-central, southeastern, and West Side Barrier areas.
2. Other detected VOCs are included in the laboratory analytical reports in Appendix A.
3. TPH-fp result from influent extracted groundwater sample collected on July 10, 2008.

Abbreviations

TPH-g = total petroleum hydrocarbons as gasoline (C4-C12)
µg/L = micrograms per liter
TPH-fp = total petroleum hydrocarbons as fuel products (C7-C28)
MTBE = methyl tertiary butyl ether
-- = not analyzed
<500 = Not detected at or above the laboratory reporting limit (RL) shown
J = Analyte was detected above the laboratory method detection limit and below the laboratory RL

TABLE 6
Remediation Well Vapor Concentrations
SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Remediation Area	Remediation Well ID	Remediation Well Function[1]	Well Operation Status at End of Third Quarter 2010[2]	9/17/2010 (ppmv as Hexane)
South-Central	MW-SF-1	SVE	OFF	27.5
	MW-SF-2	SVE; TFE	OFF; OFF	2.4
	MW-SF-3	SVE; TFE	ON; OFF	75.6
	MW-SF-4	SVE	OFF	17.3
	MW-SF-5	SVE	OFF	8.5
	MW-SF-6	SVE; TFE	OFF; OFF	4.1
	MW-SF-9	SVE	OFF	47.6
	MW-SF-10	SVE	ON	60.1
	MW-SF-11	SVE; TFE	OFF; ON	11.5
	MW-SF-12	SVE; TFE	ON; ON	248.1
	MW-SF-13	SVE; TFE	OFF; ON	6.9
	MW-SF-14	SVE; TFE	OFF; ON	4.6
	MW-SF-15	SVE; TFE	ON; ON	74.3
	MW-SF-16	SVE; TFE	ON; ON	90.1
	GMW-9	SVE; TFE	OFF; OFF	1.1
	GMW-10	SVE	OFF	7.6
	GMW-22	SVE; TFE	OFF; ON	1.1
	GMW-24	SVE; TFE	OFF; OFF	1.8
	GMW-25	SVE; GWE	OFF; OFF	1.8
	GWR-3	SVE; GWE	ON; OFF	76.7
	VEW-1	SVE	ON	104.9
	VEW-2	SVE	ON	83.1
	MW-O-1	SVE; TFE	ON; OFF	1.3
	MW-O-2	SVE; TFE	ON; ON	107.1
	GMW-O-11	SVE; TFE	ON; ON	88.6
	GMW-O-12	SVE	ON	1.9
	GMW-O-20	SVE; TFE	ON; OFF	1.7
	GMW-O-23	SVE; TFE	ON; OFF	5.4
	MW-18 (MID)	SVE	OFF	2.4
	HW-2	SVE	OFF	25.6
Southeastern	GMW-O-15	SVE; TFE	ON; ON	1.8
	GMW-O-18	SVE; TFE	ON; ON	1.8

Notes
1. The well operations listed correspond to the well functions indicated in the previous column.
2. Vapor readings measured in the field with a photoionization detector (PID) calibrated using 50 ppmv of hexane.

Data reported based on information provided by SFPP, L.P.

Abbreviations
SVE = soil vapor extraction
TFE = total fluids extraction
GWE - groundwater extraction
ppmv = parts per million by volume
NM = not measured

TABLE 7

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

SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft btoc)	Measured Depth to Product (ft btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
GMW-9	8/8/2008	74.44	28.01	27.96	0.05	---	Envent
	10/16/2008	74.44	28.36	28.35	0.01	---	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
	5/24/2010	74.44	30.47	---	---	43.97	Blaine Tech
	5/28/2010	74.44	30.35	---	---	44.09	Blaine Tech
GMW-10	04/30/2007	74.67	---	25.9	---	48.77	Secor
	11/12/2007	74.67	25.02	25.82	0.83	---	Secor
	04/14/2008	74.67	25.38	25.44	0.06	---	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	---	27.2	---	47.47	Blaine Tech
	5/24/2010	74.67	---	26.72	---	47.95	Blaine Tech
	5/28/2010	74.67	---	26.7	---	47.97	Blaine Tech
GMW-22	11/12/2007	74.17	26.45	25.91	0.54	---	Stantec
	8/12/2008	74.17	26.70	---	---	47.47	Envent
	10/31/2008	74.17	28.25	27.04	1.21	---	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	---	Envent
	7/21/2009	74.17	27.70	---	---	46.47	Envent
	11/6/2009	74.17	28.12	---	---	46.05	Kinder Morgan
	9/3/2010	74.17	28.36	25.10	3.26	---	Kinder Morgan
GMW-24	11/12/2007	74.04	27.50	27.46	0.04	---	Stantec
	8/19/2008	74.04	29.34	28.24	1.10	---	Envent
	10/17/2008	74.04	30.88	29.90	0.98	---	Envent
	10/21/2008	74.04	29.64	28.30	1.34	---	Envent
	12/18/2008	74.04	29.04	---	---	45.00	Envent
	1/15/2009	74.04	30.56	29.80	0.76	---	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
	2/4/2010	74.04	29.67	29.40	0.27	---	Kinder Morgan
	6/22/2010	74.04	29.47	---	---	44.57	Blaine Tech
	9/3/2010	74.04	29.90	---	---	44.14	Kinder Morgan
GMW-25	11/12/2007	74.29	27.30	27.25	0.05	---	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
GMW-36	8/28/2007	74.53	24.31	---	---	50.22	Stantec
	11/12/2007	74.53	24.86	24.85	0.01	---	Stantec
	2/19/2008	74.53	25.50	---	---	49.27	Stantec
	4/14/2008	74.53	24.61	---	---	50.16	Stantec
	8/8/2008	74.53	26.20	26.14	0.06	---	Envent
	10/16/2008	74.53	26.11	26.09	0.02	---	Envent
	12/18/2008	74.53	28.70	28.65	0.05	---	Envent
	1/15/2009	74.53	27.73	27.45	0.28	---	Envent
	2/20/2009	74.53	26.39	26.35	0.04	---	Envent

TABLE 7

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

SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft btoc)	Measured Depth to Product (ft btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
GMW-36	2/23/2009	74.53	26.13	25.80	0.33	---	Blaine Tech
	3/24/2009	74.53	29.83	---	---	44.70	Envent
	4/20/2009	74.53	25.63	25.59	0.04	---	Blaine Tech
	7/17/2009	74.53	27.40	---	---	47.13	Envent
	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	---	Blaine Tech
	2/4/2010	74.53	26.93	26.80	0.13	---	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	---	Blaine Tech
	5/28/2010	74.53	25.94	25.88	0.06	---	Blaine Tech
	6/22/2010	74.56	25.94	25.91	0.03	---	Blaine Tech
GMW-O-11	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	---	Envent
	2/24/2009	74.17	24.31	24.21	0.10	---	Envent
	3/27/2009	74.17	31.08	---	---	43.09	Envent
	4/21/2009	74.17	25.36	25.34	0.02	---	Envent
	7/21/2009	74.17	26.18	---	---	47.99	Envent
	11/6/2009	74.17	26.33	26.18	0.15	---	Kinder Morgan
GMW-O-12	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
GMW-O-15	11/12/2007	74.23	23.95	23.85	0.10	---	Stantec
	4/14/2008	74.23	23.64	---	---	50.59	Stantec
	8/8/2008	74.23	24.60	---	---	50.59	Envent
	8/11/2008	74.23	24.40	24.34	0.06	---	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	---	Blaine Tech
	3/24/2009	74.23	25.55	---	---	48.68	Envent
	4/20/2009	74.23	24.66	24.61	0.05	---	Blaine Tech
	7/17/2009	74.23	25.01	---	---	49.22	Envent
	7/22/2009	74.23	24.99	24.94	0.05	---	Blaine Tech
	10/19/2009	74.23	25.55	25.43	0.12	---	Blaine Tech
	2/4/2010	74.23	25.50	25.48	0.02	---	Kinder Morgan
	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
GMW-O-18	04/30/2007	74.36	---	24.21	---	50.15	Secor
	11/12/2007	74.36	---	22.46	---	51.90	Secor
	04/14/2008	74.36	---	24.5	---	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

TABLE 7

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

SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft btoc)	Measured Depth to Product (ft btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
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	---	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
	11/9/2009	73.32	25.60	25.40	0.20	---	Kinder Morgan
	6/22/2010	73.32	24.76	24.66	0.10	---	Blaine Tech
GMW-O-21	12/28/2007	71.43	27.67	---	---	43.76	Geomatrix
	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
	11/9/2009	71.43	25.02	---	---	46.41	Kinder Morgan
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
	11/9/2009	73.63	27.50	---	---	46.13	Kinder Morgan
	6/22/2010	73.63	32.10	---	---	41.53	Blaine Tech
GMW-SF-9	4/21/2009	73	---	24.19	---	48.81	Envent
	5/24/2010	73	---	28.31	---	44.69	Blaine Tech
	5/28/2010	73	---	28.37	---	44.63	Blaine Tech
GMW-SF-10	4/21/2009	75.77	---	27.1	---	48.67	Envent
GWR-3	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	---	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
MW-18 (MID)	04/30/2007	75.67	---	29.77	---	45.9	Secor
	11/12/2007	75.67	---	30.23	---	45.44	Secor
	04/14/2008	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	---	43.5	Blaine Tech
MW-O-1	8/14/2007	75.48	25.31	23.78	1.53	---	Geomatrix
	8/21/2007	75.48	23.84	23.58	0.26	---	Geomatrix
	8/28/2007	75.48	23.07	23.06	0.01	---	Stantec
	9/11/2007	75.48	23.86	23.48	0.38	---	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	---	Stantec

TABLE 7

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

SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft btoc)	Measured Depth to Product (ft btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
MW-O-1	12/28/2007	75.48	25.54	25.51	0.03	---	Geomatrix
	8/19/2008	75.48	25.18	25.13	0.05	---	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
MW-O-2	11/12/2007	71.90	23.10	---	---	48.80	Stantec
	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
	7/21/2009	71.90	23.63	---	---	48.27	Envent
	11/9/2009	71.90	25.39	---	---	46.51	Kinder Morgan
MW-SF-1	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
	7/22/2009	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
MW-SF-2	11/12/2007	78.53	29.18	28.71	0.47	---	Stantec
	8/12/2008	78.53	31.11	---	---	47.42	Envent
	10/17/2008	78.53	31.55	31.50	0.05	---	Envent
	12/18/2008	78.53	32.75	32.55	0.20	---	Envent
	1/15/2009	78.53	30.84	30.57	0.27	---	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
	12/9/2009	78.53	31.45	---	---	47.08	Kinder Morgan
MW-SF-3	11/12/2007	78.12	29.34	28.28	1.06	---	Stantec
	8/12/2008	78.12	30.30	29.05	1.25	---	Envent
	10/17/2008	78.12	29.45	---	---	48.67	Envent
	12/18/2008	78.12	31.08	30.82	0.26	---	Envent
	1/15/2009	78.12	29.96	29.94	0.02	---	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	---	Envent
	7/21/2009	78.12	30.07	---	---	48.05	Envent
	11/6/2009	78.12	30.37	30.35	0.02	---	Kinder Morgan
	12/9/2009	78.12	30.53	---	---	48.05	Kinder Morgan
	9/3/2010	78.12	30.97	30.42	0.55	---	Kinder Morgan
MW-SF-4	8/14/2007	79.38	30.34	28.38	1.96	---	Geomatrix
	8/28/2007	79.38	29.95	28.30	1.65	---	Stantec
	9/11/2007	79.38	29.98	28.43	1.55	---	Geomatrix
	10/5/2007	79.38	30.68	28.85	1.83	---	Geomatrix
	10/12/2007	79.38	30.27	29.96	0.31	---	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	---	Stantec
	12/21/2007	79.38	30.69	---	---	48.69	Geomatrix
	2/19/2008	79.38	30.22	---	---	49.16	Stantec

TABLE 7

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

SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft btoc)	Measured Depth to Product (ft btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
MW-SF-4	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	---	Blaine Tech
	4/28/2009	79.38	30.78	---	---	48.60	Envent
	7/17/2009	79.38	31.85	---	---	47.53	Envent
	7/22/2009	79.38	31.65	31.61	0.04	---	Blaine Tech
	10/19/2009	79.38	31.93	31.90	0.03	---	Blaine Tech
	3/15/2010	79.38	31.95	31.91	0.04	---	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
MW-SF-5	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
	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
MW-SF-6	11/12/2007	76.80	27.14	---	---	49.66	Stantec
	8/12/2008	76.80	29.82	---	---	46.98	Envent
	10/17/2008	76.80	29.75	---	---	47.05	Envent
	12/18/2008	76.80	30.73	---	---	46.07	Envent
	1/15/2009	76.80	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
	11/6/2009	76.80	29.10	---	---	47.70	Kinder Morgan
	12/9/2009	76.80	31.35	---	---	45.45	Kinder Morgan
MW-SF-9	8/14/2007	74.10	28.73	28.61	0.12	---	Geomatrix
	8/28/2007	74.10	20.55	---	---	53.55	Stantec
	8/21/2007	74.10	26.55	---	---	47.55	Geomatrix
	9/11/2007	74.10	19.40	---	---	54.70	Geomatrix
	10/5/2007	74.10	26.84	---	---	47.26	Geomatrix
	11/2/2007	74.10	22.76	---	---	51.34	Geomatrix
	11/12/2007	74.10	22.96	---	---	51.14	Stantec
	12/21/2007	74.10	24.05	---	---	50.05	Geomatrix
	4/14/2008	74.10	24.23	---	---	49.87	Stantec
	10/13/2008	74.10	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
MW-SF-10	10/17/2008	76.53	---	27.49	---	49.04	Envent
	10/19/2009	76.53	---	28.61	---	47.92	Blaine Tech
MW-SF-11	8/14/2007	78.56	28.58	28.30	0.28	---	Geomatrix
	8/21/2007	78.56	28.76	28.63	0.13	---	Geomatrix

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

SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft btoc)	Measured Depth to Product (ft btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
MW-SF-11	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	---	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
	11/9/2009	78.56	31.00	---	---	47.56	Kinder Morgan
	9/3/2010	78.56	31.22	---	---	47.34	Kinder Morgan
MW-SF-12	8/14/2007	78.07	27.76	---	---	50.31	Geomatrix
	8/21/2007	78.07	27.43	---	---	50.64	Geomatrix
	8/28/2007	78.07	27.58	---	---	50.49	Stantec
	9/11/2007	78.07	27.73	---	---	50.34	Geomatrix
	10/5/2007	78.07	28.06	---	---	50.01	Geomatrix
	11/2/2007	78.07	29.59	---	---	48.48	Geomatrix
	11/12/2007	78.07	28.33	---	---	49.74	Stantec
	8/12/2008	78.07	30.02	---	---	48.05	Envent
	10/17/2008	78.07	30.42	---	---	47.65	Envent
	12/18/2008	78.07	31.55	---	---	46.52	Envent
	1/15/2009	78.07	30.11	---	---	47.96	Envent
	3/24/2009	78.07	29.41	---	---	48.66	Envent
	4/21/2009	78.07	29.52	---	---	48.55	Envent
	7/21/2009	78.07	28.58	---	---	49.49	Envent
	11/4/2009	78.07	30.36	---	---	47.71	Kinder Morgan
	2/4/2010	78.07	29.20	---	---	48.87	Kinder Morgan
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	---	Geomatrix
	11/12/2007	73.40	23.70	---	---	49.70	Stantec
	12/21/2007	73.40	24.45	24.42	0.03	---	Geomatrix
	8/15/2008	73.40	27.38	24.11	3.27	---	Envent
	10/17/2008	73.40	27.28	24.33	2.95	---	Envent
	10/21/2008	73.40	27.14	24.26	2.88	---	Envent
	9/3/2010	73.40	27.40	25.71	1.69	---	Kinder Morgan
	12/17/2008	73.40	26.21	24.70	1.51	---	Envent
	1/15/2009	73.40	26.90	24.80	2.10	---	Envent
	3/27/2009	73.40	26.46	25.49	0.97	---	Envent
	4/21/2009	73.40	24.86	24.78	0.08	---	Envent
	7/21/2009	73.40	25.72	25.48	0.24	---	Envent
	11/6/2009	73.40	25.72	---	---	47.68	Kinder Morgan
	2/4/2010	73.40	25.43	25.30	0.13	---	Kinder Morgan
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
	8/15/2008	78.16	29.77	29.24	0.53	---	Envent
	10/17/2008	78.16	29.52	29.50	0.02	---	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

TABLE 7

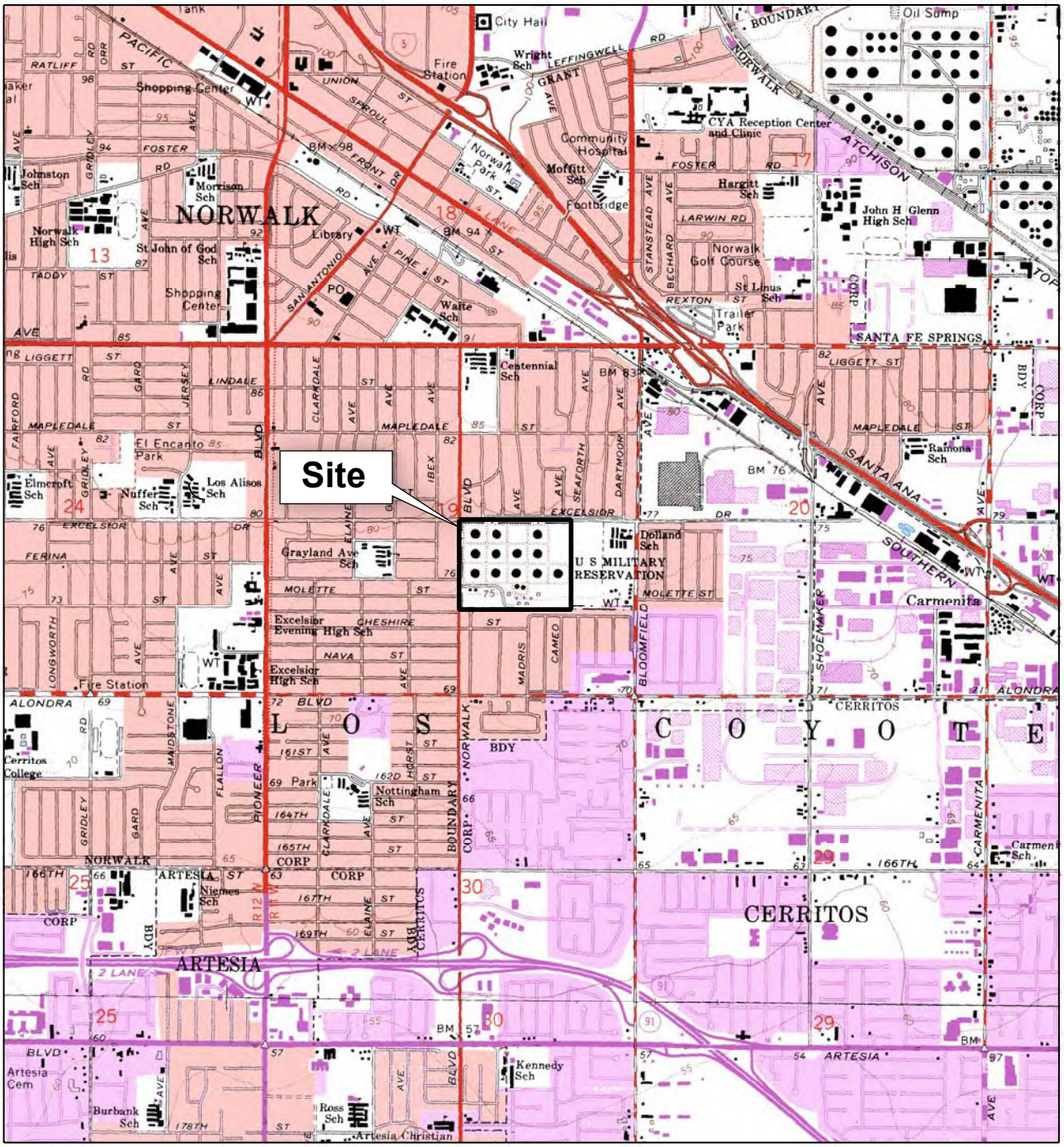
Groundwater and Product Measurements and Elevations for
Total Fluids, Groundwater, and Soil Vapor Extraction Wells

SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft btoc)	Measured Depth to Product (ft btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
MW-SF-14	4/21/2009	78.16	29.61	---	---	48.55	Envent
	7/21/2009	78.16	29.20	---	---	48.96	Envent
	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
MW-SF-15	8/14/2007	78.27	27.78	27.75	0.03	---	Geomatrix
	8/21/2007	78.27	27.69	27.65	0.04	---	Geomatrix
	8/28/2007	78.27	27.65	27.61	0.04		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	---	Geomatrix
	11/12/2007	78.27	28.75	---	---	49.52	Stantec
	8/15/2008	78.27	30.12	29.35	0.77	---	Envent
	10/17/2008	78.27	30.80	29.44	1.36	---	Envent
	10/21/2008	78.27	30.80	29.31	1.49	---	Envent
	12/18/2008	78.27	32.11	30.56	1.55	---	Envent
	1/15/2009	78.27	31.75	29.70	2.05	---	Envent
	3/24/2009	78.27	30.32	29.93	0.39	---	Envent
	4/21/2009	78.27	29.96	29.60	0.36	---	Envent
	7/21/2009	78.27	30.45	---	---	47.82	Envent
	11/4/2009	78.27	31.10	30.45	0.36	---	Kinder Morgan
	12/9/2009	78.27	30.87	---	---	47.40	Kinder Morgan
MW-SF-16	8/14/2007	78.21	27.68	---	---	50.53	Geomatrix
	8/21/2007	78.21	27.33	---	---	50.88	Geomatrix
	8/28/2007	78.21	27.51	---	---	50.70	Stantec
	9/11/2007	78.21	27.59	---	---	50.62	Geomatrix
	10/5/2007	78.21	28.10	---	---	50.11	Geomatrix
	11/2/2007	78.21	29.81	---	---	48.40	Geomatrix
	11/12/2007	78.21	28.40	---	---	49.81	Stantec
	8/15/2008	78.21	29.36	---	---	48.85	Envent
	10/17/2008	78.21	29.51	---	---	48.70	Envent
	12/18/2008	78.21	30.94	---	---	47.27	Envent
	1/15/2009	78.21	30.01	30.00	0.01	---	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
	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

Abbreviations
ft msl = feet above mean sea level based on the National Geodetic Vertical Datum of 1929.
ft btoc = feet below top of casing.
--- = not detected or not applicable.

Figures



N

Approximate Scale in Feet

0 1200 2400

0 0 0

Approximate Scale in Meters

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.

SITE LOCATION MAP

DFSP NORWALK
Norwalk, California

By: Andy Vollmar	Date: July 21, 2010	Project No: 407609

CH2MHILL

Figure 1

ES070610212914SCO407609.A1.03 DFSP_sitelocation.ai 7/10

Explanation

- GMW-5 — Existing Groundwater Monitoring Well
- VE-1 — Existing Remediation Well
- KMEP Remediation Piping Layout (above ground and below ground)
- Approximate Location of Air Compressor Shed

N

120 60 0 120 Feet

REMEDIATION SYSTEM LAYOUT
DFSP NORWALK
Norwalk, California

By: Michael Brown	Date: 10/4/2010	Project No: 406972
CH2MHILL	Figure 2	

Appendix A
Laboratory Analytical Reports

Calscience
Environmental
Laboratories, Inc.

July 27, 2010

Alex Padilla
AMEC Geomatrix, Inc.
510 Superior Avenue
Suite 200
Newport Beach, CA 92663-3627

Subject: **Calscience Work Order No.: 10-07-1465**
Client Reference: SFPP - Norwalk Site

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 7/20/2010 and analyzed in accordance with the attached chain-of-custody.

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Stephen Nowak
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Geomatrix, Inc.		Date Received:	07/20/10
510 Superior Avenue		Work Order No:	10-07-1465
Suite 200		Preparation:	EPA 3510C
Newport Beach, CA 92663-3627		Method:	EPA 8015B (M)

Project: SFPP - Norwalk Site

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
INF-07-20	**10-07-1465-1-G**	**07/20/10 12:30**	**Aqueous**	**GC 49**	**07/23/10**	**07/24/10 10:52**	**100723B28**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Fuel Product	21000	500	430	1		ug/L

Surrogates:	REC (%)	Control Limits	MDL	Qual
Decachlorobiphenyl	97	68-140		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-384-28**	**N/A**	**Aqueous**	**GC 49**	**07/23/10**	**07/24/10 10:05**	**100723B28**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Fuel Product	ND	500	430	1		ug/L

Surrogates:	REC (%)	Control Limits	MDL	Qual
Decachlorobiphenyl	119	68-140		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Geomatrix, Inc.		Date Received:	07/20/10
510 Superior Avenue		Work Order No:	10-07-1465
Suite 200		Preparation:	EPA 5030B
Newport Beach, CA 92663-3627		Method:	EPA 8015B (M)

Project: SFPP - Norwalk Site

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
INF-07-20	**10-07-1465-1-E**	**07/20/10 12:30**	**Aqueous**	**GC 25**	**07/22/10**	**07/23/10 11:05**	**100722B01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	21000	500	240	5		ug/L

Surrogates:	REC (%)	Control Limits	MDL	Qual
1,4-Bromofluorobenzene	96	38-134		

Method Blank	**099-12-247-4,359**	**N/A**	**Aqueous**	**GC 25**	**07/22/10**	**07/23/10 03:49**	**100722B01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	ND	100	48	1		ug/L

Surrogates:	REC (%)	Control Limits	MDL	Qual
1,4-Bromofluorobenzene	79	38-134		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Geomatrix, Inc.		Date Received:	07/20/10
510 Superior Avenue		Work Order No:	10-07-1465
Suite 200		Preparation:	EPA 5030B
Newport Beach, CA 92663-3627		Method:	EPA 8260B
		Units:	ug/L
Project: SFPP - Norwalk Site			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
INF-07-20	**10-07-1465-1-A**	**07/20/10 12:30**	**Aqueous**	**GC/MS EE**	**07/21/10**	**07/22/10 10:14**	**100721L02**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	1000	400	20		1,1-Dichloropropene	ND	20	5.1	20	
Benzene	3400	10	5.7	20		c-1,3-Dichloropropene	ND	10	5.7	20	
Bromobenzene	ND	20	6.7	20		t-1,3-Dichloropropene	ND	10	7.2	20	
Bromochloromethane	ND	20	14	20		Ethylbenzene	370	20	4.4	20	
Bromodichloromethane	ND	20	6.6	20		2-Hexanone	ND	200	140	20	
Bromoform	ND	20	11	20		Isopropylbenzene	20	20	4.5	20	J
Bromomethane	ND	200	86	20		p-Isopropyltoluene	ND	20	5.2	20	
2-Butanone	ND	200	140	20		Methylene Chloride	ND	200	52	20	
n-Butylbenzene	21	20	5.5	20		4-Methyl-2-Pentanone	ND	200	88	20	
sec-Butylbenzene	6.5	20	4.1	20	J	Naphthalene	190	200	51	20	J
tert-Butylbenzene	ND	20	5.5	20		n-Propylbenzene	55	20	16	20	
Carbon Disulfide	ND	200	38	20		Styrene	ND	20	6.0	20	
Carbon Tetrachloride	ND	10	8.5	20		1,1,1,2-Tetrachloroethane	ND	20	7.0	20	
Chlorobenzene	ND	20	4.4	20		1,1,2,2-Tetrachloroethane	ND	20	8.8	20	
Chloroethane	ND	100	26	20		Tetrachloroethene	ND	20	10	20	
Chloroform	ND	20	6.6	20		Toluene	3000	20	6.5	20	
Chloromethane	ND	200	9.7	20		1,2,3-Trichlorobenzene	ND	20	6.1	20	
2-Chlorotoluene	ND	20	11	20		1,2,4-Trichlorobenzene	ND	20	9.7	20	
4-Chlorotoluene	ND	20	4.2	20		1,1,1-Trichloroethane	ND	20	9.0	20	
Dibromochloromethane	ND	20	9.7	20		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	200	13	20	
1,2-Dibromo-3-Chloropropane	ND	100	62	20		1,1,2-Trichloroethane	ND	20	11	20	
1,2-Dibromoethane	ND	20	9.3	20		Trichloroethene	ND	20	6.1	20	
Dibromomethane	ND	20	12	20		Trichlorofluoromethane	ND	200	6.2	20	
1,2-Dichlorobenzene	ND	20	5.4	20		1,2,3-Trichloropropane	ND	100	27	20	
1,3-Dichlorobenzene	ND	20	5.7	20		1,2,4-Trimethylbenzene	470	20	4.9	20	
1,4-Dichlorobenzene	ND	20	4.2	20		1,3,5-Trimethylbenzene	130	20	4.6	20	
Dichlorodifluoromethane	ND	20	9.8	20		Vinyl Acetate	ND	200	140	20	
1,1-Dichloroethane	ND	20	7.5	20		Vinyl Chloride	ND	10	6.5	20	
1,2-Dichloroethane	ND	10	6.3	20		p/m-Xylene	1800	20	9.1	20	
1,1-Dichloroethene	ND	20	8.0	20		o-Xylene	750	20	4.7	20	
c-1,2-Dichloroethene	ND	20	9.7	20		Methyl-t-Butyl Ether (MTBE)	2300	20	6.1	20	
t-1,2-Dichloroethene	ND	20	8.1	20		Diisopropyl Ether (DIPE)	13	40	6.2	20	J
1,2-Dichloropropane	ND	20	7.6	20		Ethyl-t-Butyl Ether (ETBE)	ND	40	5.3	20	
1,3-Dichloropropane	ND	20	7.6	20		Tert-Amyl-Methyl Ether (TAME)	ND	40	5.7	20	
2,2-Dichloropropane	ND	20	9.2	20		Ethanol	ND	2000	1000	20	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	102	80-126		1,2-Dichloroethane-d4	106	80-131	
Toluene-d8	99	80-120		1,4-Bromofluorobenzene	93	80-120	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Geomatrix, Inc.		Date Received:	07/20/10
510 Superior Avenue		Work Order No:	10-07-1465
Suite 200		Preparation:	EPA 5030B
Newport Beach, CA 92663-3627		Method:	EPA 8260B
		Units:	ug/L
Project: SFPP - Norwalk Site			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-001-1,453**	**N/A**	**Aqueous**	**GC/MS EE**	**07/21/10**	**07/22/10 02:04**	**100721L02**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	50	20	1		1,1-Dichloropropene	ND	1.0	0.26	1	
Benzene	ND	0.50	0.28	1		c-1,3-Dichloropropene	ND	0.50	0.28	1	
Bromobenzene	ND	1.0	0.33	1		t-1,3-Dichloropropene	ND	0.50	0.36	1	
Bromochloromethane	ND	1.0	0.69	1		Ethylbenzene	ND	1.0	0.22	1	
Bromodichloromethane	ND	1.0	0.33	1		2-Hexanone	ND	10	6.9	1	
Bromoform	ND	1.0	0.55	1		Isopropylbenzene	ND	1.0	0.23	1	
Bromomethane	ND	10	4.3	1		p-Isopropyltoluene	ND	1.0	0.26	1	
2-Butanone	ND	10	6.9	1		Methylene Chloride	ND	10	2.6	1	
n-Butylbenzene	ND	1.0	0.28	1		4-Methyl-2-Pentanone	ND	10	4.4	1	
sec-Butylbenzene	ND	1.0	0.20	1		Naphthalene	ND	10	2.5	1	
tert-Butylbenzene	ND	1.0	0.28	1		n-Propylbenzene	ND	1.0	0.79	1	
Carbon Disulfide	ND	10	1.9	1		Styrene	ND	1.0	0.30	1	
Carbon Tetrachloride	ND	0.50	0.43	1		1,1,1,2-Tetrachloroethane	ND	1.0	0.35	1	
Chlorobenzene	ND	1.0	0.22	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.44	1	
Chloroethane	ND	5.0	1.3	1		Tetrachloroethene	ND	1.0	0.51	1	
Chloroform	ND	1.0	0.33	1		Toluene	ND	1.0	0.33	1	
Chloromethane	ND	10	0.49	1		1,2,3-Trichlorobenzene	ND	1.0	0.31	1	
2-Chlorotoluene	ND	1.0	0.55	1		1,2,4-Trichlorobenzene	ND	1.0	0.49	1	
4-Chlorotoluene	ND	1.0	0.21	1		1,1,1-Trichloroethane	ND	1.0	0.45	1	
Dibromochloromethane	ND	1.0	0.48	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.64	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	3.1	1		1,1,2-Trichloroethane	ND	1.0	0.54	1	
1,2-Dibromoethane	ND	1.0	0.47	1		Trichloroethene	ND	1.0	0.30	1	
Dibromomethane	ND	1.0	0.59	1		Trichlorofluoromethane	ND	10	0.31	1	
1,2-Dichlorobenzene	ND	1.0	0.27	1		1,2,3-Trichloropropane	ND	5.0	1.3	1	
1,3-Dichlorobenzene	ND	1.0	0.28	1		1,2,4-Trimethylbenzene	ND	1.0	0.24	1	
1,4-Dichlorobenzene	ND	1.0	0.21	1		1,3,5-Trimethylbenzene	ND	1.0	0.23	1	
Dichlorodifluoromethane	ND	1.0	0.49	1		Vinyl Acetate	ND	10	7.1	1	
1,1-Dichloroethane	ND	1.0	0.37	1		Vinyl Chloride	ND	0.50	0.33	1	
1,2-Dichloroethane	ND	0.50	0.31	1		p/m-Xylene	ND	1.0	0.45	1	
1,1-Dichloroethene	ND	1.0	0.40	1		o-Xylene	ND	1.0	0.24	1	
c-1,2-Dichloroethene	ND	1.0	0.49	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.30	1	
t-1,2-Dichloroethene	ND	1.0	0.40	1		Diisopropyl Ether (DIPE)	ND	2.0	0.31	1	
1,2-Dichloropropane	ND	1.0	0.38	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.27	1	
1,3-Dichloropropane	ND	1.0	0.38	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	0.28	1	
2,2-Dichloropropane	ND	1.0	0.46	1		Ethanol	ND	100	50	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	104	80-126		1,2-Dichloroethane-d4	104	80-131	
Toluene-d8	100	80-120		1,4-Bromofluorobenzene	92	80-120	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Geomatrix, Inc.
510 Superior Avenue
Suite 200
Newport Beach, CA 92663-3627

Date Received: 07/20/10
Work Order No: 10-07-1465
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-07-1459-1	**Aqueous**	**GC 25**	**07/22/10**	**07/23/10**	**100722S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	70	69	68-122	1	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Geomatrix, Inc.
510 Superior Avenue
Suite 200
Newport Beach, CA 92663-3627

Date Received: 07/20/10
Work Order No: 10-07-1465
Preparation: EPA 5030B
Method: EPA 8260B

Project SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-07-1261-3	**Aqueous**	**GC/MS EE**	**07/21/10**	**07/22/10**	**100721S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	90	90	80-120	1	0-20	
Carbon Tetrachloride	78	78	55-151	1	0-20	
Chlorobenzene	99	101	80-120	1	0-20	
1,2-Dibromoethane	100	100	77-125	0	0-20	
1,2-Dichlorobenzene	100	98	78-120	2	0-20	
1,2-Dichloroethane	98	101	80-120	2	0-20	
1,1-Dichloroethene	106	105	69-129	1	0-20	
Ethylbenzene	95	97	73-127	1	0-20	
Toluene	86	88	80-120	2	0-20	
Trichloroethene	91	95	67-133	4	0-20	
Vinyl Chloride	98	98	67-133	1	0-20	
Methyl-t-Butyl Ether (MTBE)	84	83	65-131	1	0-22	
Tert-Butyl Alcohol (TBA)	94	100	62-134	6	0-20	
Diisopropyl Ether (DIPE)	89	88	64-136	2	0-29	
Ethyl-t-Butyl Ether (ETBE)	83	82	70-124	1	0-20	
Tert-Amyl-Methyl Ether (TAME)	82	84	71-125	2	0-20	
Ethanol	115	116	44-152	1	0-43	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Geomatrix, Inc.
510 Superior Avenue
Suite 200
Newport Beach, CA 92663-3627

Date Received: N/A
Work Order No: 10-07-1465
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-384-28	**Aqueous**	**GC 49**	**07/23/10**	**07/24/10**	**100723B28**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Fuel Product	97	105	75-117	8	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Geomatrix, Inc.
510 Superior Avenue
Suite 200
Newport Beach, CA 92663-3627

Date Received: N/A
Work Order No: 10-07-1465
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-247-4,359	**Aqueous**	**GC 25**	**07/22/10**	**07/23/10**	**100722B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	82	83	78-120	1	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Geomatrix, Inc.
510 Superior Avenue
Suite 200
Newport Beach, CA 92663-3627

Date Received: N/A
Work Order No: 10-07-1465
Preparation: EPA 5030B
Method: EPA 8260B

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-001-1,453	**Aqueous**	**GC/MS EE**	**07/21/10**	**07/22/10**	**100721L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	90	97	80-120	73-127	7	0-20	
Carbon Tetrachloride	77	83	67-139	55-151	8	0-22	
Chlorobenzene	100	106	80-120	73-127	6	0-20	
1,2-Dibromoethane	101	108	80-120	73-127	7	0-20	
1,2-Dichlorobenzene	101	109	79-120	72-127	8	0-20	
1,2-Dichloroethane	99	106	80-120	73-127	7	0-20	
1,1-Dichloroethene	108	98	71-125	62-134	10	0-25	
Ethylbenzene	97	103	80-123	73-130	6	0-20	
Toluene	86	92	80-120	73-127	7	0-20	
Trichloroethene	96	101	80-120	73-127	5	0-20	
Vinyl Chloride	95	103	68-140	56-152	8	0-23	
Methyl-t-Butyl Ether (MTBE)	83	89	75-123	67-131	7	0-25	
Tert-Butyl Alcohol (TBA)	99	103	72-126	63-135	4	0-20	
Diisopropyl Ether (DIPE)	89	94	75-129	66-138	6	0-22	
Ethyl-t-Butyl Ether (ETBE)	82	88	76-124	68-132	8	0-20	
Tert-Amyl-Methyl Ether (TAME)	83	91	79-121	72-128	9	0-20	
Ethanol	129	132	53-143	38-158	2	0-25	

Total number of LCS compounds : 17
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 10-07-1465

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
E	Concentration exceeds the calibration range.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

DATE: 07-20-10

PAGE: 1 OF 1

LABORATORY CLIENT: Kinder Morgan Energy Partners, Attn: Steve Defibaugh

ADDRESS: 1100 Town & Country Road

CITY: Orange, CA 92868

TEL: 714-560-4802 | FAX: 714-560-4601 | E-MAIL: james_dye@kindermorgan.com

CLIENT PROJECT NAME / NUMBER: SFPP - Norwalk Site

PROJECT CONTACT: James Dye

SAMPLER(S): (SIGNATURE)

P.O. NO.:

QUOTE NO.:

LAB USE ONLY: 07-1465

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 to A. Padilla at Geomatrix, cc: KMEP
Direct Bill KMEP/SFPP - Steve Defibaugh-ref. AFE# 81195
"J" flags required/Use lowest possible detection limit - all methods.

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MAT-RIX	NO. OF CONT.	TPH - g (8015M)	TPH-fp (8015M)	VOCs, Full List (8260B)	Oil & Grease (413.1)	TPH-g (C5-C14 Only) (8015M)	MtBE;BTEX;1,1-DCA;1,2-DCA;MEK(8260B)	Settleable Solids (160.5)	Total Suspended Solids (160.2)	Phenolics (420.1)	Hg,Cr(VI),Cu(1669,7199,6020)	Selenium on 24 HR TAT		Comments
1	INF- 07-20	Influent	07-20-10	1230	WW	7	X	X	X										Temperature* = 70.9
																			(Temp. as sampled*)
																			Monthly

Relinquished by: (Signature)	Received by: (Signature) Dannyle C&L	Date: 7/20/10	Time: 13:48
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Revised: 07/23/09

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 10-07-1 4 6 5

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: KMEP

DATE: 07/20/10

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 3.0 °C + 0.5 °C (CF) = 3.5 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only Initial: DL

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: DL

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: DL

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Residual Chlorine / Dissolved Sulfide received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☑	☐	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☑500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na**

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** DL

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** WB

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:**$Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **znna:** $ZnAc_2$+NaOH **f:** Field-filtered **Scanned by:** WB

Calscience
Environmental
Laboratories, Inc.

August 10, 2010

Dan Jablonski
CH2M Hill
1000 Wilshire Blvd.
21st Floor
Los Angeles, CA 90017-2417

Subject: **Calscience Work Order No.: 10-08-0164**
Client Reference: SFPP - Norwalk Site

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 08/03/2010 and analyzed in accordance with the attached chain-of-custody.

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Stephen Nowak
Project Manager

Calscience Environmental Laboratories, Inc.

Client: CH2M Hill
1000 Wilshire Blvd.
21st Floor
Attn: Dan Jablonski

Work Order: 10-08-0164
Project name: SFPP - Norwalk Site
Received: 08/03/10 16:48

DETECTIONS SUMMARY

Client Sample ID / Analyte	Result	Qualifiers	Reporting Limit	Units	Method	Extraction
INF-8-3-10						
TPH as Fuel Product	**1500**		500	ug/L	EPA 8015B (M)	EPA 3510C
TPH as Gasoline	**3400**		100	ug/L	EPA 8015B (M)	EPA 5030B
Benzene	**1400**		10	ug/L	EPA 8260B	EPA 5030B
Ethylbenzene	**17**	J	4.4*	ug/L	EPA 8260B	EPA 5030B
Toluene	**140**		20	ug/L	EPA 8260B	EPA 5030B
1,2,4-Trimethylbenzene	**29**		20	ug/L	EPA 8260B	EPA 5030B
1,3,5-Trimethylbenzene	**14**	J	4.6*	ug/L	EPA 8260B	EPA 5030B
p/m-Xylene	**110**		20	ug/L	EPA 8260B	EPA 5030B
o-Xylene	**51**		20	ug/L	EPA 8260B	EPA 5030B
Methyl-t-Butyl Ether (MTBE)	**390**		20	ug/L	EPA 8260B	EPA 5030B
Tert-Butyl Alcohol (TBA)	**7000**		200	ug/L	EPA 8260B	EPA 5030B
Diisopropyl Ether (DIPE)	**18**	J	6.2*	ug/L	EPA 8260B	EPA 5030B

Subcontracted analyses, if any, are not included in this summary.

*MDL is shown.

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/03/10
1000 Wilshire Blvd.		Work Order No:	10-08-0164
21st Floor		Preparation:	EPA 3510C
Los Angeles, CA 90017-2417		Method:	EPA 8015B (M)

Project: SFPP - Norwalk Site

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
INF-8-3-10	**10-08-0164-1-G**	**08/03/10 15:30**	**Aqueous**	**GC 27**	**08/06/10**	**08/07/10 08:40**	**100806B09**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Fuel Product	1500	500	430	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**	**MDL**		**Qual**	
Decachlorobiphenyl	113	68-140				

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-384-29**	**N/A**	**Aqueous**	**GC 27**	**08/06/10**	**08/07/10 07:47**	**100806B09**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Fuel Product	ND	500	430	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**	**MDL**		**Qual**	
Decachlorobiphenyl	121	68-140				

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/03/10
1000 Wilshire Blvd.		Work Order No:	10-08-0164
21st Floor		Preparation:	EPA 5030B
Los Angeles, CA 90017-2417		Method:	EPA 8015B (M)

Project: SFPP - Norwalk Site

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
INF-8-3-10	**10-08-0164-1-E**	**08/03/10 15:30**	**Aqueous**	**GC 42**	**08/04/10**	**08/04/10 19:56**	**100804B01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	3400	100	48	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**	**MDL**		**Qual**	
1,4-Bromofluorobenzene	108	38-134				

Method Blank	**099-12-247-4,387**	**N/A**	**Aqueous**	**GC 42**	**08/04/10**	**08/04/10 12:00**	**100804B01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	ND	100	48	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**	**MDL**		**Qual**	
1,4-Bromofluorobenzene	93	38-134				

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/03/10
1000 Wilshire Blvd.		Work Order No:	10-08-0164
21st Floor		Preparation:	EPA 5030B
Los Angeles, CA 90017-2417		Method:	EPA 8260B
		Units:	ug/L
Project: SFPP - Norwalk Site			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
INF-8-3-10	**10-08-0164-1-A**	**08/03/10 15:30**	**Aqueous**	**GC/MS EE**	**08/05/10**	**08/05/10 23:53**	**100805L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	1000	400	20		c-1,3-Dichloropropene	ND	10	5.7	20	
Benzene	1400	10	5.7	20		t-1,3-Dichloropropene	ND	10	7.2	20	
Bromobenzene	ND	20	6.7	20		Ethylbenzene	17	20	4.4	20	J
Bromochloromethane	ND	20	14	20		2-Hexanone	ND	200	140	20	
Bromodichloromethane	ND	20	6.6	20		Isopropylbenzene	ND	20	4.5	20	
Bromoform	ND	20	11	20		p-Isopropyltoluene	ND	20	5.2	20	
Bromomethane	ND	200	86	20		Methylene Chloride	ND	200	52	20	
2-Butanone	ND	200	140	20		4-Methyl-2-Pentanone	ND	200	88	20	
n-Butylbenzene	ND	20	5.5	20		Naphthalene	ND	200	51	20	
sec-Butylbenzene	ND	20	4.1	20		n-Propylbenzene	ND	20	16	20	
tert-Butylbenzene	ND	20	5.5	20		Styrene	ND	20	6.0	20	
Carbon Disulfide	ND	200	38	20		1,1,1,2-Tetrachloroethane	ND	20	7.0	20	
Carbon Tetrachloride	ND	10	8.5	20		1,1,2,2-Tetrachloroethane	ND	20	8.8	20	
Chlorobenzene	ND	20	4.4	20		Tetrachloroethene	ND	20	10	20	
Chloroethane	ND	100	26	20		Toluene	140	20	6.5	20	
Chloroform	ND	20	6.6	20		1,2,3-Trichlorobenzene	ND	20	6.1	20	
Chloromethane	ND	200	9.7	20		1,2,4-Trichlorobenzene	ND	20	9.7	20	
2-Chlorotoluene	ND	20	11	20		1,1,1-Trichloroethane	ND	20	9.0	20	
4-Chlorotoluene	ND	20	4.2	20		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	200	13	20	
Dibromochloromethane	ND	20	9.7	20		1,1,2-Trichloroethane	ND	20	11	20	
1,2-Dibromo-3-Chloropropane	ND	100	62	20		Trichloroethene	ND	20	6.1	20	
1,2-Dibromoethane	ND	20	9.3	20		Trichlorofluoromethane	ND	200	6.2	20	
Dibromomethane	ND	20	12	20		1,2,3-Trichloropropane	ND	100	27	20	
1,2-Dichlorobenzene	ND	20	5.4	20		1,2,4-Trimethylbenzene	29	20	4.9	20	
1,3-Dichlorobenzene	ND	20	5.7	20		1,3,5-Trimethylbenzene	14	20	4.6	20	J
1,4-Dichlorobenzene	ND	20	4.2	20		Vinyl Acetate	ND	200	140	20	
Dichlorodifluoromethane	ND	20	9.8	20		Vinyl Chloride	ND	10	6.5	20	
1,1-Dichloroethane	ND	20	7.5	20		p/m-Xylene	110	20	9.1	20	
1,2-Dichloroethane	ND	10	6.3	20		o-Xylene	51	20	4.7	20	
1,1-Dichloroethene	ND	20	8.0	20		Methyl-t-Butyl Ether (MTBE)	390	20	6.1	20	
c-1,2-Dichloroethene	ND	20	9.7	20		Tert-Butyl Alcohol (TBA)	7000	200	71	20	
t-1,2-Dichloroethene	ND	20	8.1	20		Diisopropyl Ether (DIPE)	18	40	6.2	20	J
1,2-Dichloropropane	ND	20	7.6	20		Ethyl-t-Butyl Ether (ETBE)	ND	40	5.3	20	
1,3-Dichloropropane	ND	20	7.6	20		Tert-Amyl-Methyl Ether (TAME)	ND	40	5.7	20	
2,2-Dichloropropane	ND	20	9.2	20		Ethanol	ND	2000	1000	20	
1,1-Dichloropropene	ND	20	5.1	20							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	106	80-126		1,2-Dichloroethane-d4	117	80-131	
Toluene-d8	98	80-120		1,4-Bromofluorobenzene	92	80-120	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/03/10
1000 Wilshire Blvd.		Work Order No:	10-08-0164
21st Floor		Preparation:	EPA 5030B
Los Angeles, CA 90017-2417		Method:	EPA 8260B
		Units:	ug/L
Project: SFPP - Norwalk Site			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-001-1,621**	**N/A**	**Aqueous**	**GC/MS EE**	**08/05/10**	**08/05/10 15:07**	**100805L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	50	20	1		c-1,3-Dichloropropene	ND	0.50	0.28	1	
Benzene	ND	0.50	0.28	1		t-1,3-Dichloropropene	ND	0.50	0.36	1	
Bromobenzene	ND	1.0	0.33	1		Ethylbenzene	ND	1.0	0.22	1	
Bromochloromethane	ND	1.0	0.69	1		2-Hexanone	ND	10	6.9	1	
Bromodichloromethane	ND	1.0	0.33	1		Isopropylbenzene	ND	1.0	0.23	1	
Bromoform	ND	1.0	0.55	1		p-Isopropyltoluene	ND	1.0	0.26	1	
Bromomethane	ND	10	4.3	1		Methylene Chloride	ND	10	2.6	1	
2-Butanone	ND	10	6.9	1		4-Methyl-2-Pentanone	ND	10	4.4	1	
n-Butylbenzene	ND	1.0	0.28	1		Naphthalene	ND	10	2.5	1	
sec-Butylbenzene	ND	1.0	0.20	1		n-Propylbenzene	ND	1.0	0.79	1	
tert-Butylbenzene	ND	1.0	0.28	1		Styrene	ND	1.0	0.30	1	
Carbon Disulfide	ND	10	1.9	1		1,1,1,2-Tetrachloroethane	ND	1.0	0.35	1	
Carbon Tetrachloride	ND	0.50	0.43	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.44	1	
Chlorobenzene	ND	1.0	0.22	1		Tetrachloroethene	ND	1.0	0.51	1	
Chloroethane	ND	5.0	1.3	1		Toluene	ND	1.0	0.33	1	
Chloroform	ND	1.0	0.33	1		1,2,3-Trichlorobenzene	ND	1.0	0.31	1	
Chloromethane	ND	10	0.49	1		1,2,4-Trichlorobenzene	ND	1.0	0.49	1	
2-Chlorotoluene	ND	1.0	0.55	1		1,1,1-Trichloroethane	ND	1.0	0.45	1	
4-Chlorotoluene	ND	1.0	0.21	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.64	1	
Dibromochloromethane	ND	1.0	0.48	1		1,1,2-Trichloroethane	ND	1.0	0.54	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	3.1	1		Trichloroethene	ND	1.0	0.30	1	
1,2-Dibromoethane	ND	1.0	0.47	1		Trichlorofluoromethane	ND	10	0.31	1	
Dibromomethane	ND	1.0	0.59	1		1,2,3-Trichloropropane	ND	5.0	1.3	1	
1,2-Dichlorobenzene	ND	1.0	0.27	1		1,2,4-Trimethylbenzene	ND	1.0	0.24	1	
1,3-Dichlorobenzene	ND	1.0	0.28	1		1,3,5-Trimethylbenzene	ND	1.0	0.23	1	
1,4-Dichlorobenzene	ND	1.0	0.21	1		Vinyl Acetate	ND	10	7.1	1	
Dichlorodifluoromethane	ND	1.0	0.49	1		Vinyl Chloride	ND	0.50	0.33	1	
1,1-Dichloroethane	ND	1.0	0.37	1		p/m-Xylene	ND	1.0	0.45	1	
1,2-Dichloroethane	ND	0.50	0.31	1		o-Xylene	ND	1.0	0.24	1	
1,1-Dichloroethene	ND	1.0	0.40	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.30	1	
c-1,2-Dichloroethene	ND	1.0	0.49	1		Tert-Butyl Alcohol (TBA)	ND	10	3.5	1	
t-1,2-Dichloroethene	ND	1.0	0.40	1		Diisopropyl Ether (DIPE)	ND	2.0	0.31	1	
1,2-Dichloropropane	ND	1.0	0.38	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.27	1	
1,3-Dichloropropane	ND	1.0	0.38	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	0.28	1	
2,2-Dichloropropane	ND	1.0	0.46	1		Ethanol	ND	100	50	1	
1,1-Dichloropropene	ND	1.0	0.26	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	104	80-126		1,2-Dichloroethane-d4	111	80-131	
Toluene-d8	98	80-120		1,4-Bromofluorobenzene	94	80-120	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

CH2M Hill		Date Received:	08/03/10
1000 Wilshire Blvd.		Work Order No:	10-08-0164
21st Floor		Preparation:	EPA 5030B
Los Angeles, CA 90017-2417		Method:	EPA 8015B (M)

Project SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-07-2412-2	**Aqueous**	**GC 42**	**08/04/10**	**08/04/10**	**100804S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	84	80	68-122	5	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

CH2M Hill
1000 Wilshire Blvd.
21st Floor
Los Angeles, CA 90017-2417

Date Received: 08/03/10
Work Order No: 10-08-0164
Preparation: EPA 5030B
Method: EPA 8260B

Project SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-08-0187-1	**Aqueous**	**GC/MS EE**	**08/05/10**	**08/05/10**	**100805S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	100	97	80-120	3	0-20	
Carbon Tetrachloride	113	109	55-151	3	0-20	
Chlorobenzene	101	99	80-120	2	0-20	
1,2-Dibromoethane	106	102	77-125	3	0-20	
1,2-Dichlorobenzene	102	100	78-120	2	0-20	
1,2-Dichloroethane	111	106	80-120	5	0-20	
1,1-Dichloroethene	94	93	69-129	2	0-20	
Ethylbenzene	109	106	73-127	3	0-20	
Toluene	99	96	80-120	3	0-20	
Trichloroethene	101	99	67-133	2	0-20	
Vinyl Chloride	111	111	67-133	1	0-20	
Methyl-t-Butyl Ether (MTBE)	98	96	65-131	3	0-22	
Tert-Butyl Alcohol (TBA)	103	102	62-134	1	0-20	
Diisopropyl Ether (DIPE)	102	99	64-136	3	0-29	
Ethyl-t-Butyl Ether (ETBE)	99	96	70-124	3	0-20	
Tert-Amyl-Methyl Ether (TAME)	100	99	71-125	1	0-20	
Ethanol	103	101	44-152	2	0-43	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

CH2M Hill	Date Received: N/A
1000 Wilshire Blvd.	Work Order No: 10-08-0164
21st Floor	Preparation: EPA 3510C
Los Angeles, CA 90017-2417	Method: EPA 8015B (M)

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-384-29	**Aqueous**	**GC 27**	**08/06/10**	**08/07/10**	**100806B09**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Fuel Product	112	112	75-117	0	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

CH2M Hill
1000 Wilshire Blvd.
21st Floor
Los Angeles, CA 90017-2417

Date Received: N/A
Work Order No: 10-08-0164
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-247-4,387	**Aqueous**	**GC 42**	**08/04/10**	**08/04/10**	**100804B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	92	92	78-120	0	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

CH2M Hill
1000 Wilshire Blvd.
21st Floor
Los Angeles, CA 90017-2417

Date Received: N/A
Work Order No: 10-08-0164
Preparation: EPA 5030B
Method: EPA 8260B

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-001-1,621	**Aqueous**	**GC/MS EE**	**08/05/10**	**08/05/10**	**100805L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	95	99	80-120	73-127	4	0-20	
Carbon Tetrachloride	107	111	67-139	55-151	4	0-22	
Chlorobenzene	95	100	80-120	73-127	6	0-20	
1,2-Dibromoethane	97	106	80-120	73-127	8	0-20	
1,2-Dichlorobenzene	95	103	79-120	72-127	8	0-20	
1,2-Dichloroethane	103	109	80-120	73-127	6	0-20	
1,1-Dichloroethene	94	95	71-125	62-134	1	0-25	
Ethylbenzene	100	108	80-123	73-130	8	0-20	
Toluene	93	99	80-120	73-127	5	0-20	
Trichloroethene	95	99	80-120	73-127	4	0-20	
Vinyl Chloride	109	111	68-140	56-152	2	0-23	
Methyl-t-Butyl Ether (MTBE)	92	98	75-123	67-131	6	0-25	
Tert-Butyl Alcohol (TBA)	97	102	72-126	63-135	5	0-20	
Diisopropyl Ether (DIPE)	95	101	75-129	66-138	7	0-22	
Ethyl-t-Butyl Ether (ETBE)	92	98	76-124	68-132	6	0-20	
Tert-Amyl-Methyl Ether (TAME)	95	100	79-121	72-128	6	0-20	
Ethanol	103	105	53-143	38-158	2	0-25	

Total number of LCS compounds : 17
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 10-08-0164

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
E	Concentration exceeds the calibration range.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

DATE: 8/3/10

PAGE: 1 OF 1

LABORATORY CLIENT: Kinder Morgan Energy Partners, Attn: Steve Defibaugh
ADDRESS: 1100 Town & Country Road
CITY: Orange, CA 92868
TEL: 714-560-4802 | FAX: 714-560-4601 | E-MAIL: james_dye@kindermorgan.com

CLIENT PROJECT NAME / NUMBER: SFPP - Norwalk Site
PROJECT CONTACT: James Dye
SAMPLER(S): (SIGNATURE)

P.O. NO.:
QUOTE NO.:
LAB USE ONLY: 08-0164

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 to A. Padilla at Geomatrix, cc: KMEP
Direct Bill KMEP/SFPP - Steve Defibaugh-ref. AFE# 81195
"J" flags required/Use lowest possible detection limit - all methods.

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MAT-RIX	NO. OF CONT.	TPH - g (8015M)	TPH-fp (8015M)	VOCs, Full List (8260B)	Oil & Grease (413.1)	TPH-g (C5-C14 Only) (8015M)	MtBE;BTEX;1,1-DCA;1,2-DCA;MEK(8260B)	Settleable Solids (160.5)	Total Suspended Solids (160.2)	Phenolics (420.1)	Hg,Cr(VI),Cu(1669,7199,6020)	Selenium on 24 HR TAT		Comments
1	INF- 8-3-10	Influent	8/3/10	1530	WW	7	X	X	X										Temperature* = ___
																			(Temp. as sampled*)
																			Monthly

Relinquished by: (Signature)	Received by: (Signature)	Date: 8/3/10	Time: 1648
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Revised: 07/23/09

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 10-08-C 1 6 4

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: KINDER MORGAN ENERGY PARTNERS

DATE: 08/03/10

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 2.0 °C + 0.5 °C (CF) = 2.5 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only Initial: PS

CUSTODY SEALS INTACT:

☐ Cooler	☐_____	☐ No (Not Intact)	☑ Not Present	☐ N/A	Initial: PS
☐ Sample	☐_____	☐ No (Not Intact)	☑ Not Present		Initial: MC

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Residual Chlorine / Dissolved Sulfide received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☑	☐	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☑500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐500PB ☐500PBna ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** MC

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** PS

Preservative: h: HCL n: HNO_3 na_2:$Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 znna: $ZnAc_2$+NaOH f: Field-filtered **Scanned by:** PS

Calscience
Environmental
Laboratories, Inc.

ACCREDITED IN ACCORDANCE WITH nelac

August 10, 2010

Dan Jablonski
CH2M Hill
1000 Wilshire Blvd.
21st Floor
Los Angeles, CA 90017-2417

Subject: **Calscience Work Order No.: 10-08-0166**
Client Reference: SFPP - Norwalk Site

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 08/03/2010 and analyzed in accordance with the attached chain-of-custody.

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Stephen Nowak
Project Manager

Case Narrative

Work Order # 10-08-0166

Modified EPA TO-14A or EPA TO-15

EPA Methods TO-14A and TO-15 describe gas chromatographic procedures that will allow for that separation of volatile organic compounds and their qualitative and quantitative analysis by mass spectrometry (GC/MS). A known volume of sample is directed from the container (Summa® canister or Tedlar™ bag) through a solid multi-module (glass beads, tenex, cryofocuser) concentrator. Following concentration, the VOCs are thermally desorbed onto a gas chromatographic column for separation and then detected on a mass selective detector.

Comparison of EPA TO-14A/TO-15 versus Calscience EPA TO-14A/TO-15 (Modified)

Requirement	EPA Method	Calscience Modifications
BFB Acceptance Criteria	CLP Protocol	SW846 Protocol
Initial Calibration	Allowable % RSD for each Target Analyte <= 30%, two analytes allowed <= 40%	Allowable % RSD for each Target Analyte <= 30%, 10% of analytes allowed <= 40%
Initial Calibration Verification (ICV) - Second Source Standard (LCS)	Not Mentioned	Analytes contained in the LCS standard evaluated against historical control limits for the LCS
Daily Calibration Verification (CCV)	Allowable % Difference for each Target Analyte is <= 30%	**Full List Analysis:** Allowable % Difference for each CCC analyte is <= 30%
		Target List Analysis: Allowable % Difference for each target analytes is <= 30%
Daily Calibration Verification (CCV) - Internal Standard Area Response	Allowable +/- 40% (Range: 60% to 140%)	Allowable +/- 50% (Range: 50% to 150%)
Method Blank, Laboratory Control Sample and Sample - Internal Standard Area Response	Allowable +/- 40% of the mean area response of most recent Initial Calibration (Range: 60% to 140%)	Allowable +/- 50% of the mean area response of the most recent Calibration Verification (Range: 50% to 150%)
Surrogates	Not Mentioned	1,4-Bromoflurobenzene, 1,2-Dichloroethane-d4 and Toluene-d8 - % Recoveries based upon historical control limits +/-3S

Calscience Environmental Laboratories, Inc.

Client: CH2M Hill
1000 Wilshire Blvd.
21st Floor
Attn: Dan Jablonski

Work Order: 10-08-0166
Project name: SFPP - Norwalk Site
Received: 08/03/10 16:48

DETECTIONS SUMMARY

Client Sample ID / Analyte	Result	Qualifiers	Reporting Limit	Units	Method	Extraction
VINF-08-03						
Carbon Dioxide	**0.603**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**20.4**		0.500	%v	ASTM D-1946	N/A
TPH as Gasoline	**29**		1.5	ppm (v/v)	EPA TO-3M	N/A
Benzene	**210**		4.0	ppb (v/v)	EPA TO-15M	N/A
2-Butanone	**7.6**	J	0.79*	ppb (v/v)	EPA TO-15M	N/A
Chloroform	**4.7**		4.0	ppb (v/v)	EPA TO-15M	N/A
Ethylbenzene	**13**		4.0	ppb (v/v)	EPA TO-15M	N/A
4-Ethyltoluene	**5.7**		4.0	ppb (v/v)	EPA TO-15M	N/A
Methyl-t-Butyl Ether (MTBE)	**9.1**	J	0.95*	ppb (v/v)	EPA TO-15M	N/A
o-Xylene	**22**		4.0	ppb (v/v)	EPA TO-15M	N/A
p/m-Xylene	**63**		16	ppb (v/v)	EPA TO-15M	N/A
Toluene	**64**		40	ppb (v/v)	EPA TO-15M	N/A
1,3,5-Trimethylbenzene	**6.8**		4.0	ppb (v/v)	EPA TO-15M	N/A
1,2,4-Trimethylbenzene	**17**		12	ppb (v/v)	EPA TO-15M	N/A
VCAT-08-03						
Carbon Dioxide	**1.23**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**19.5**		0.500	%v	ASTM D-1946	N/A
TPH as Gasoline	**16**		1.5	ppm (v/v)	EPA TO-3M	N/A
Benzene	**120**		2.0	ppb (v/v)	EPA TO-15M	N/A
2-Butanone	**62**		6.0	ppb (v/v)	EPA TO-15M	N/A
Chloroform	**2.3**		2.0	ppb (v/v)	EPA TO-15M	N/A
Ethylbenzene	**6.0**		2.0	ppb (v/v)	EPA TO-15M	N/A
4-Ethyltoluene	**2.0**		2.0	ppb (v/v)	EPA TO-15M	N/A
Methyl-t-Butyl Ether (MTBE)	**1.8**	J	0.48*	ppb (v/v)	EPA TO-15M	N/A
o-Xylene	**9.8**		2.0	ppb (v/v)	EPA TO-15M	N/A
p/m-Xylene	**27**		8.0	ppb (v/v)	EPA TO-15M	N/A
Toluene	**35**		20	ppb (v/v)	EPA TO-15M	N/A
1,3,5-Trimethylbenzene	**2.4**		2.0	ppb (v/v)	EPA TO-15M	N/A
1,2,4-Trimethylbenzene	**5.5**	J	1.3*	ppb (v/v)	EPA TO-15M	N/A

*MDL is shown.

Calscience Environmental Laboratories, Inc.

Client: CH2M Hill
1000 Wilshire Blvd.
21st Floor
Attn: Dan Jablonski

Work Order: 10-08-0166
Project name: SFPP - Norwalk Site
Received: 08/03/10 16:48

DETECTIONS SUMMARY

Client Sample ID / Analyte	Result	Qualifiers	Reporting Limit	Units	Method	Extraction
VEFF-08-03						
Carbon Dioxide	**1.23**		0.500	%v	ASTM D-1946	N/A
Oxygen + Argon	**19.5**		0.500	%v	ASTM D-1946	N/A
TPH as Gasoline	**8.4**		1.5	ppm (v/v)	EPA TO-3M	N/A
Acetone	**410**		250	ppb (v/v)	EPA TO-15M	N/A
Benzene	**13**		0.50	ppb (v/v)	EPA TO-15M	N/A
2-Butanone	**170**		7.5	ppb (v/v)	EPA TO-15M	N/A
Chloroethane	**14**		0.50	ppb (v/v)	EPA TO-15M	N/A
Chloroform	**1.2**		0.50	ppb (v/v)	EPA TO-15M	N/A
Chloromethane	**2.8**		0.50	ppb (v/v)	EPA TO-15M	N/A
Dichlorodifluoromethane	**0.26**	J	0.14*	ppb (v/v)	EPA TO-15M	N/A
1,1-Dichloroethane	**1.5**		0.50	ppb (v/v)	EPA TO-15M	N/A
1,2-Dichloroethane	**1.0**		0.50	ppb (v/v)	EPA TO-15M	N/A
Ethylbenzene	**0.68**		0.50	ppb (v/v)	EPA TO-15M	N/A
4-Ethyltoluene	**0.24**	J	0.18*	ppb (v/v)	EPA TO-15M	N/A
2-Hexanone	**42**		1.5	ppb (v/v)	EPA TO-15M	N/A
Methylene Chloride	**3.3**	J	1.0*	ppb (v/v)	EPA TO-15M	N/A
4-Methyl-2-Pentanone	**0.65**	J	0.15*	ppb (v/v)	EPA TO-15M	N/A
o-Xylene	**1.0**		0.50	ppb (v/v)	EPA TO-15M	N/A
p/m-Xylene	**3.1**		2.0	ppb (v/v)	EPA TO-15M	N/A
Toluene	**3.6**	J	2.0*	ppb (v/v)	EPA TO-15M	N/A
1,1,2-Trichloroethane	**0.63**		0.50	ppb (v/v)	EPA TO-15M	N/A
1,3,5-Trimethylbenzene	**0.30**	J	0.17*	ppb (v/v)	EPA TO-15M	N/A
1,2,4-Trimethylbenzene	**0.79**	J	0.33*	ppb (v/v)	EPA TO-15M	N/A
Vinyl Chloride	**0.21**	J	0.10*	ppb (v/v)	EPA TO-15M	N/A

Subcontracted analyses, if any, are not included in this summary.

*MDL is shown.

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/03/10
1000 Wilshire Blvd.		Work Order No:	10-08-0166
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	ASTM D-1946

Project: SFPP - Norwalk Site

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VINF-08-03	**10-08-0166-1-A**	**08/03/10 15:35**	**Air**	**GC 36**	**N/A**	**08/03/10 17:59**	**100803L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Methane	ND	0.500	0.0981	1		%v
Carbon Dioxide	0.603	0.500	0.344	1		%v
Oxygen + Argon	20.4	0.500	0.370	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VCAT-08-03	**10-08-0166-2-A**	**08/03/10 15:35**	**Air**	**GC 36**	**N/A**	**08/03/10 18:15**	**100803L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Methane	ND	0.500	0.0981	1		%v
Carbon Dioxide	1.23	0.500	0.344	1		%v
Oxygen + Argon	19.5	0.500	0.370	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VEFF-08-03	**10-08-0166-3-A**	**08/03/10 15:35**	**Air**	**GC 36**	**N/A**	**08/03/10 18:32**	**100803L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Methane	ND	0.500	0.0981	1		%v
Carbon Dioxide	1.23	0.500	0.344	1		%v
Oxygen + Argon	19.5	0.500	0.370	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-03-002-1,103**	**N/A**	**Air**	**GC 36**	**N/A**	**08/03/10 08:50**	**100803L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Methane	ND	0.500	0.0981	1		%v
Carbon Dioxide	ND	0.500	0.344	1		%v
Carbon Monoxide	ND	0.500	0.272	1		%v
Oxygen + Argon	ND	0.500	0.370	1		%v
Nitrogen	ND	0.500	0.174	1		%v

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/03/10
1000 Wilshire Blvd.		Work Order No:	10-08-0166
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	EPA TO-3M

Project: SFPP - Norwalk Site

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VINF-08-03	**10-08-0166-1-A**	**08/03/10 15:35**	**Air**	**GC 13**	**N/A**	**08/03/10 17:55**	**100803L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	29	1.5	0.17	1		ppm (v/v)

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VCAT-08-03	**10-08-0166-2-A**	**08/03/10 15:35**	**Air**	**GC 13**	**N/A**	**08/03/10 18:05**	**100803L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	16	1.5	0.17	1		ppm (v/v)

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VEFF-08-03	**10-08-0166-3-A**	**08/03/10 15:35**	**Air**	**GC 13**	**N/A**	**08/03/10 18:18**	**100803L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	8.4	1.5	0.17	1		ppm (v/v)

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**098-01-005-2,484**	**N/A**	**Air**	**GC 13**	**N/A**	**08/03/10 08:45**	**100803L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	ND	1.5	0.17	1		ppm (v/v)

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/03/10
1000 Wilshire Blvd.		Work Order No:	10-08-0166
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	EPA TO-15M
		Units:	ppb (v/v)
Project: SFPP - Norwalk Site			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VINF-08-03	**10-08-0166-1-A**	**08/03/10 15:35**	**Air**	**GC/MS AA**	**N/A**	**08/03/10 20:28**	**100803L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

-The method has been modified to use Tedlar bags instead of Summa Canisters.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	400	200	8		t-1,2-Dichloroethene	ND	4.0	1.5	8	
Benzene	210	4.0	0.75	8		t-1,3-Dichloropropene	ND	8.0	0.82	8	
Benzyl Chloride	ND	12	3.2	8		Ethylbenzene	13	4.0	0.91	8	
Bromodichloromethane	ND	4.0	0.81	8		4-Ethyltoluene	5.7	4.0	1.5	8	
Bromoform	ND	4.0	1.2	8		Hexachloro-1,3-Butadiene	ND	12	1.4	8	
Bromomethane	ND	4.0	0.74	8		2-Hexanone	ND	12	4.1	8	
2-Butanone	7.6	12	0.79	8	J	Methyl-t-Butyl Ether (MTBE)	9.1	16	0.95	8	J
Carbon Disulfide	ND	80	40	8		Methylene Chloride	ND	40	8.0	8	
Carbon Tetrachloride	ND	4.0	0.79	8		4-Methyl-2-Pentanone	ND	12	1.2	8	
Chlorobenzene	ND	4.0	0.87	8		o-Xylene	22	4.0	0.97	8	
Chloroethane	ND	4.0	1.2	8		p/m-Xylene	63	16	6.1	8	
Chloroform	4.7	4.0	0.72	8		Styrene	ND	12	1.4	8	
Chloromethane	ND	4.0	0.78	8		Tetrachloroethene	ND	4.0	0.89	8	
Dibromochloromethane	ND	4.0	0.90	8		Toluene	64	40	16	8	
Dichlorodifluoromethane	ND	4.0	1.2	8		Trichloroethene	ND	4.0	0.86	8	
1,1-Dichloroethane	ND	4.0	0.82	8		Trichlorofluoromethane	ND	8.0	0.62	8	
1,1-Dichloroethene	ND	4.0	0.88	8		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	12	0.80	8	
1,2-Dibromoethane	ND	4.0	0.89	8		1,1,1-Trichloroethane	ND	4.0	0.80	8	
Dichlorotetrafluoroethane	ND	16	0.88	8		1,1,2-Trichloroethane	ND	4.0	0.97	8	
1,2-Dichlorobenzene	ND	4.0	0.88	8		1,3,5-Trimethylbenzene	6.8	4.0	1.3	8	
1,2-Dichloroethane	ND	4.0	0.76	8		1,1,2,2-Tetrachloroethane	ND	8.0	0.85	8	
1,2-Dichloropropane	ND	4.0	0.91	8		1,2,4-Trimethylbenzene	17	12	2.6	8	
1,3-Dichlorobenzene	ND	4.0	1.0	8		1,2,4-Trichlorobenzene	ND	16	5.8	8	
1,4-Dichlorobenzene	ND	4.0	1.1	8		Vinyl Acetate	ND	16	3.6	8	
c-1,3-Dichloropropene	ND	4.0	1.1	8		Vinyl Chloride	ND	4.0	0.81	8	
c-1,2-Dichloroethene	ND	4.0	1.1	8							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	102	57-129		1,2-Dichloroethane-d4	105	47-137	
Toluene-d8	97	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/03/10
1000 Wilshire Blvd.		Work Order No:	10-08-0166
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	EPA TO-15M
		Units:	ppb (v/v)
Project: SFPP - Norwalk Site			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VCAT-08-03	**10-08-0166-2-A**	**08/03/10 15:35**	**Air**	**GC/MS AA**	**N/A**	**08/03/10 21:15**	**100803L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

-The method has been modified to use Tedlar bags instead of Summa Canisters.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	200	100	4		t-1,2-Dichloroethene	ND	2.0	0.75	4	
Benzene	120	2.0	0.38	4		t-1,3-Dichloropropene	ND	4.0	0.41	4	
Benzyl Chloride	ND	6.0	1.6	4		Ethylbenzene	6.0	2.0	0.46	4	
Bromodichloromethane	ND	2.0	0.41	4		4-Ethyltoluene	2.0	2.0	0.73	4	
Bromoform	ND	2.0	0.61	4		Hexachloro-1,3-Butadiene	ND	6.0	0.72	4	
Bromomethane	ND	2.0	0.37	4		2-Hexanone	ND	6.0	2.1	4	
2-Butanone	62	6.0	0.40	4		Methyl-t-Butyl Ether (MTBE)	1.8	8.0	0.48	4	J
Carbon Disulfide	ND	40	20	4		Methylene Chloride	ND	20	4.0	4	
Carbon Tetrachloride	ND	2.0	0.39	4		4-Methyl-2-Pentanone	ND	6.0	0.61	4	
Chlorobenzene	ND	2.0	0.43	4		o-Xylene	9.8	2.0	0.48	4	
Chloroethane	ND	2.0	0.62	4		p/m-Xylene	27	8.0	3.0	4	
Chloroform	2.3	2.0	0.36	4		Styrene	ND	6.0	0.72	4	
Chloromethane	ND	2.0	0.39	4		Tetrachloroethene	ND	2.0	0.44	4	
Dibromochloromethane	ND	2.0	0.45	4		Toluene	35	20	8.0	4	
Dichlorodifluoromethane	ND	2.0	0.58	4		Trichloroethene	ND	2.0	0.43	4	
1,1-Dichloroethane	ND	2.0	0.41	4		Trichlorofluoromethane	ND	4.0	0.31	4	
1,1-Dichloroethene	ND	2.0	0.44	4		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	6.0	0.40	4	
1,2-Dibromoethane	ND	2.0	0.45	4		1,1,1-Trichloroethane	ND	2.0	0.40	4	
Dichlorotetrafluoroethane	ND	8.0	0.44	4		1,1,2-Trichloroethane	ND	2.0	0.49	4	
1,2-Dichlorobenzene	ND	2.0	0.44	4		1,3,5-Trimethylbenzene	2.4	2.0	0.67	4	
1,2-Dichloroethane	ND	2.0	0.38	4		1,1,2,2-Tetrachloroethane	ND	4.0	0.42	4	
1,2-Dichloropropane	ND	2.0	0.46	4		1,2,4-Trimethylbenzene	5.5	6.0	1.3	4	J
1,3-Dichlorobenzene	ND	2.0	0.52	4		1,2,4-Trichlorobenzene	ND	8.0	2.9	4	
1,4-Dichlorobenzene	ND	2.0	0.54	4		Vinyl Acetate	ND	8.0	1.8	4	
c-1,3-Dichloropropene	ND	2.0	0.56	4		Vinyl Chloride	ND	2.0	0.40	4	
c-1,2-Dichloroethene	ND	2.0	0.53	4							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	102	57-129		1,2-Dichloroethane-d4	103	47-137	
Toluene-d8	97	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/03/10
1000 Wilshire Blvd.		Work Order No:	10-08-0166
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	EPA TO-15M
		Units:	ppb (v/v)
Project: SFPP - Norwalk Site			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VEFF-08-03	**10-08-0166-3-A**	**08/03/10 15:35**	**Air**	**GC/MS AA**	**N/A**	**08/03/10 22:04**	**100803L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

-The method has been modified to use Tedlar bags instead of Summa Canisters.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	410	250	120	5		t-1,2-Dichloroethene	ND	0.50	0.19	1	
Benzene	13	0.50	0.094	1		t-1,3-Dichloropropene	ND	1.0	0.10	1	
Benzyl Chloride	ND	1.5	0.39	1		Ethylbenzene	0.68	0.50	0.11	1	
Bromodichloromethane	ND	0.50	0.10	1		4-Ethyltoluene	0.24	0.50	0.18	1	J
Bromoform	ND	0.50	0.15	1		Hexachloro-1,3-Butadiene	ND	1.5	0.18	1	
Bromomethane	ND	0.50	0.093	1		2-Hexanone	42	1.5	0.52	1	
2-Butanone	170	7.5	0.50	5		Methyl-t-Butyl Ether (MTBE)	ND	2.0	0.12	1	
Carbon Disulfide	ND	10	5.0	1		Methylene Chloride	3.3	5.0	1.0	1	J
Carbon Tetrachloride	ND	0.50	0.098	1		4-Methyl-2-Pentanone	0.65	1.5	0.15	1	J
Chlorobenzene	ND	0.50	0.11	1		o-Xylene	1.0	0.50	0.12	1	
Chloroethane	14	0.50	0.15	1		p/m-Xylene	3.1	2.0	0.76	1	
Chloroform	1.2	0.50	0.090	1		Styrene	ND	1.5	0.18	1	
Chloromethane	2.8	0.50	0.098	1		Tetrachloroethene	ND	0.50	0.11	1	
Dibromochloromethane	ND	0.50	0.11	1		Toluene	3.6	5.0	2.0	1	J
Dichlorodifluoromethane	0.26	0.50	0.14	1	J	Trichloroethene	ND	0.50	0.11	1	
1,1-Dichloroethane	1.5	0.50	0.10	1		Trichlorofluoromethane	ND	1.0	0.077	1	
1,1-Dichloroethene	ND	0.50	0.11	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.5	0.10	1	
1,2-Dibromoethane	ND	0.50	0.11	1		1,1,1-Trichloroethane	ND	0.50	0.10	1	
Dichlorotetrafluoroethane	ND	2.0	0.11	1		1,1,2-Trichloroethane	0.63	0.50	0.12	1	
1,2-Dichlorobenzene	ND	0.50	0.11	1		1,3,5-Trimethylbenzene	0.30	0.50	0.17	1	J
1,2-Dichloroethane	1.0	0.50	0.095	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.11	1	
1,2-Dichloropropane	ND	0.50	0.11	1		1,2,4-Trimethylbenzene	0.79	1.5	0.33	1	J
1,3-Dichlorobenzene	ND	0.50	0.13	1		1,2,4-Trichlorobenzene	ND	2.0	0.72	1	
1,4-Dichlorobenzene	ND	0.50	0.13	1		Vinyl Acetate	ND	2.0	0.45	1	
c-1,3-Dichloropropene	ND	0.50	0.14	1		Vinyl Chloride	0.21	0.50	0.10	1	J
c-1,2-Dichloroethene	ND	0.50	0.13	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	103	57-129		1,2-Dichloroethane-d4	104	47-137	
Toluene-d8	98	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/03/10
1000 Wilshire Blvd.		Work Order No:	10-08-0166
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	EPA TO-15M
		Units:	ppb (v/v)
Project: SFPP - Norwalk Site			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-981-676**	**N/A**	**Air**	**GC/MS AA**	**N/A**	**08/03/10 14:09**	**100803L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	50	25	1		t-1,2-Dichloroethene	ND	0.50	0.19	1	
Benzene	ND	0.50	0.094	1		t-1,3-Dichloropropene	ND	1.0	0.10	1	
Benzyl Chloride	ND	1.5	0.39	1		Ethylbenzene	ND	0.50	0.11	1	
Bromodichloromethane	ND	0.50	0.10	1		4-Ethyltoluene	ND	0.50	0.18	1	
Bromoform	ND	0.50	0.15	1		Hexachloro-1,3-Butadiene	ND	1.5	0.18	1	
Bromomethane	ND	0.50	0.093	1		2-Hexanone	ND	1.5	0.52	1	
2-Butanone	ND	1.5	0.099	1		Methyl-t-Butyl Ether (MTBE)	ND	2.0	0.12	1	
Carbon Disulfide	ND	10	5.0	1		Methylene Chloride	ND	5.0	1.0	1	
Carbon Tetrachloride	ND	0.50	0.098	1		4-Methyl-2-Pentanone	ND	1.5	0.15	1	
Chlorobenzene	ND	0.50	0.11	1		o-Xylene	ND	0.50	0.12	1	
Chloroethane	ND	0.50	0.15	1		p/m-Xylene	ND	2.0	0.76	1	
Chloroform	ND	0.50	0.090	1		Styrene	ND	1.5	0.18	1	
Chloromethane	ND	0.50	0.098	1		Tetrachloroethene	ND	0.50	0.11	1	
Dibromochloromethane	ND	0.50	0.11	1		Toluene	ND	5.0	2.0	1	
Dichlorodifluoromethane	ND	0.50	0.14	1		Trichloroethene	ND	0.50	0.11	1	
1,1-Dichloroethane	ND	0.50	0.10	1		Trichlorofluoromethane	ND	1.0	0.077	1	
1,1-Dichloroethene	ND	0.50	0.11	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.5	0.10	1	
1,2-Dibromoethane	ND	0.50	0.11	1		1,1,1-Trichloroethane	ND	0.50	0.10	1	
Dichlorotetrafluoroethane	ND	2.0	0.11	1		1,1,2-Trichloroethane	ND	0.50	0.12	1	
1,2-Dichlorobenzene	ND	0.50	0.11	1		1,3,5-Trimethylbenzene	ND	0.50	0.17	1	
1,2-Dichloroethane	ND	0.50	0.095	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.11	1	
1,2-Dichloropropane	ND	0.50	0.11	1		1,2,4-Trimethylbenzene	ND	1.5	0.33	1	
1,3-Dichlorobenzene	ND	0.50	0.13	1		1,2,4-Trichlorobenzene	ND	2.0	0.72	1	
1,4-Dichlorobenzene	ND	0.50	0.13	1		Vinyl Acetate	ND	2.0	0.45	1	
c-1,3-Dichloropropene	ND	0.50	0.14	1		Vinyl Chloride	ND	0.50	0.10	1	
c-1,2-Dichloroethene	ND	0.50	0.13	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	102	57-129		1,2-Dichloroethane-d4	103	47-137	
Toluene-d8	96	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

CH2M Hill		Date Received:	08/03/10
1000 Wilshire Blvd.		Work Order No:	10-08-0166
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	EPA TO-3M

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
10-08-0081-1	**Air**	**GC 13**	**N/A**	**08/03/10**	**100803D01**

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
TPH as Gasoline	130	140	9	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

CH2M Hill
1000 Wilshire Blvd.
21st Floor
Los Angeles, CA 90017-2417

Date Received: N/A
Work Order No: 10-08-0166
Preparation: N/A
Method: ASTM D-1946

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-03-002-1,103	**Air**	**GC 36**	**N/A**	**08/03/10**	**100803L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Carbon Dioxide	94	92	80-120	2	0-30	
Oxygen + Argon	88	88	80-120	0	0-30	
Nitrogen	88	88	80-120	0	0-30	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

CH2M Hill		Date Received:	N/A
1000 Wilshire Blvd.		Work Order No:	10-08-0166
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	EPA TO-15M

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-981-676	**Air**	**GC/MS AA**	**N/A**	**08/03/10**	**100803L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	92	94	60-156	44-172	3	0-40	
Carbon Tetrachloride	104	106	64-154	49-169	2	0-32	
1,2-Dibromoethane	97	99	54-144	39-159	1	0-36	
1,2-Dichlorobenzene	100	103	34-160	13-181	2	0-47	
1,2-Dichloroethane	100	101	69-153	55-167	1	0-30	
1,2-Dichloropropane	92	95	67-157	52-172	2	0-35	
1,4-Dichlorobenzene	99	101	36-156	16-176	2	0-47	
c-1,3-Dichloropropene	100	103	61-157	45-173	3	0-35	
Ethylbenzene	94	95	52-154	35-171	2	0-38	
o-Xylene	94	96	52-148	36-164	2	0-38	
p/m-Xylene	94	96	42-156	23-175	2	0-41	
Tetrachloroethene	97	98	56-152	40-168	1	0-40	
Toluene	93	95	56-146	41-161	1	0-43	
Trichloroethene	94	96	63-159	47-175	2	0-34	
1,1,2-Trichloroethane	90	94	65-149	51-163	4	0-37	
Vinyl Chloride	111	106	45-177	23-199	4	0-36	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 10-08-0166

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
E	Concentration exceeds the calibration range.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

DATE: 8/3/2010

PAGE: 1 OF 1

LABORATORY CLIENT: Kinder Morgan Energy Partners, Attn: Steve Definbough
ADDRESS: 1100 Town & Country Road
CITY: Orange, CA 92868
TEL: 714-560-4802 FAX: 714-560-4601 E-MAIL: james_dye@kindermorgan.com

CLIENT PROJECT NAME / NUMBER: SFPP - Norwalk Site
PROJECT CONTACT: James Dye
SAMPLER(S): (SIGNATURE)
P.O. NO.:
QUOTE NO.:
LAB USE ONLY: 09-0166

TURNAROUND TIME: ☐ SAME DAY ~~24 HR~~ 30 ☐ 48HR ☐ 72 HR ☒ 5 DAYS ☐ 10 DAYS

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

SPECIAL INSTRUCTIONS
Report to A. Padilla at Geomatrix, cc: KMEP
Direct Bill KMEP/SFPP - Steve Defibaugh-ref. AFE# 81195
"J" flags required/Use lowest possible detection limit - all methods.

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MAT-RIX	NO. OF CONT.	TO-15	TO-3 (TPH-g)	ASTM-D1946 (O2/Argon, CO2, CH4)	Comments
	~~VHEAD-08-03~~	~~Influent Vapor to SVE~~	~~8/3/2010~~		~~Air~~	~~1~~	X	X	X	Monthly sample
1	VINF-08-03	Influent Vapor to SVE	8/3/2010	1535	Air	1	X	X	X	
2	VCAT-08-03	CAT	8/3/2010	1535	Air	1	X	X	X	
3	VEFF-08-03	EFFLUENT	8/3/2010	1535	Air	1	X	X	X	
					Air	1	X	X	X	

Relinquished by: (Signature)	Received by: (Signature)	Date: 8/3/10	Time: 1648
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Revised: 07/23/09

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 10-08-C1166

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: KINDER MORGAN ENERGY PARTNERS

DATE: 08/03/10

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 2.0 °C + 0.5 °C (CF) = 2.5 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only Initial: PS

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: PS

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: NC

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Residual Chlorine / Dissolved Sulfide received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☑	☐	☐

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s** ☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na** ☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☑Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** NC

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:**

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:**$Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **znna:** $ZnAc_2$+NaOH **f:** Field-filtered **Scanned by:**

Calscience Environmental Laboratories, Inc.

August 17, 2010

Dan Jablonski
CH2M Hill
1000 Wilshire Blvd.
21st Floor
Los Angeles, CA 90017-2417

Subject: **Calscience Work Order No.: 10-08-0761**
Client Reference: SFPP - Norwalk Site

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 8/10/2010 and analyzed in accordance with the attached chain-of-custody.

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Stephen Nowak
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/10/10
1000 Wilshire Blvd.		Work Order No:	10-08-0761
21st Floor		Preparation:	EPA 3510C
Los Angeles, CA 90017-2417		Method:	EPA 8015B (M)

Project: SFPP - Norwalk Site

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
INF-08-10	**10-08-0761-1-G**	**08/10/10 12:15**	**Aqueous**	**GC 27**	**08/13/10**	**08/13/10 19:03**	**100813B16**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Fuel Product	3400	500	430	1		ug/L
Surrogates:	REC (%)	Control Limits	MDL		Qual	
Decachlorobiphenyl	103	68-140				

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-384-30**	**N/A**	**Aqueous**	**GC 27**	**08/13/10**	**08/13/10 18:10**	**100813B16**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Fuel Product	ND	500	430	1		ug/L
Surrogates:	REC (%)	Control Limits	MDL		Qual	
Decachlorobiphenyl	116	68-140				

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/10/10
1000 Wilshire Blvd.		Work Order No:	10-08-0761
21st Floor		Preparation:	EPA 5030B
Los Angeles, CA 90017-2417		Method:	EPA 8015B (M)

Project: SFPP - Norwalk Site

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
INF-08-10	**10-08-0761-1-E**	**08/10/10 12:15**	**Aqueous**	**GC 42**	**08/10/10**	**08/10/10 22:58**	**100810B01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	5800	500	240	5		ug/L
Surrogates:	REC (%)	Control Limits	MDL		Qual	
1,4-Bromofluorobenzene	104	38-134				

Method Blank	**099-12-247-4,403**	**N/A**	**Aqueous**	**GC 42**	**08/10/10**	**08/10/10 09:14**	**100810B01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	ND	100	48	1		ug/L
Surrogates:	REC (%)	Control Limits	MDL		Qual	
1,4-Bromofluorobenzene	94	38-134				

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/10/10
1000 Wilshire Blvd.		Work Order No:	10-08-0761
21st Floor		Preparation:	EPA 5030B
Los Angeles, CA 90017-2417		Method:	EPA 8260B
		Units:	ug/L
Project: SFPP - Norwalk Site			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
INF-08-10	**10-08-0761-1-B**	**08/10/10 12:15**	**Aqueous**	**GC/MS U**	**08/11/10**	**08/11/10 16:30**	**100811L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	1000	400	20		c-1,3-Dichloropropene	ND	10	5.7	20	
Benzene	2600	10	5.7	20		t-1,3-Dichloropropene	ND	10	7.2	20	
Bromobenzene	ND	20	6.7	20		Ethylbenzene	40	20	4.4	20	
Bromochloromethane	ND	20	14	20		2-Hexanone	ND	200	140	20	
Bromodichloromethane	ND	20	6.6	20		Isopropylbenzene	9.1	20	4.5	20	J
Bromoform	ND	20	11	20		p-Isopropyltoluene	ND	20	5.2	20	
Bromomethane	ND	200	86	20		Methylene Chloride	ND	200	52	20	
2-Butanone	ND	200	140	20		4-Methyl-2-Pentanone	ND	200	88	20	
n-Butylbenzene	ND	20	5.5	20		Naphthalene	60	200	51	20	J
sec-Butylbenzene	ND	20	4.1	20		n-Propylbenzene	26	20	16	20	
tert-Butylbenzene	ND	20	5.5	20		Styrene	ND	20	6.0	20	
Carbon Disulfide	ND	200	38	20		1,1,1,2-Tetrachloroethane	ND	20	7.0	20	
Carbon Tetrachloride	ND	10	8.5	20		1,1,2,2-Tetrachloroethane	ND	20	8.8	20	
Chlorobenzene	ND	20	4.4	20		Tetrachloroethene	ND	20	10	20	
Chloroethane	ND	100	26	20		Toluene	190	20	6.5	20	
Chloroform	ND	20	6.6	20		1,2,3-Trichlorobenzene	ND	20	6.1	20	
Chloromethane	ND	200	9.7	20		1,2,4-Trichlorobenzene	ND	20	9.7	20	
2-Chlorotoluene	ND	20	11	20		1,1,1-Trichloroethane	ND	20	9.0	20	
4-Chlorotoluene	ND	20	4.2	20		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	200	13	20	
Dibromochloromethane	ND	20	9.7	20		1,1,2-Trichloroethane	ND	20	11	20	
1,2-Dibromo-3-Chloropropane	ND	100	62	20		Trichloroethene	ND	20	6.1	20	
1,2-Dibromoethane	ND	20	9.3	20		Trichlorofluoromethane	ND	200	6.2	20	
Dibromomethane	ND	20	12	20		1,2,3-Trichloropropane	ND	100	27	20	
1,2-Dichlorobenzene	ND	20	5.4	20		1,2,4-Trimethylbenzene	34	20	4.9	20	
1,3-Dichlorobenzene	ND	20	5.7	20		1,3,5-Trimethylbenzene	13	20	4.6	20	J
1,4-Dichlorobenzene	ND	20	4.2	20		Vinyl Acetate	ND	200	140	20	
Dichlorodifluoromethane	ND	20	9.8	20		Vinyl Chloride	ND	10	6.5	20	
1,1-Dichloroethane	ND	20	7.5	20		p/m-Xylene	120	20	9.1	20	
1,2-Dichloroethane	ND	10	6.3	20		o-Xylene	49	20	4.7	20	
1,1-Dichloroethene	ND	20	8.0	20		Methyl-t-Butyl Ether (MTBE)	140	20	6.1	20	
c-1,2-Dichloroethene	ND	20	9.7	20		Tert-Butyl Alcohol (TBA)	5600	200	71	20	
t-1,2-Dichloroethene	ND	20	8.1	20		Diisopropyl Ether (DIPE)	15	40	6.2	20	J
1,2-Dichloropropane	ND	20	7.6	20		Ethyl-t-Butyl Ether (ETBE)	ND	40	5.3	20	
1,3-Dichloropropane	ND	20	7.6	20		Tert-Amyl-Methyl Ether (TAME)	ND	40	5.7	20	
2,2-Dichloropropane	ND	20	9.2	20		Ethanol	ND	2000	1000	20	
1,1-Dichloropropene	ND	20	5.1	20							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	101	80-126		1,2-Dichloroethane-d4	105	80-131	
Toluene-d8	98	80-120		1,4-Bromofluorobenzene	94	80-120	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/10/10
1000 Wilshire Blvd.		Work Order No:	10-08-0761
21st Floor		Preparation:	EPA 5030B
Los Angeles, CA 90017-2417		Method:	EPA 8260B
		Units:	ug/L
Project: SFPP - Norwalk Site			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-001-1,687**	**N/A**	**Aqueous**	**GC/MS U**	**08/11/10**	**08/11/10 13:58**	**100811L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	50	20	1		c-1,3-Dichloropropene	ND	0.50	0.28	1	
Benzene	ND	0.50	0.28	1		t-1,3-Dichloropropene	ND	0.50	0.36	1	
Bromobenzene	ND	1.0	0.33	1		Ethylbenzene	ND	1.0	0.22	1	
Bromochloromethane	ND	1.0	0.69	1		2-Hexanone	ND	10	6.9	1	
Bromodichloromethane	ND	1.0	0.33	1		Isopropylbenzene	ND	1.0	0.23	1	
Bromoform	ND	1.0	0.55	1		p-Isopropyltoluene	ND	1.0	0.26	1	
Bromomethane	ND	10	4.3	1		Methylene Chloride	ND	10	2.6	1	
2-Butanone	ND	10	6.9	1		4-Methyl-2-Pentanone	ND	10	4.4	1	
n-Butylbenzene	ND	1.0	0.28	1		Naphthalene	ND	10	2.5	1	
sec-Butylbenzene	ND	1.0	0.20	1		n-Propylbenzene	ND	1.0	0.79	1	
tert-Butylbenzene	ND	1.0	0.28	1		Styrene	ND	1.0	0.30	1	
Carbon Disulfide	ND	10	1.9	1		1,1,1,2-Tetrachloroethane	ND	1.0	0.35	1	
Carbon Tetrachloride	ND	0.50	0.43	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.44	1	
Chlorobenzene	ND	1.0	0.22	1		Tetrachloroethene	ND	1.0	0.51	1	
Chloroethane	ND	5.0	1.3	1		Toluene	ND	1.0	0.33	1	
Chloroform	ND	1.0	0.33	1		1,2,3-Trichlorobenzene	ND	1.0	0.31	1	
Chloromethane	ND	10	0.49	1		1,2,4-Trichlorobenzene	ND	1.0	0.49	1	
2-Chlorotoluene	ND	1.0	0.55	1		1,1,1-Trichloroethane	ND	1.0	0.45	1	
4-Chlorotoluene	ND	1.0	0.21	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.64	1	
Dibromochloromethane	ND	1.0	0.48	1		1,1,2-Trichloroethane	ND	1.0	0.54	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	3.1	1		Trichloroethene	ND	1.0	0.30	1	
1,2-Dibromoethane	ND	1.0	0.47	1		Trichlorofluoromethane	ND	10	0.31	1	
Dibromomethane	ND	1.0	0.59	1		1,2,3-Trichloropropane	ND	5.0	1.3	1	
1,2-Dichlorobenzene	ND	1.0	0.27	1		1,2,4-Trimethylbenzene	ND	1.0	0.24	1	
1,3-Dichlorobenzene	ND	1.0	0.28	1		1,3,5-Trimethylbenzene	ND	1.0	0.23	1	
1,4-Dichlorobenzene	ND	1.0	0.21	1		Vinyl Acetate	ND	10	7.1	1	
Dichlorodifluoromethane	ND	1.0	0.49	1		Vinyl Chloride	ND	0.50	0.33	1	
1,1-Dichloroethane	ND	1.0	0.37	1		p/m-Xylene	ND	1.0	0.45	1	
1,2-Dichloroethane	ND	0.50	0.31	1		o-Xylene	ND	1.0	0.24	1	
1,1-Dichloroethene	ND	1.0	0.40	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.30	1	
c-1,2-Dichloroethene	ND	1.0	0.49	1		Tert-Butyl Alcohol (TBA)	ND	10	3.5	1	
t-1,2-Dichloroethene	ND	1.0	0.40	1		Diisopropyl Ether (DIPE)	ND	2.0	0.31	1	
1,2-Dichloropropane	ND	1.0	0.38	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.27	1	
1,3-Dichloropropane	ND	1.0	0.38	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	0.28	1	
2,2-Dichloropropane	ND	1.0	0.46	1		Ethanol	ND	100	50	1	
1,1-Dichloropropene	ND	1.0	0.26	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	105	80-126		1,2-Dichloroethane-d4	104	80-131	
Toluene-d8	99	80-120		1,4-Bromofluorobenzene	93	80-120	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

CH2M Hill		Date Received:	08/10/10
1000 Wilshire Blvd.		Work Order No:	10-08-0761
21st Floor		Preparation:	EPA 5030B
Los Angeles, CA 90017-2417		Method:	EPA 8015B (M)

Project SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-08-0691-1	**Aqueous**	**GC 42**	**08/10/10**	**08/10/10**	**100810S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	90	91	68-122	1	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

CH2M Hill		Date Received:	08/10/10
1000 Wilshire Blvd.		Work Order No:	10-08-0761
21st Floor		Preparation:	EPA 5030B
Los Angeles, CA 90017-2417		Method:	EPA 8260B

Project SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-08-0528-22	**Aqueous**	**GC/MS U**	**08/11/10**	**08/11/10**	**100811S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	108	111	80-120	3	0-20	
Carbon Tetrachloride	119	122	55-151	2	0-20	
Chlorobenzene	103	105	80-120	2	0-20	
1,2-Dibromoethane	110	110	77-125	0	0-20	
1,2-Dichlorobenzene	102	103	78-120	1	0-20	
1,2-Dichloroethane	107	111	80-120	3	0-20	
1,1-Dichloroethene	108	108	69-129	1	0-20	
Ethylbenzene	108	110	73-127	2	0-20	
Toluene	104	107	80-120	3	0-20	
Trichloroethene	108	111	67-133	3	0-20	
Vinyl Chloride	97	106	67-133	9	0-20	
Methyl-t-Butyl Ether (MTBE)	101	103	65-131	2	0-22	
Tert-Butyl Alcohol (TBA)	106	115	62-134	9	0-20	
Diisopropyl Ether (DIPE)	100	100	64-136	0	0-29	
Ethyl-t-Butyl Ether (ETBE)	101	105	70-124	4	0-20	
Tert-Amyl-Methyl Ether (TAME)	106	111	71-125	4	0-20	
Ethanol	90	105	44-152	16	0-43	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

CH2M Hill	Date Received: N/A
1000 Wilshire Blvd.	Work Order No: 10-08-0761
21st Floor	Preparation: EPA 3510C
Los Angeles, CA 90017-2417	Method: EPA 8015B (M)

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-384-30	**Aqueous**	**GC 27**	**08/13/10**	**08/13/10**	**100813B16**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Fuel Product	114	114	75-117	0	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

CH2M Hill		Date Received:	N/A
1000 Wilshire Blvd.		Work Order No:	10-08-0761
21st Floor		Preparation:	EPA 5030B
Los Angeles, CA 90017-2417		Method:	EPA 8015B (M)

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-247-4,403	**Aqueous**	**GC 42**	**08/10/10**	**08/10/10**	**100810B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	97	96	78-120	0	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

CH2M Hill
1000 Wilshire Blvd.
21st Floor
Los Angeles, CA 90017-2417

Date Received: N/A
Work Order No: 10-08-0761
Preparation: EPA 5030B
Method: EPA 8260B

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-001-1,687	**Aqueous**	**GC/MS U**	**08/11/10**	**08/11/10**	**100811L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	108	111	80-120	73-127	2	0-20	
Carbon Tetrachloride	125	122	67-139	55-151	2	0-22	
Chlorobenzene	107	105	80-120	73-127	1	0-20	
1,2-Dibromoethane	104	106	80-120	73-127	2	0-20	
1,2-Dichlorobenzene	99	101	79-120	72-127	2	0-20	
1,2-Dichloroethane	105	106	80-120	73-127	2	0-20	
1,1-Dichloroethene	112	112	71-125	62-134	1	0-25	
Ethylbenzene	110	108	80-123	73-130	2	0-20	
Toluene	106	106	80-120	73-127	0	0-20	
Trichloroethene	111	113	80-120	73-127	1	0-20	
Vinyl Chloride	97	105	68-140	56-152	8	0-23	
Methyl-t-Butyl Ether (MTBE)	102	102	75-123	67-131	1	0-25	
Tert-Butyl Alcohol (TBA)	107	108	72-126	63-135	1	0-20	
Diisopropyl Ether (DIPE)	103	100	75-129	66-138	3	0-22	
Ethyl-t-Butyl Ether (ETBE)	102	101	76-124	68-132	1	0-20	
Tert-Amyl-Methyl Ether (TAME)	104	109	79-121	72-128	5	0-20	
Ethanol	106	94	53-143	38-158	13	0-25	

Total number of LCS compounds : 17
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 10-08-0761

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
E	Concentration exceeds the calibration range.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

DATE:

PAGE: 1 OF 1

LABORATORY CLIENT: Kinder Morgan Energy Partners, Attn: Steve Defibaugh
ADDRESS: 1100 Town & Country Road
CITY: Orange, CA 92868
TEL: 714-560-4802 FAX: 714-560-4601 E-MAIL: james_dye@kindermorgan.com

CLIENT PROJECT NAME / NUMBER: SFPP - Norwalk Site
PROJECT CONTACT: James Dye
SAMPLER(S): (SIGNATURE)
P.O. NO.:
QUOTE NO.:
LAB USE ONLY: 08-0761

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 to D. Jablonski/CH2M HILL, cc: KMEP
Direct Bill KMEP/SFPP - Steve Defibaugh-ref. AFE# 81195
"J" flags required/Use lowest possible detection limit - all methods.

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MAT-RIX	NO. OF CONT.	TPH - g (8015M)	TPH-fp (8015M)	VOCs, Full List (8260B)	Oil & Grease (413.1)	TPH-g (C5-C14 Only) (8015M)	MtBE;BTEX;1,1-DCA;1,2-DCA;MEK(8260B)	Settleable Solids (160.5)	Total Suspended Solids (160.2)	Phenolics (420.1)	Hg,Cr(VI),Cu(1669,7199,6020)	Selenium on 24 HR TAT		Comments
1	INF-08-10	Influent	8/10/10	1215	WW	7	X	X	X										Temperature* = ___
																			(Temp. as sampled*)
																			Monthly

Relinquished by: (Signature)	Received by: (Signature) pannyle cH	Date: 8/10/10	Time: 12:44
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Revised: 08/06/10

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 10-08-0761

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: KMEP DATE: 08/10/10

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 1.4 °C + 0.5 °C (CF) = 1.9 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only Initial: DL

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: DL

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: DL

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Residual Chlorine / Dissolved Sulfide received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☑	☐	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☑500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na**

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** DL

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** WSC

Preservative: h: HCL n: HNO_3 na$_2$: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 znna: $ZnAc_2$+NaOH f: Field-filtered **Scanned by:** DL

Calscience
Environmental
Laboratories, Inc.

ACCREDITED IN ACCORDANCE WITH nelac

September 01, 2010

Dan Jablonski
CH2M Hill
1000 Wilshire Blvd.
21st Floor
Los Angeles, CA 90017-2417

Subject: **Calscience Work Order No.: 10-08-2369**
Client Reference: SFPP - Norwalk Site

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 8/31/2010 and analyzed in accordance with the attached chain-of-custody.

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Stephen Nowak
Project Manager

Case Narrative

Work Order # 10-08-2369

Modified EPA TO-14A or EPA TO-15

EPA Methods TO-14A and TO-15 describe gas chromatographic procedures that will allow for that separation of volatile organic compounds and their qualitative and quantitative analysis by mass spectrometry (GC/MS). A known volume of sample is directed from the container (Summa® canister or Tedlar™ bag) through a solid multi-module (glass beads, tenex, cryofocuser) concentrator. Following concentration, the VOCs are thermally desorbed onto a gas chromatographic column for separation and then detected on a mass selective detector.

Comparison of EPA TO-14A/TO-15 versus Calscience EPA TO-14A/TO-15 (Modified)

Requirement	EPA Method	Calscience Modifications
BFB Acceptance Criteria	CLP Protocol	SW846 Protocol
Initial Calibration	Allowable % RSD for each Target Analyte <= 30%, two analytes allowed <= 40%	Allowable % RSD for each Target Analyte <= 30%, 10% of analytes allowed <= 40%
Initial Calibration Verification (ICV) - Second Source Standard (LCS)	Not Mentioned	Analytes contained in the LCS standard evaluated against historical control limits for the LCS
Daily Calibration Verification (CCV)	Allowable % Difference for each Target Analyte is <= 30%	**Full List Analysis:** Allowable % Difference for each CCC analyte is <= 30%
		Target List Analysis: Allowable % Difference for each target analytes is <= 30%
Daily Calibration Verification (CCV) - Internal Standard Area Response	Allowable +/- 40% (Range: 60% to 140%)	Allowable +/- 50% (Range: 50% to 150%)
Method Blank, Laboratory Control Sample and Sample - Internal Standard Area Response	Allowable +/- 40% of the mean area response of most recent Initial Calibration (Range: 60% to 140%)	Allowable +/- 50% of the mean area response of the most recent Calibration Verification (Range: 50% to 150%)
Surrogates	Not Mentioned	1,4-Bromoflurobenzene, 1,2-Dichloroethane-d4 and Toluene-d8 - % Recoveries based upon historical control limits +/-3S

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/31/10
1000 Wilshire Blvd.		Work Order No:	10-08-2369
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	ASTM D-1946

Project: SFPP - Norwalk Site

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
INF-08-31	**10-08-2369-1-B**	**08/31/10 12:15**	**Air**	**GC 36**	**N/A**	**08/31/10 14:55**	**100831L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	ND	0.500	0.344	1		%v
Oxygen + Argon	21.4	0.500	0.370	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Pre Cat-08-31	**10-08-2369-2-B**	**08/31/10 12:15**	**Air**	**GC 36**	**N/A**	**08/31/10 15:12**	**100831L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	1.24	0.500	0.344	1		%v
Oxygen + Argon	19.8	0.500	0.370	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EFF-08-31	**10-08-2369-3-B**	**08/31/10 12:15**	**Air**	**GC 36**	**N/A**	**08/31/10 15:29**	**100831L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Carbon Dioxide	1.13	0.500	0.344	1		%v
Oxygen + Argon	20.0	0.500	0.370	1		%v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-03-002-1,131**	**N/A**	**Air**	**GC 36**	**N/A**	**08/31/10 09:13**	**100831L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Methane	ND	0.500	0.0981	1		%v
Carbon Dioxide	ND	0.500	0.344	1		%v
Carbon Monoxide	ND	0.500	0.272	1		%v
Oxygen + Argon	ND	0.500	0.370	1		%v
Nitrogen	ND	0.500	0.174	1		%v

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/31/10
1000 Wilshire Blvd.		Work Order No:	10-08-2369
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	EPA TO-3M

Project: SFPP - Norwalk Site

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
INF-08-31	**10-08-2369-1-A**	**08/31/10 12:15**	**Air**	**GC 53**	**N/A**	**08/31/10 15:23**	**100831L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	11	1.5	0.17	1		ppm (v/v)

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Pre Cat-08-31	**10-08-2369-2-A**	**08/31/10 12:15**	**Air**	**GC 53**	**N/A**	**08/31/10 15:32**	**100831L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	6.5	1.5	0.17	1		ppm (v/v)

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EFF-08-31	**10-08-2369-3-A**	**08/31/10 12:15**	**Air**	**GC 53**	**N/A**	**08/31/10 14:55**	**100831L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	2.8	1.5	0.17	1		ppm (v/v)

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**098-01-005-2,568**	**N/A**	**Air**	**GC 53**	**N/A**	**08/31/10 09:09**	**100831L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	ND	1.5	0.17	1		ppm (v/v)

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/31/10
1000 Wilshire Blvd.		Work Order No:	10-08-2369
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	SCAQMD 25.1M

Project: SFPP - Norwalk Site

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
INF-08-31	**10-08-2369-1-A**	**08/31/10 12:15**	**Air**	**GC 14**	**N/A**	**08/31/10 15:17**	**100831L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Methane	39	1.0	0.21	1		ppm (v/v)

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Pre Cat-08-31	**10-08-2369-2-A**	**08/31/10 12:15**	**Air**	**GC 14**	**N/A**	**08/31/10 15:37**	**100831L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Methane	160	1.0	0.21	1		ppm (v/v)

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EFF-08-31	**10-08-2369-3-A**	**08/31/10 12:15**	**Air**	**GC 14**	**N/A**	**08/31/10 14:58**	**100831L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Methane	190	1.0	0.21	1		ppm (v/v)

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-07-024-717**	**N/A**	**Air**	**GC 14**	**N/A**	**08/31/10 10:29**	**100831L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Methane	ND	1.0	0.21	1		ppm (v/v)
Carbon Dioxide	ND	1.0	0.34	1		ppm (v/v)
Carbon Monoxide	ND	5.0	0.33	1		ppm (v/v)
TGNMO	ND	5.0	0.54	1		ppm (v/v)

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/31/10
1000 Wilshire Blvd.		Work Order No:	10-08-2369
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	EPA TO-15M
		Units:	ppb (v/v)
Project: SFPP - Norwalk Site			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
INF-08-31	**10-08-2369-1-A**	**08/31/10 12:15**	**Air**	**GC/MS V**	**N/A**	**08/31/10 16:33**	**100831L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

-The method has been modified to use Tedlar bags instead of Summa Canisters.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	120	62	2.5		t-1,2-Dichloroethene	ND	1.2	0.47	2.5	
Benzene	72	1.2	0.24	2.5		t-1,3-Dichloropropene	ND	2.5	0.26	2.5	
Benzyl Chloride	ND	3.8	0.99	2.5		Ethylbenzene	12	1.2	0.28	2.5	
Bromodichloromethane	ND	1.2	0.25	2.5		4-Ethyltoluene	6.5	1.2	0.46	2.5	
Bromoform	ND	1.2	0.38	2.5		Hexachloro-1,3-Butadiene	ND	3.8	0.45	2.5	
Bromomethane	ND	1.2	0.23	2.5		2-Hexanone	ND	3.8	1.3	2.5	
2-Butanone	6.4	3.8	0.25	2.5		Methyl-t-Butyl Ether (MTBE)	7.7	5.0	0.30	2.5	
Carbon Disulfide	ND	25	12	2.5		Methylene Chloride	ND	12	2.5	2.5	
Carbon Tetrachloride	ND	1.2	0.25	2.5		4-Methyl-2-Pentanone	ND	3.8	0.38	2.5	
Chlorobenzene	ND	1.2	0.27	2.5		o-Xylene	25	1.2	0.30	2.5	
Chloroethane	ND	1.2	0.39	2.5		p/m-Xylene	62	5.0	1.9	2.5	
Chloroform	0.89	1.2	0.22	2.5	J	Styrene	ND	3.8	0.45	2.5	
Chloromethane	ND	1.2	0.24	2.5		Tetrachloroethene	ND	1.2	0.28	2.5	
Dibromochloromethane	ND	1.2	0.28	2.5		Toluene	66	12	5.0	2.5	
Dichlorodifluoromethane	ND	1.2	0.36	2.5		Trichloroethene	ND	1.2	0.27	2.5	
1,1-Dichloroethane	ND	1.2	0.26	2.5		Trichlorofluoromethane	ND	2.5	0.19	2.5	
1,1-Dichloroethene	ND	1.2	0.27	2.5		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	3.8	0.25	2.5	
1,2-Dibromoethane	ND	1.2	0.28	2.5		1,1,1-Trichloroethane	ND	1.2	0.25	2.5	
Dichlorotetrafluoroethane	ND	5.0	0.27	2.5		1,1,2-Trichloroethane	ND	1.2	0.30	2.5	
1,2-Dichlorobenzene	ND	1.2	0.28	2.5		1,3,5-Trimethylbenzene	8.3	1.2	0.42	2.5	
1,2-Dichloroethane	ND	1.2	0.24	2.5		1,1,2,2-Tetrachloroethane	ND	2.5	0.26	2.5	
1,2-Dichloropropane	ND	1.2	0.29	2.5		1,2,4-Trimethylbenzene	18	3.8	0.82	2.5	
1,3-Dichlorobenzene	ND	1.2	0.33	2.5		1,2,4-Trichlorobenzene	ND	5.0	1.8	2.5	
1,4-Dichlorobenzene	ND	1.2	0.34	2.5		Vinyl Acetate	ND	5.0	1.1	2.5	
c-1,3-Dichloropropene	ND	1.2	0.35	2.5		Vinyl Chloride	ND	1.2	0.25	2.5	
c-1,2-Dichloroethene	ND	1.2	0.33	2.5							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	87	57-129		1,2-Dichloroethane-d4	75	47-137	
Toluene-d8	91	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/31/10
1000 Wilshire Blvd.		Work Order No:	10-08-2369
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	EPA TO-15M
		Units:	ppb (v/v)
Project: SFPP - Norwalk Site			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Pre Cat-08-31	**10-08-2369-2-A**	**08/31/10 12:15**	**Air**	**GC/MS V**	**N/A**	**08/31/10 17:20**	**100831L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

-The method has been modified to use Tedlar bags instead of Summa Canisters.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	81	100	50	2	J	t-1,2-Dichloroethene	ND	1.0	0.37	2	
Benzene	53	1.0	0.19	2		t-1,3-Dichloropropene	ND	2.0	0.20	2	
Benzyl Chloride	ND	3.0	0.79	2		Ethylbenzene	6.3	1.0	0.23	2	
Bromodichloromethane	ND	1.0	0.20	2		4-Ethyltoluene	2.4	1.0	0.36	2	
Bromoform	ND	1.0	0.30	2		Hexachloro-1,3-Butadiene	ND	3.0	0.36	2	
Bromomethane	ND	1.0	0.19	2		2-Hexanone	ND	3.0	1.0	2	
2-Butanone	18	3.0	0.20	2		Methyl-t-Butyl Ether (MTBE)	1.6	4.0	0.24	2	J
Carbon Disulfide	ND	20	10	2		Methylene Chloride	ND	10	2.0	2	
Carbon Tetrachloride	ND	1.0	0.20	2		4-Methyl-2-Pentanone	ND	3.0	0.30	2	
Chlorobenzene	ND	1.0	0.22	2		o-Xylene	12	1.0	0.24	2	
Chloroethane	ND	1.0	0.31	2		p/m-Xylene	28	4.0	1.5	2	
Chloroform	0.48	1.0	0.18	2	J	Styrene	ND	3.0	0.36	2	
Chloromethane	ND	1.0	0.20	2		Tetrachloroethene	ND	1.0	0.22	2	
Dibromochloromethane	ND	1.0	0.22	2		Toluene	39	10	4.0	2	
Dichlorodifluoromethane	ND	1.0	0.29	2		Trichloroethene	ND	1.0	0.21	2	
1,1-Dichloroethane	ND	1.0	0.21	2		Trichlorofluoromethane	ND	2.0	0.15	2	
1,1-Dichloroethene	ND	1.0	0.22	2		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	3.0	0.20	2	
1,2-Dibromoethane	ND	1.0	0.22	2		1,1,1-Trichloroethane	ND	1.0	0.20	2	
Dichlorotetrafluoroethane	ND	4.0	0.22	2		1,1,2-Trichloroethane	ND	1.0	0.24	2	
1,2-Dichlorobenzene	ND	1.0	0.22	2		1,3,5-Trimethylbenzene	3.1	1.0	0.34	2	
1,2-Dichloroethane	ND	1.0	0.19	2		1,1,2,2-Tetrachloroethane	ND	2.0	0.21	2	
1,2-Dichloropropane	ND	1.0	0.23	2		1,2,4-Trimethylbenzene	6.0	3.0	0.65	2	
1,3-Dichlorobenzene	ND	1.0	0.26	2		1,2,4-Trichlorobenzene	ND	4.0	1.4	2	
1,4-Dichlorobenzene	ND	1.0	0.27	2		Vinyl Acetate	ND	4.0	0.91	2	
c-1,3-Dichloropropene	ND	1.0	0.28	2		Vinyl Chloride	ND	1.0	0.20	2	
c-1,2-Dichloroethene	ND	1.0	0.27	2							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	85	57-129		1,2-Dichloroethane-d4	73	47-137	
Toluene-d8	90	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/31/10
1000 Wilshire Blvd.		Work Order No:	10-08-2369
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	EPA TO-15M
		Units:	ppb (v/v)
Project: SFPP - Norwalk Site			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EFF-08-31	**10-08-2369-3-A**	**08/31/10 12:15**	**Air**	**GC/MS V**	**N/A**	**08/31/10 15:45**	**100831L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

-The method has been modified to use Tedlar bags instead of Summa Canisters.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	42	50	25	1	J	t-1,2-Dichloroethene	ND	0.50	0.19	1	
Benzene	6.7	0.50	0.094	1		t-1,3-Dichloropropene	ND	1.0	0.10	1	
Benzyl Chloride	ND	1.5	0.39	1		Ethylbenzene	1.1	0.50	0.11	1	
Bromodichloromethane	ND	0.50	0.10	1		4-Ethyltoluene	0.49	0.50	0.18	1	J
Bromoform	ND	0.50	0.15	1		Hexachloro-1,3-Butadiene	ND	1.5	0.18	1	
Bromomethane	ND	0.50	0.093	1		2-Hexanone	1.1	1.5	0.52	1	J
2-Butanone	17	1.5	0.099	1		Methyl-t-Butyl Ether (MTBE)	ND	2.0	0.12	1	
Carbon Disulfide	ND	10	5.0	1		Methylene Chloride	ND	5.0	1.0	1	
Carbon Tetrachloride	ND	0.50	0.098	1		4-Methyl-2-Pentanone	ND	1.5	0.15	1	
Chlorobenzene	ND	0.50	0.11	1		o-Xylene	1.9	0.50	0.12	1	
Chloroethane	ND	0.50	0.15	1		p/m-Xylene	5.2	2.0	0.76	1	
Chloroform	ND	0.50	0.090	1		Styrene	ND	1.5	0.18	1	
Chloromethane	0.27	0.50	0.098	1	J	Tetrachloroethene	ND	0.50	0.11	1	
Dibromochloromethane	ND	0.50	0.11	1		Toluene	7.4	5.0	2.0	1	
Dichlorodifluoromethane	0.27	0.50	0.14	1	J	Trichloroethene	0.70	0.50	0.11	1	
1,1-Dichloroethane	ND	0.50	0.10	1		Trichlorofluoromethane	ND	1.0	0.077	1	
1,1-Dichloroethene	ND	0.50	0.11	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.5	0.10	1	
1,2-Dibromoethane	ND	0.50	0.11	1		1,1,1-Trichloroethane	ND	0.50	0.10	1	
Dichlorotetrafluoroethane	ND	2.0	0.11	1		1,1,2-Trichloroethane	ND	0.50	0.12	1	
1,2-Dichlorobenzene	ND	0.50	0.11	1		1,3,5-Trimethylbenzene	0.74	0.50	0.17	1	
1,2-Dichloroethane	ND	0.50	0.095	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.11	1	
1,2-Dichloropropane	ND	0.50	0.11	1		1,2,4-Trimethylbenzene	2.0	1.5	0.33	1	
1,3-Dichlorobenzene	ND	0.50	0.13	1		1,2,4-Trichlorobenzene	ND	2.0	0.72	1	
1,4-Dichlorobenzene	ND	0.50	0.13	1		Vinyl Acetate	ND	2.0	0.45	1	
c-1,3-Dichloropropene	ND	0.50	0.14	1		Vinyl Chloride	ND	0.50	0.10	1	
c-1,2-Dichloroethene	ND	0.50	0.13	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	86	57-129		1,2-Dichloroethane-d4	80	47-137	
Toluene-d8	90	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	08/31/10
1000 Wilshire Blvd.		Work Order No:	10-08-2369
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	EPA TO-15M
		Units:	ppb (v/v)
Project: SFPP - Norwalk Site			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-981-737**	**N/A**	**Air**	**GC/MS V**	**N/A**	**08/31/10 14:51**	**100831L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	50	25	1		t-1,2-Dichloroethene	ND	0.50	0.19	1	
Benzene	ND	0.50	0.094	1		t-1,3-Dichloropropene	ND	1.0	0.10	1	
Benzyl Chloride	ND	1.5	0.39	1		Ethylbenzene	ND	0.50	0.11	1	
Bromodichloromethane	ND	0.50	0.10	1		4-Ethyltoluene	ND	0.50	0.18	1	
Bromoform	ND	0.50	0.15	1		Hexachloro-1,3-Butadiene	ND	1.5	0.18	1	
Bromomethane	ND	0.50	0.093	1		2-Hexanone	ND	1.5	0.52	1	
2-Butanone	ND	1.5	0.099	1		Methyl-t-Butyl Ether (MTBE)	ND	2.0	0.12	1	
Carbon Disulfide	ND	10	5.0	1		Methylene Chloride	ND	5.0	1.0	1	
Carbon Tetrachloride	ND	0.50	0.098	1		4-Methyl-2-Pentanone	ND	1.5	0.15	1	
Chlorobenzene	ND	0.50	0.11	1		o-Xylene	ND	0.50	0.12	1	
Chloroethane	ND	0.50	0.15	1		p/m-Xylene	ND	2.0	0.76	1	
Chloroform	ND	0.50	0.090	1		Styrene	ND	1.5	0.18	1	
Chloromethane	ND	0.50	0.098	1		Tetrachloroethene	ND	0.50	0.11	1	
Dibromochloromethane	ND	0.50	0.11	1		Toluene	ND	5.0	2.0	1	
Dichlorodifluoromethane	ND	0.50	0.14	1		Trichloroethene	ND	0.50	0.11	1	
1,1-Dichloroethane	ND	0.50	0.10	1		Trichlorofluoromethane	ND	1.0	0.077	1	
1,1-Dichloroethene	ND	0.50	0.11	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.5	0.10	1	
1,2-Dibromoethane	ND	0.50	0.11	1		1,1,1-Trichloroethane	ND	0.50	0.10	1	
Dichlorotetrafluoroethane	ND	2.0	0.11	1		1,1,2-Trichloroethane	ND	0.50	0.12	1	
1,2-Dichlorobenzene	ND	0.50	0.11	1		1,3,5-Trimethylbenzene	ND	0.50	0.17	1	
1,2-Dichloroethane	ND	0.50	0.095	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.11	1	
1,2-Dichloropropane	ND	0.50	0.11	1		1,2,4-Trimethylbenzene	ND	1.5	0.33	1	
1,3-Dichlorobenzene	ND	0.50	0.13	1		1,2,4-Trichlorobenzene	ND	2.0	0.72	1	
1,4-Dichlorobenzene	ND	0.50	0.13	1		Vinyl Acetate	ND	2.0	0.45	1	
c-1,3-Dichloropropene	ND	0.50	0.14	1		Vinyl Chloride	ND	0.50	0.10	1	
c-1,2-Dichloroethene	ND	0.50	0.13	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	87	57-129		1,2-Dichloroethane-d4	80	47-137	
Toluene-d8	92	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

CH2M Hill		Date Received:	08/31/10
1000 Wilshire Blvd.		Work Order No:	10-08-2369
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	EPA TO-3M

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
EFF-08-31	**Air**	**GC 53**	**N/A**	**08/31/10**	**100831D01**

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
TPH as Gasoline	2.8	2.8	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

CH2M Hill
1000 Wilshire Blvd.
21st Floor
Los Angeles, CA 90017-2417

Date Received: N/A
Work Order No: 10-08-2369
Preparation: N/A
Method: ASTM D-1946

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-03-002-1,131	**Air**	**GC 36**	**N/A**	**08/31/10**	**100831L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Carbon Dioxide	94	92	80-120	2	0-30	
Oxygen + Argon	88	88	80-120	0	0-30	
Nitrogen	88	88	80-120	0	0-30	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

CH2M Hill
1000 Wilshire Blvd.
21st Floor
Los Angeles, CA 90017-2417

Date Received: N/A
Work Order No: 10-08-2369
Preparation: N/A
Method: SCAQMD 25.1M

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-024-717	**Air**	**GC 14**	**N/A**	**08/31/10**	**100831L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Methane	107	106	80-120	1	0-20	
Carbon Monoxide	111	111	80-120	0	0-20	
TGNMO	108	108	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

CH2M Hill
1000 Wilshire Blvd.
21st Floor
Los Angeles, CA 90017-2417

Date Received: N/A
Work Order No: 10-08-2369
Preparation: N/A
Method: EPA TO-3M

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-476-195	**Air**	**GC 33**	**N/A**	**09/01/10**	**100901L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Methane	98	96	80-120	2	0-20	
Ethane	94	93	80-120	1	0-20	
Propane	94	93	80-120	1	0-20	
Butane	93	93	80-120	0	0-20	
Pentane	92	92	80-120	0	0-20	
Hexane	89	90	80-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

CH2M Hill
1000 Wilshire Blvd.
21st Floor
Los Angeles, CA 90017-2417

Date Received: N/A
Work Order No: 10-08-2369
Preparation: N/A
Method: EPA TO-15M

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-981-737	**Air**	**GC/MS V**	**N/A**	**08/31/10**	**100831L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	101	101	60-156	44-172	1	0-40	
Carbon Tetrachloride	96	96	64-154	49-169	0	0-32	
1,2-Dibromoethane	115	117	54-144	39-159	2	0-36	
1,2-Dichlorobenzene	116	117	34-160	13-181	1	0-47	
1,2-Dichloroethane	85	85	69-153	55-167	0	0-30	
1,2-Dichloropropane	96	96	67-157	52-172	0	0-35	
1,4-Dichlorobenzene	123	123	36-156	16-176	0	0-47	
c-1,3-Dichloropropene	110	109	61-157	45-173	1	0-35	
Ethylbenzene	119	122	52-154	35-171	2	0-38	
o-Xylene	111	113	52-148	36-164	1	0-38	
p/m-Xylene	113	114	42-156	23-175	2	0-41	
Tetrachloroethene	114	117	56-152	40-168	3	0-40	
Toluene	112	114	56-146	41-161	2	0-43	
Trichloroethene	101	100	63-159	47-175	1	0-34	
1,1,2-Trichloroethane	100	99	65-149	51-163	1	0-37	
Vinyl Chloride	77	81	45-177	23-199	5	0-36	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 10-08-2369

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
E	Concentration exceeds the calibration range.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

DATE: 08/31/10

PAGE: 1 OF 1

LABORATORY CLIENT: Kinder Morgan Energy Partners, Attn: Steve Definbough
ADDRESS: 1100 Town & Country Road
CITY: Orange, CA 92868
TEL: 714-560-4802 | FAX: 714-560-4601 | E-MAIL: james_dye@kindermorgan.com

CLIENT PROJECT NAME / NUMBER: SFPP - Norwalk Site
PROJECT CONTACT: James Dye
SAMPLER(S): (SIGNATURE)

P.O. NO.:
QUOTE NO.:
LAB USE ONLY: 08-3369

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 to D. Jablonski/CH2M HILL, cc: KMEP
Direct Bill KMEP/SFPP - Steve Defibaugh-ref. AFE# 81195
"J" flags required/Use lowest possible detection limit - all methods.

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MAT-RIX	NO. OF CONT.	TO-15	TO-3 (TPH-g)	ASTM-1946 (O2/Argon, CO2, ~~CH4~~)	Methane Method 25.1	Comments
1	INF- 08-31	Influent Vapor to SVE	8-31-10	1215	Air	2	X	X	X	X	Monthly sample
2	Pre Cat- 08-31	sample port pre Cat	8-31-10	1215	Air	2	X	X	X	X	
3	EFF- 08-31	Stack	8-31-10	1215	Air	2	X	X	X	X	

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
		8/31/10	1357
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Revised: 08/06/10

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 10-08- 2 3 6 9

SAMPLE RECEIPT FORM

Box 0 of 0

CLIENT: KINDER MORGAN

DATE: 08/31/10

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature ____•____ °C + 0.5 °C (CF) = ____•____ °C ☐ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☑ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** PS

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☐ Not Present ☑ N/A **Initial:** PS

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** PS

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Residual Chlorine / Dissolved Sulfide received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☑	☐	☐

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na**

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☑Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** PS

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:**

Preservative: h: HCL n: HNO_3 na$_2$: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 znna: $ZnAc_2$+NaOH f: Field-filtered **Scanned by:**

Calscience Environmental Laboratories, Inc.

September 23, 2010

Dan Jablonski
CH2M Hill
1000 Wilshire Blvd.
21st Floor
Los Angeles, CA 90017-2417

Subject: **Calscience Work Order No.: 10-09-1048**
Client Reference: SFPP - Norwalk Site

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/14/2010 and analyzed in accordance with the attached chain-of-custody.

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Stephen Nowak
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	09/14/10
1000 Wilshire Blvd.		Work Order No:	10-09-1048
21st Floor		Preparation:	EPA 3510C
Los Angeles, CA 90017-2417		Method:	EPA 8015B (M)

Project: SFPP - Norwalk Site

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
INF-09-14	**10-09-1048-1-G**	**09/14/10 12:50**	**Aqueous**	**GC 49**	**09/20/10**	**09/21/10 03:35**	**100920B15**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Fuel Product	10000	500	430	1		ug/L
Surrogates:	REC (%)	Control Limits	MDL		Qual	
Decachlorobiphenyl	135	68-140				

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-384-31**	**N/A**	**Aqueous**	**GC 49**	**09/20/10**	**09/21/10 02:49**	**100920B15**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Fuel Product	ND	500	430	1		ug/L
Surrogates:	REC (%)	Control Limits	MDL		Qual	
Decachlorobiphenyl	138	68-140				

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	09/14/10
1000 Wilshire Blvd.		Work Order No:	10-09-1048
21st Floor		Preparation:	EPA 5030B
Los Angeles, CA 90017-2417		Method:	EPA 8015B (M)

Project: SFPP - Norwalk Site

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
INF-09-14	**10-09-1048-1-E**	**09/14/10 12:50**	**Aqueous**	**GC 42**	**09/14/10**	**09/15/10 10:05**	**100914B02**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	9400	1000	480	10		ug/L
Surrogates:	REC (%)	Control Limits	MDL		Qual	
1,4-Bromofluorobenzene	70	38-134				

Method Blank	**099-12-247-4,496**	**N/A**	**Aqueous**	**GC 42**	**09/14/10**	**09/14/10 18:51**	**100914B02**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	ND	100	48	1		ug/L
Surrogates:	REC (%)	Control Limits	MDL		Qual	
1,4-Bromofluorobenzene	66	38-134				

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	09/14/10
1000 Wilshire Blvd.		Work Order No:	10-09-1048
21st Floor		Preparation:	EPA 5030C
Los Angeles, CA 90017-2417		Method:	EPA 8260C
		Units:	ug/L
Project: SFPP - Norwalk Site			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
INF-09-14	**10-09-1048-1-A**	**09/14/10 12:50**	**Aqueous**	**GC/MS OO**	**09/22/10**	**09/22/10 17:01**	**100922L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	2500	1000	50		c-1,3-Dichloropropene	ND	25	14	50	
Benzene	4900	25	14	50		t-1,3-Dichloropropene	ND	25	18	50	
Bromobenzene	ND	50	17	50		Ethylbenzene	170	50	11	50	
Bromochloromethane	ND	50	35	50		2-Hexanone	ND	500	340	50	
Bromodichloromethane	ND	50	17	50		Isopropylbenzene	23	50	11	50	J
Bromoform	ND	50	28	50		p-Isopropyltoluene	ND	50	13	50	
Bromomethane	ND	500	210	50		Methylene Chloride	ND	500	130	50	
2-Butanone	ND	500	350	50		4-Methyl-2-Pentanone	ND	500	220	50	
n-Butylbenzene	27	50	14	50	J	Naphthalene	170	500	130	50	J
sec-Butylbenzene	ND	50	10	50		n-Propylbenzene	59	50	40	50	
tert-Butylbenzene	ND	50	14	50		Styrene	ND	50	15	50	
Carbon Disulfide	ND	500	96	50		1,1,1,2-Tetrachloroethane	ND	50	18	50	
Carbon Tetrachloride	ND	25	21	50		1,1,2,2-Tetrachloroethane	ND	50	22	50	
Chlorobenzene	ND	50	11	50		Tetrachloroethene	ND	50	26	50	
Chloroethane	ND	250	64	50		Toluene	1100	50	16	50	
Chloroform	ND	50	17	50		1,2,3-Trichlorobenzene	ND	50	15	50	
Chloromethane	ND	500	24	50		1,2,4-Trichlorobenzene	ND	50	24	50	
2-Chlorotoluene	ND	50	28	50		1,1,1-Trichloroethane	ND	50	22	50	
4-Chlorotoluene	ND	50	11	50		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	500	32	50	
Dibromochloromethane	ND	50	24	50		1,1,2-Trichloroethane	ND	50	27	50	
1,2-Dibromo-3-Chloropropane	ND	250	160	50		Trichloroethene	ND	50	15	50	
1,2-Dibromoethane	ND	50	23	50		Trichlorofluoromethane	ND	500	16	50	
Dibromomethane	ND	50	29	50		1,2,3-Trichloropropane	ND	250	67	50	
1,2-Dichlorobenzene	ND	50	14	50		1,2,4-Trimethylbenzene	340	50	12	50	
1,3-Dichlorobenzene	ND	50	14	50		1,3,5-Trimethylbenzene	110	50	12	50	
1,4-Dichlorobenzene	ND	50	11	50		Vinyl Acetate	ND	500	350	50	
Dichlorodifluoromethane	ND	50	25	50		Vinyl Chloride	ND	25	16	50	
1,1-Dichloroethane	ND	50	19	50		p/m-Xylene	960	50	23	50	
1,2-Dichloroethane	ND	25	16	50		o-Xylene	380	50	12	50	
1,1-Dichloroethene	ND	50	20	50		Methyl-t-Butyl Ether (MTBE)	380	50	15	50	
c-1,2-Dichloroethene	ND	50	24	50		Tert-Butyl Alcohol (TBA)	6600	500	180	50	
t-1,2-Dichloroethene	ND	50	20	50		Diisopropyl Ether (DIPE)	34	100	15	50	J
1,2-Dichloropropane	ND	50	19	50		Ethyl-t-Butyl Ether (ETBE)	ND	100	13	50	
1,3-Dichloropropane	ND	50	19	50		Tert-Amyl-Methyl Ether (TAME)	ND	100	14	50	
2,2-Dichloropropane	ND	50	23	50		Ethanol	ND	5000	2500	50	
1,1-Dichloropropene	ND	50	13	50							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	104	80-126		1,2-Dichloroethane-d4	105	80-131	
Toluene-d8	101	80-120		1,4-Bromofluorobenzene	97	80-120	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	09/14/10
1000 Wilshire Blvd.		Work Order No:	10-09-1048
21st Floor		Preparation:	EPA 5030C
Los Angeles, CA 90017-2417		Method:	EPA 8260C
		Units:	ug/L
Project: SFPP - Norwalk Site			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-106-153**	**N/A**	**Aqueous**	**GC/MS OO**	**09/22/10**	**09/22/10 14:17**	**100922L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	50	20	1		c-1,3-Dichloropropene	ND	0.50	0.28	1	
Benzene	ND	0.50	0.28	1		t-1,3-Dichloropropene	ND	0.50	0.36	1	
Bromobenzene	ND	1.0	0.33	1		Ethylbenzene	ND	1.0	0.22	1	
Bromochloromethane	ND	1.0	0.69	1		2-Hexanone	ND	10	6.9	1	
Bromodichloromethane	ND	1.0	0.33	1		Isopropylbenzene	ND	1.0	0.23	1	
Bromoform	ND	1.0	0.55	1		p-Isopropyltoluene	ND	1.0	0.26	1	
Bromomethane	ND	10	4.3	1		Methylene Chloride	ND	10	2.6	1	
2-Butanone	ND	10	6.9	1		4-Methyl-2-Pentanone	ND	10	4.4	1	
n-Butylbenzene	ND	1.0	0.28	1		Naphthalene	ND	10	2.5	1	
sec-Butylbenzene	ND	1.0	0.20	1		n-Propylbenzene	ND	1.0	0.79	1	
tert-Butylbenzene	ND	1.0	0.28	1		Styrene	ND	1.0	0.30	1	
Carbon Disulfide	ND	10	1.9	1		1,1,1,2-Tetrachloroethane	ND	1.0	0.35	1	
Carbon Tetrachloride	ND	0.50	0.43	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.44	1	
Chlorobenzene	ND	1.0	0.22	1		Tetrachloroethene	ND	1.0	0.51	1	
Chloroethane	ND	5.0	1.3	1		Toluene	ND	1.0	0.33	1	
Chloroform	ND	1.0	0.33	1		1,2,3-Trichlorobenzene	ND	1.0	0.31	1	
Chloromethane	ND	10	0.49	1		1,2,4-Trichlorobenzene	ND	1.0	0.49	1	
2-Chlorotoluene	ND	1.0	0.55	1		1,1,1-Trichloroethane	ND	1.0	0.45	1	
4-Chlorotoluene	ND	1.0	0.21	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.64	1	
Dibromochloromethane	ND	1.0	0.48	1		1,1,2-Trichloroethane	ND	1.0	0.54	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	3.1	1		Trichloroethene	ND	1.0	0.30	1	
1,2-Dibromoethane	ND	1.0	0.47	1		Trichlorofluoromethane	ND	10	0.31	1	
Dibromomethane	ND	1.0	0.59	1		1,2,3-Trichloropropane	ND	5.0	1.3	1	
1,2-Dichlorobenzene	ND	1.0	0.27	1		1,2,4-Trimethylbenzene	ND	1.0	0.24	1	
1,3-Dichlorobenzene	ND	1.0	0.28	1		1,3,5-Trimethylbenzene	ND	1.0	0.23	1	
1,4-Dichlorobenzene	ND	1.0	0.21	1		Vinyl Acetate	ND	10	7.1	1	
Dichlorodifluoromethane	ND	1.0	0.49	1		Vinyl Chloride	ND	0.50	0.33	1	
1,1-Dichloroethane	ND	1.0	0.37	1		p/m-Xylene	ND	1.0	0.45	1	
1,2-Dichloroethane	ND	0.50	0.31	1		o-Xylene	ND	1.0	0.24	1	
1,1-Dichloroethene	ND	1.0	0.40	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.30	1	
c-1,2-Dichloroethene	ND	1.0	0.49	1		Tert-Butyl Alcohol (TBA)	ND	10	3.5	1	
t-1,2-Dichloroethene	ND	1.0	0.40	1		Diisopropyl Ether (DIPE)	ND	2.0	0.31	1	
1,2-Dichloropropane	ND	1.0	0.38	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.27	1	
1,3-Dichloropropane	ND	1.0	0.38	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	0.28	1	
2,2-Dichloropropane	ND	1.0	0.46	1		Ethanol	ND	100	50	1	
1,1-Dichloropropene	ND	1.0	0.26	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	106	80-126		1,2-Dichloroethane-d4	111	80-131	
Toluene-d8	100	80-120		1,4-Bromofluorobenzene	98	80-120	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

CH2M Hill		Date Received:	09/14/10
1000 Wilshire Blvd.		Work Order No:	10-09-1048
21st Floor		Preparation:	EPA 5030B
Los Angeles, CA 90017-2417		Method:	EPA 8015B (M)

Project SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-09-0854-1	**Aqueous**	**GC 42**	**09/14/10**	**09/14/10**	**100914S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	110	106	68-122	3	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

CH2M Hill		Date Received:	09/14/10
1000 Wilshire Blvd.		Work Order No:	10-09-1048
21st Floor		Preparation:	EPA 5030C
Los Angeles, CA 90017-2417		Method:	EPA 8260C

Project SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-09-0809-17	**Aqueous**	**GC/MS OO**	**09/22/10**	**09/22/10**	**100922S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	105	103	80-120	2	0-20	
Carbon Tetrachloride	100	97	55-151	3	0-20	
Chlorobenzene	98	97	80-120	1	0-20	
1,2-Dibromoethane	101	99	77-125	1	0-20	
1,2-Dichlorobenzene	96	96	78-120	0	0-20	
1,2-Dichloroethane	97	99	80-120	2	0-20	
1,1-Dichloroethene	113	112	69-129	2	0-20	
Ethylbenzene	102	101	73-127	1	0-20	
Toluene	101	100	80-120	2	0-20	
Trichloroethene	100	98	67-133	3	0-20	
Vinyl Chloride	128	132	67-133	4	0-20	
Methyl-t-Butyl Ether (MTBE)	106	104	65-131	2	0-22	
Tert-Butyl Alcohol (TBA)	100	104	62-134	4	0-20	
Diisopropyl Ether (DIPE)	123	120	64-136	3	0-29	
Ethyl-t-Butyl Ether (ETBE)	114	111	70-124	3	0-20	
Tert-Amyl-Methyl Ether (TAME)	106	107	71-125	1	0-20	
Ethanol	100	109	44-152	8	0-43	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

CH2M Hill
1000 Wilshire Blvd.
21st Floor
Los Angeles, CA 90017-2417

Date Received: N/A
Work Order No: 10-09-1048
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-384-31	**Aqueous**	**GC 49**	**09/20/10**	**09/21/10**	**100920B15**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Fuel Product	113	106	75-117	6	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

CH2M Hill		Date Received:	N/A
1000 Wilshire Blvd.		Work Order No:	10-09-1048
21st Floor		Preparation:	EPA 5030B
Los Angeles, CA 90017-2417		Method:	EPA 8015B (M)

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-247-4,496	**Aqueous**	**GC 42**	**09/14/10**	**09/14/10**	**100914B02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	113	111	78-120	2	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

CH2M Hill
1000 Wilshire Blvd.
21st Floor
Los Angeles, CA 90017-2417

Date Received: N/A
Work Order No: 10-09-1048
Preparation: EPA 5030C
Method: EPA 8260C

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-106-153	**Aqueous**	**GC/MS OO**	**09/22/10**	**09/22/10**	**100922L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	104	103	80-120	73-127	1	0-20	
Carbon Tetrachloride	101	98	67-139	55-151	4	0-22	
Chlorobenzene	98	97	80-120	73-127	1	0-20	
1,2-Dibromoethane	101	106	80-120	73-127	5	0-20	
1,2-Dichlorobenzene	97	98	79-120	72-127	1	0-20	
1,2-Dichloroethane	99	101	80-120	73-127	2	0-20	
1,1-Dichloroethene	116	111	71-125	62-134	4	0-25	
Ethylbenzene	103	99	80-123	73-130	4	0-20	
Toluene	101	100	80-120	73-127	1	0-20	
Trichloroethene	100	99	80-120	73-127	1	0-20	
Vinyl Chloride	132	129	68-140	56-152	3	0-23	
Methyl-t-Butyl Ether (MTBE)	107	118	75-123	67-131	9	0-25	
Tert-Butyl Alcohol (TBA)	102	113	72-126	63-135	11	0-20	
Diisopropyl Ether (DIPE)	121	126	75-129	66-138	4	0-22	
Ethyl-t-Butyl Ether (ETBE)	114	122	76-124	68-132	7	0-20	
Tert-Amyl-Methyl Ether (TAME)	110	121	79-121	72-128	9	0-20	
Ethanol	99	104	53-143	38-158	5	0-25	

Total number of LCS compounds : 17
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 10-09-1048

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
E	Concentration exceeds the calibration range.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

Calscience Environmental Laboratories, Inc.

7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

DATE: 9-14-10

PAGE: 1 OF 1

LABORATORY CLIENT: Kinder Morgan Energy Partners, Attn: Steve Defibaugh
ADDRESS: 1100 Town & Country Road
CITY: Orange, CA 92868
TEL: 714-560-4802 FAX: 714-560-4601 E-MAIL: james_dye@kindermorgan.com

CLIENT PROJECT NAME / NUMBER: SFPP - Norwalk Site
PROJECT CONTACT: James Dye
SAMPLER(S): (SIGNATURE)

P.O. NO.:
QUOTE NO.:
LAB USE ONLY: 09-1048

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 to D. Jablonski/CH2M HILL, cc: KMEP
Direct Bill KMEP/SFPP - Steve Defibaugh-ref. AFE# 81195
"J" flags required/Use lowest possible detection limit - all methods.

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MAT-RIX	NO. OF CONT.	TPH - g (8015M)	TPH-fp (8015M)	VOCs, Full List (8260B)	Oil & Grease (413.1)	TPH-g (C5-C14 Only) (8015M)	MtBE;BTEX;1,1-DCA;1,2-DCA;MEK(8260B)	Settleable Solids (160.5)	Total Suspended Solids (160.2)	Phenolics (420.1)	Hg,Cr(VI),Cu(1669,7199,6020)	Selenium on 24 HR TAT		Comments
1	INF-09-14	Influent	9-14-10	1250	WW	7	X	X	X										Temperature* = ___
																			(Temp. as sampled*)
																			Monthly

Relinquished by: (Signature)	Received by: (Signature) bannyle cel	Date: 9/14/10	Time: 14:45
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Revised: 08/06/10

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 10-09-1048

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: KMEP

DATE: 09/14/10

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 2.2 °C + 0.5 °C (CF) = 2.7 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only Initial: b.c

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: b.c

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: JS

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Residual Chlorine / Dissolved Sulfide received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☑	☐	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s** ☐500AGB ☑500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na** ☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** JS

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** DMC

Preservative: h: HCL n: HNO_3 na$_2$: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 znna: $ZnAc_2$+NaOH f: Field-filtered **Scanned by:** JS

Calscience
Environmental
Laboratories, Inc.

September 21, 2010

Dan Jablonski
CH2M Hill
1000 Wilshire Blvd.
21st Floor
Los Angeles, CA 90017-2417

Subject: **Calscience Work Order No.: 10-09-1049**
Client Reference: SFPP - Norwalk Site

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 09/14/2010 and analyzed in accordance with the attached chain-of-custody.

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Stephen Nowak
Project Manager

Case Narrative

Work Order # 10-09-1049

Modified EPA TO-14A or EPA TO-15

EPA Methods TO-14A and TO-15 describe gas chromatographic procedures that will allow for that separation of volatile organic compounds and their qualitative and quantitative analysis by mass spectrometry (GC/MS). A known volume of sample is directed from the container (Summa® canister or Tedlar™ bag) through a solid multi-module (glass beads, tenex, cryofocuser) concentrator. Following concentration, the VOCs are thermally desorbed onto a gas chromatographic column for separation and then detected on a mass selective detector.

Comparison of EPA TO-14A/TO-15 versus Calscience EPA TO-14A/TO-15 (Modified)

Requirement	EPA Method	Calscience Modifications
BFB Acceptance Criteria	CLP Protocol	SW846 Protocol
Initial Calibration	Allowable % RSD for each Target Analyte <= 30%, two analytes allowed <= 40%	Allowable % RSD for each Target Analyte <= 30%, 10% of analytes allowed <= 40%
Initial Calibration Verification (ICV) - Second Source Standard (LCS)	Not Mentioned	Analytes contained in the LCS standard evaluated against historical control limits for the LCS
Daily Calibration Verification (CCV)	Allowable % Difference for each Target Analyte is <= 30%	**Full List Analysis:** Allowable % Difference for each CCC analyte is <= 30%
		Target List Analysis: Allowable % Difference for each target analytes is <= 30%
Daily Calibration Verification (CCV) - Internal Standard Area Response	Allowable +/- 40% (Range: 60% to 140%)	Allowable +/- 50% (Range: 50% to 150%)
Method Blank, Laboratory Control Sample and Sample - Internal Standard Area Response	Allowable +/- 40% of the mean area response of most recent Initial Calibration (Range: 60% to 140%)	Allowable +/- 50% of the mean area response of the most recent Calibration Verification (Range: 50% to 150%)
Surrogates	Not Mentioned	1,4-Bromoflurobenzene, 1,2-Dichloroethane-d4 and Toluene-d8 - % Recoveries based upon historical control limits +/-3S

Calscience Environmental Laboratories, Inc.

Client: CH2M Hill
1000 Wilshire Blvd.
21st Floor
Attn: Dan Jablonski

Work Order: 10-09-1049
Project name: SFPP - Norwalk Site
Received: 09/14/10 14:45

DETECTIONS SUMMARY

Client Sample ID / Analyte	Result	Qualifiers	Reporting Limit	Units	Method	Extraction
INF-09-14						
Oxygen + Argon	**21.6**		0.500	%v	ASTM D-1946	N/A
TPH as Gasoline	**6.1**		1.5	ppm (v/v)	EPA TO-3M	N/A
Benzene	**63**		0.80	ppb (v/v)	EPA TO-15M	N/A
Ethylbenzene	**15**		0.80	ppb (v/v)	EPA TO-15M	N/A
4-Ethyltoluene	**5.5**		0.80	ppb (v/v)	EPA TO-15M	N/A
o-Xylene	**25**		0.80	ppb (v/v)	EPA TO-15M	N/A
p/m-Xylene	**59**		3.2	ppb (v/v)	EPA TO-15M	N/A
Toluene	**57**		8.0	ppb (v/v)	EPA TO-15M	N/A
1,3,5-Trimethylbenzene	**7.3**		0.80	ppb (v/v)	EPA TO-15M	N/A
1,2,4-Trimethylbenzene	**14**		2.4	ppb (v/v)	EPA TO-15M	N/A

Subcontracted analyses, if any, are not included in this summary.

*MDL is shown.

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	09/14/10
1000 Wilshire Blvd.		Work Order No:	10-09-1049
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	ASTM D-1946
		Units:	%v
Project: SFPP - Norwalk Site			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
INF-09-14	**10-09-1049-1-A**	**09/14/10 12:00**	**Air**	**GC 36**	**N/A**	**09/14/10 15:52**	**100914L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Methane	ND	0.500	0.0981	1		Oxygen + Argon	21.6	0.500	0.370	1	
Carbon Dioxide	ND	0.500	0.344	1							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-03-002-1,139**	**N/A**	**Air**	**GC 36**	**N/A**	**09/14/10 09:08**	**100914L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Methane	ND	0.500	0.0981	1		Oxygen + Argon	ND	0.500	0.370	1	
Carbon Dioxide	ND	0.500	0.344	1		Nitrogen	ND	0.500	0.174	1	
Carbon Monoxide	ND	0.500	0.272	1							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	09/14/10
1000 Wilshire Blvd.		Work Order No:	10-09-1049
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	EPA TO-3M

Project: SFPP - Norwalk Site

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
INF-09-14	**10-09-1049-1-A**	**09/14/10 12:00**	**Air**	**GC 13**	**N/A**	**09/14/10 15:53**	**100914L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	6.1	1.5	0.17	1		ppm (v/v)

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**098-01-005-2,605**	**N/A**	**Air**	**GC 13**	**N/A**	**09/14/10 09:05**	**100914L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	ND	1.5	0.17	1		ppm (v/v)

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	09/14/10
1000 Wilshire Blvd.		Work Order No:	10-09-1049
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	EPA TO-15M
		Units:	ppb (v/v)
Project: SFPP - Norwalk Site			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
INF-09-14	**10-09-1049-1-A**	**09/14/10 12:00**	**Air**	**GC/MS AA**	**N/A**	**09/14/10 16:27**	**100914L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

-The method has been modified to use Tedlar bags instead of Summa Canisters.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	80	40	1.6		t-1,2-Dichloroethene	ND	0.80	0.30	1.6	
Benzene	63	0.80	0.15	1.6		t-1,3-Dichloropropene	ND	1.6	0.16	1.6	
Benzyl Chloride	ND	2.4	0.63	1.6		Ethylbenzene	15	0.80	0.18	1.6	
Bromodichloromethane	ND	0.80	0.16	1.6		4-Ethyltoluene	5.5	0.80	0.29	1.6	
Bromoform	ND	0.80	0.24	1.6		Hexachloro-1,3-Butadiene	ND	2.4	0.29	1.6	
Bromomethane	ND	0.80	0.15	1.6		2-Hexanone	ND	2.4	0.83	1.6	
2-Butanone	ND	2.4	0.16	1.6		Methyl-t-Butyl Ether (MTBE)	ND	3.2	0.19	1.6	
Carbon Disulfide	ND	16	8.0	1.6		Methylene Chloride	ND	8.0	1.6	1.6	
Carbon Tetrachloride	ND	0.80	0.16	1.6		4-Methyl-2-Pentanone	ND	2.4	0.24	1.6	
Chlorobenzene	ND	0.80	0.17	1.6		o-Xylene	25	0.80	0.19	1.6	
Chloroethane	ND	0.80	0.25	1.6		p/m-Xylene	59	3.2	1.2	1.6	
Chloroform	ND	0.80	0.14	1.6		Styrene	ND	2.4	0.29	1.6	
Chloromethane	ND	0.80	0.16	1.6		Tetrachloroethene	ND	0.80	0.18	1.6	
Dibromochloromethane	ND	0.80	0.18	1.6		Toluene	57	8.0	3.2	1.6	
Dichlorodifluoromethane	ND	0.80	0.23	1.6		Trichloroethene	ND	0.80	0.17	1.6	
1,1-Dichloroethane	ND	0.80	0.16	1.6		Trichlorofluoromethane	ND	1.6	0.12	1.6	
1,1-Dichloroethene	ND	0.80	0.18	1.6		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	2.4	0.16	1.6	
1,2-Dibromoethane	ND	0.80	0.18	1.6		1,1,1-Trichloroethane	ND	0.80	0.16	1.6	
Dichlorotetrafluoroethane	ND	3.2	0.18	1.6		1,1,2-Trichloroethane	ND	0.80	0.19	1.6	
1,2-Dichlorobenzene	ND	0.80	0.18	1.6		1,3,5-Trimethylbenzene	7.3	0.80	0.27	1.6	
1,2-Dichloroethane	ND	0.80	0.15	1.6		1,1,2,2-Tetrachloroethane	ND	1.6	0.17	1.6	
1,2-Dichloropropane	ND	0.80	0.18	1.6		1,2,4-Trimethylbenzene	14	2.4	0.52	1.6	
1,3-Dichlorobenzene	ND	0.80	0.21	1.6		1,2,4-Trichlorobenzene	ND	3.2	1.2	1.6	
1,4-Dichlorobenzene	ND	0.80	0.22	1.6		Vinyl Acetate	ND	3.2	0.73	1.6	
c-1,3-Dichloropropene	ND	0.80	0.22	1.6		Vinyl Chloride	ND	0.80	0.16	1.6	
c-1,2-Dichloroethene	ND	0.80	0.21	1.6							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	105	57-129		1,2-Dichloroethane-d4	97	47-137	
Toluene-d8	95	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CH2M Hill		Date Received:	09/14/10
1000 Wilshire Blvd.		Work Order No:	10-09-1049
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	EPA TO-15M
		Units:	ppb (v/v)
Project: SFPP - Norwalk Site			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-981-780**	**N/A**	**Air**	**GC/MS AA**	**N/A**	**09/14/10 15:09**	**100914L01**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	50	25	1		t-1,2-Dichloroethene	ND	0.50	0.19	1	
Benzene	ND	0.50	0.094	1		t-1,3-Dichloropropene	ND	1.0	0.10	1	
Benzyl Chloride	ND	1.5	0.39	1		Ethylbenzene	ND	0.50	0.11	1	
Bromodichloromethane	ND	0.50	0.10	1		4-Ethyltoluene	ND	0.50	0.18	1	
Bromoform	ND	0.50	0.15	1		Hexachloro-1,3-Butadiene	ND	1.5	0.18	1	
Bromomethane	ND	0.50	0.093	1		2-Hexanone	ND	1.5	0.52	1	
2-Butanone	ND	1.5	0.099	1		Methyl-t-Butyl Ether (MTBE)	ND	2.0	0.12	1	
Carbon Disulfide	ND	10	5.0	1		Methylene Chloride	ND	5.0	1.0	1	
Carbon Tetrachloride	ND	0.50	0.098	1		4-Methyl-2-Pentanone	ND	1.5	0.15	1	
Chlorobenzene	ND	0.50	0.11	1		o-Xylene	ND	0.50	0.12	1	
Chloroethane	ND	0.50	0.15	1		p/m-Xylene	ND	2.0	0.76	1	
Chloroform	ND	0.50	0.090	1		Styrene	ND	1.5	0.18	1	
Chloromethane	ND	0.50	0.098	1		Tetrachloroethene	ND	0.50	0.11	1	
Dibromochloromethane	ND	0.50	0.11	1		Toluene	ND	5.0	2.0	1	
Dichlorodifluoromethane	ND	0.50	0.14	1		Trichloroethene	ND	0.50	0.11	1	
1,1-Dichloroethane	ND	0.50	0.10	1		Trichlorofluoromethane	ND	1.0	0.077	1	
1,1-Dichloroethene	ND	0.50	0.11	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.5	0.10	1	
1,2-Dibromoethane	ND	0.50	0.11	1		1,1,1-Trichloroethane	ND	0.50	0.10	1	
Dichlorotetrafluoroethane	ND	2.0	0.11	1		1,1,2-Trichloroethane	ND	0.50	0.12	1	
1,2-Dichlorobenzene	ND	0.50	0.11	1		1,3,5-Trimethylbenzene	ND	0.50	0.17	1	
1,2-Dichloroethane	ND	0.50	0.095	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.11	1	
1,2-Dichloropropane	ND	0.50	0.11	1		1,2,4-Trimethylbenzene	ND	1.5	0.33	1	
1,3-Dichlorobenzene	ND	0.50	0.13	1		1,2,4-Trichlorobenzene	ND	2.0	0.72	1	
1,4-Dichlorobenzene	ND	0.50	0.13	1		Vinyl Acetate	ND	2.0	0.45	1	
c-1,3-Dichloropropene	ND	0.50	0.14	1		Vinyl Chloride	ND	0.50	0.10	1	
c-1,2-Dichloroethene	ND	0.50	0.13	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	104	57-129		1,2-Dichloroethane-d4	102	47-137	
Toluene-d8	99	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

CH2M Hill		Date Received:	09/14/10
1000 Wilshire Blvd.		Work Order No:	10-09-1049
21st Floor		Preparation:	N/A
Los Angeles, CA 90017-2417		Method:	EPA TO-3M

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
10-09-0984-1	**Air**	**GC 13**	**N/A**	**09/14/10**	**100914D01**

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
TPH as Gasoline	130	140	4	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

CH2M Hill
1000 Wilshire Blvd.
21st Floor
Los Angeles, CA 90017-2417

Date Received: N/A
Work Order No: 10-09-1049
Preparation: N/A
Method: ASTM D-1946

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-03-002-1,139	**Air**	**GC 36**	**N/A**	**09/14/10**	**100914L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Carbon Dioxide	98	98	80-120	0	0-30	
Oxygen + Argon	90	90	80-120	0	0-30	
Nitrogen	91	90	80-120	0	0-30	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

CH2M Hill
1000 Wilshire Blvd.
21st Floor
Los Angeles, CA 90017-2417

Date Received: N/A
Work Order No: 10-09-1049
Preparation: N/A
Method: EPA TO-15M

Project: SFPP - Norwalk Site

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-981-780	**Air**	**GC/MS AA**	**N/A**	**09/14/10**	**100914L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	101	99	60-156	44-172	2	0-40	
Carbon Tetrachloride	103	100	64-154	49-169	3	0-32	
1,2-Dibromoethane	104	104	54-144	39-159	1	0-36	
1,2-Dichlorobenzene	126	127	34-160	13-181	1	0-47	
1,2-Dichloroethane	102	100	69-153	55-167	1	0-30	
1,2-Dichloropropane	103	101	67-157	52-172	2	0-35	
1,4-Dichlorobenzene	124	126	36-156	16-176	1	0-47	
c-1,3-Dichloropropene	109	106	61-157	45-173	2	0-35	
Ethylbenzene	102	103	52-154	35-171	1	0-38	
o-Xylene	105	106	52-148	36-164	0	0-38	
p/m-Xylene	100	101	42-156	23-175	0	0-41	
Tetrachloroethene	104	105	56-152	40-168	1	0-40	
Toluene	101	102	56-146	41-161	1	0-43	
Trichloroethene	101	99	63-159	47-175	2	0-34	
1,1,2-Trichloroethane	103	101	65-149	51-163	2	0-37	
Vinyl Chloride	108	110	45-177	23-199	2	0-36	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 10-09-1049

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
E	Concentration exceeds the calibration range.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

DATE: 9-14-10

PAGE: 1 OF 1

LABORATORY CLIENT: Kinder Morgan Energy Partners, Attn: Steve Definbough
ADDRESS: 1100 Town & Country Road
CITY: Orange, CA 92868
TEL: 714-560-4802 | FAX: 714-560-4601 | E-MAIL: james_dye@kindermorgan.com

CLIENT PROJECT NAME / NUMBER: SFPP - Norwalk Site
PROJECT CONTACT: James Dye
SAMPLER(S): (SIGNATURE)
P.O. NO.:
QUOTE NO.:
LAB USE ONLY: 09-1049

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 to D. Jablonski/CH2M HILL, cc: KMEP
Direct Bill KMEP/SFPP - Steve Defibaugh-ref. AFE# 81195
"J" flags required/Use lowest possible detection limit - all methods.

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MAT-RIX	NO. OF CONT.	TO-15	TO-3 (TPH-g)	ASTM-1946 (O2/Argon, CO2, CH4)	Comments
1	INF-09-14	Influent Vapor to SVE	9-14-10	1200	Air	1	X	X	X	Monthly sample

Relinquished by: (Signature)	Received by: (Signature) Danyle CCL	Date: 9/14/10	Time: 14:45
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Revised: 08/06/10

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 10-09-[1][0][4][9]

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: KMEP

DATE: 09/14/10

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 2.2 °C + 0.5 °C (CF) = 2.7 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only Initial: b.c

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: b.c

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: DT

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Residual Chlorine / Dissolved Sulfide received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☐
Tedlar bag(s) free of condensation	☑	☐	☐

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s** ☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na** ☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☑Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** DT

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** WB

Preservative: h: HCL n: HNO_3 na$_2$: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 znna: $ZnAc_2$+NaOH f: Field-filtered **Scanned by:** WB