Fourth Quarter 2011 Remediation Progress Report and Annual 2011 Summary SFPP Norwalk Pump Station Norwalk, California

Prepared for

Kinder Morgan Energy Partners, L.P.

1100 Town & Country Road
Orange, California 92868

January 15, 2012

CH2MHILL

6 Hutton Centre Drive, Suite 700
Santa Ana, California 92707

ES011012221635SCO/ 120130005

Signature Page

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

January 15, 2012

Mark Wuttig
CH2M HILL
California Professional Geologist, No. 6820

Date

Contents

Appendixes

Tables

Figures

Acronyms and Abbreviations

µg/L	micrograms per liter
1,2-DCA	1,2-dichloroethane
ASTM	American Society for Testing and Materials
ATL	Advanced Technology Laboratories
DFSP	Defense Fuel Support Point
DPE	dual-phase extraction
EPA	United States Environmental Protection Agency
FBBR	fluidized bed bioreactor
GAC	granular activated carbon
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
OWS	oil-water separator
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
TBA	tertiary butyl alcohol
TFE	total fluids extraction
TPH-fp	total petroleum hydrocarbons quantified as fuel products

TPH-g	total petroleum hydrocarbons quantified as gasoline
VOC	volatile organic compound
WDR	Waste Discharge Requirement
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 during the fourth quarter 2011 reporting period at the SFPP Norwalk Pump Station located within the Defense Fuel Support Point (DFSP) at 15306 Norwalk Boulevard, Norwalk, California (the site; Figure 1). This report also summarizes remediation activities described in previously submitted, first, second, and third quarter 2011 progress reports (CH2M HILL, 2011i, 2011j, and 2011k), thereby providing a combined fourth quarter 2011 and annual 2011 progress report.

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 of October through December 2011 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 October through December 2011 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 (WSB) GWE system (WSB system) for remediation of the western offsite area was discontinued in August 2008.

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 (OWS). Free product, if any, from the OWS is collected in a storage tank and recycled at an offsite location. Water from the OWS is treated using liquid-phase granular activated carbon (LGAC). Treated water is routed through an onsite 3,000-gallon equalization tank. Two fluidized bed bioreactors (FBBRs) installed downstream of the equalization tank treat fuel oxygenates such as tertiary butyl alcohol (TBA) and methyl tertiary butyl ether (MTBE). The treated groundwater then passes through polishing LGAC units prior to discharge 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 fourth quarter 2011. 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)
- Removal, inspection, and repair of TFE/GWE pumps and associated discharge lines
- Collection and analysis of system influent vapor and groundwater samples
- Gauging of selected remediation wells
- Troubleshooting of the SVE and TFE/GWE systems
- Replacement of carbon from the polishing LGAC vessels
- Cleaning of the flame arrestor for the SVE catalytic oxidizer and calibration of the air flowmeter
- Replacement of the temporary FBBR with a new permanent FBBR
- Replacement of the 8,000-gallon equalization tank with a 3,000-gallon equalization tank
- Installation of a proportional controller at the TFE/GWE influent to keep the TFE/GWE influent flow similar to the influent flow to the TBA treatment system
- Modification of the concrete containment berm heights (raised by 6 inches)
- Connection of the TFE/GWE system effluent flowmeter to the digital chart recorder
- Connection of the TFE/GWE system influent and effluent flowmeters to an independent power source
- Replacement of the SVE ultraviolet (UV) flame sensor and Veri-flame controller

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 fourth quarter 2011 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 fourth quarter 2011 are summarized in Tables 2 and 3.

The remediation systems operated during the fourth quarter 2011 with the following exceptions:

- The TFE/GWE system was down between October 2 and 4, 2011, due to a high water level in the transfer tank, likely caused by clogged bag filters. The bag filters were replaced, but the TFE/GWE system remained off to facilitate quarterly groundwater monitoring for the second semiannual 2011 groundwater sampling event. The SVE was also turned off on October 4, 2011, to facilitate groundwater monitoring. The TFE/GWE system was restarted on October 13, 2011; however, the SVE system remained off for the remainder of October 2011 due to mechanical issues with the SVE flow sensor.
- Throughout the month of October 2011, the TFE/GWE would turn off occasionally due to a high water level in the equalization tank. The high level in the equalization tank was due to decreased flow through the FBBR (TBA) treatment system, as a result of plugging of the lead LGAC polishing vessel. Between October 21 and 24, 2011, the carbon in the lead polishing LGAC vessel was changed out. The carbon in this vessel had solidified; therefore, several days were required to clean out the vessel. It is believed that the solidification in the lead carbon vessel is a result of carbonates precipitating from the pretreated groundwater. Adjustments to the pH of the pretreated groundwater have been implemented in order to eliminate the formation of these carbonate precipitates. The TFE/GWE system was restarted on October 25, 2011.
- On November 4, 2011, the TFE/GWE system was off on arrival due to a high level in the transfer tank, which was caused by the bag filters downstream of the OWS being clogged. The bag filters were replaced and the system was restarted the same day.
- On November 7 and 8, 2011, the TFE/GWE system was down on arrival due to water in the product tank. The air vent for the transfer tank was blocked, which caused water to go into the product tank instead of being treated by the TFE/GWE system. The vent was repaired on November 8, 2011. The system stayed off to connect the new southeastern influent flowmeter, total influent flowmeter, and total effluent flowmeter to a separate power source from the TFE/GWE and SVE systems. The system was restarted on November 15, 2011.
- On November 27, 2011, the TFE/GWE system was turned off to drain the 8,000-gallon equalization tank so that it could be moved and replaced with the 3,000-gallon equalization tank. The system was restarted on December 2, 2011.
- The SVE system was off between November 1 and 22, 2011, due to mechanical issues with the SVE flow sensor. Malfunctioning of the SVE flow sensor was due to damage to the flow sensor stainless steel tubing and a plugged flame arrestor. The stainless steel tubing for the flow sensor was replaced by KMEP's remediation contractor, Northstar. Northstar also inspected and cleaned the flame arrestor the week of November 7, 2011. On November 22, 2011, the flow recorder was recalibrated based on the blower curve.
- On November 29, 2011, the SVE system was off on arrival due to the pilot light malfunctioning. Troubleshooting of the pilot light continued for the remainder of November 2011.

- The SVE system was off between December 1 and 15, 2011, because the pilot light was unable to light. The KMEP technicians replaced the UV flame sensor but the pilot light was still unable to light. The SVE was operational on December 16, 2011, after the Veri-flame controller was replaced.
- On December 13, 2011, the TFE/GWE system was turned off to replace the carbon from the two polishing LGAC vessels. The system was restarted the same day.
- On December 24, 2011, the TFE/GWE system was off on arrival due to a high level in the transfer tank, which was caused by the bag filters downstream of the OWS being clogged. The bag filters were replaced and the system was restarted the same day.
- The system was shut down between December 30, 2011, and January 3, 2012, due to malfunctioning of the digital chart recorder, which records daily effluent flow. The system was restarted on January 3, 2012, and the chart recorder repaired on January 6, 2012.

A summary of system shutdowns that occurred in each quarter of 2011 is provided in Appendix A.

Overall, during the fourth quarter 2011, the SVE system operated approximately 20 percent of the time, while the TFE/GWE system operated approximately 58 percent of the time.

Vapor samples from the SVE system influent and water samples from TFE/GWE system influent were collected during the fourth quarter 2011 when the systems were in operation. During the fourth quarter 2011, influent vapor samples were collected on November 22 and December 20, 2011, when the SVE system was operating. Influent water samples were collected on October 25, November 22, and December 20, 2011, when the TFE/GWE system was operating. The vapor and water samples were delivered to Advanced Technology Laboratories (ATL) for analysis. ATL is a laboratory certified by the California Department of Public Health Environmental Laboratory Accreditation Program.

ATL 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
- Total petroleum hydrocarbons (TPH) quantified as gasoline (TPH-g) using United States Environmental Protection Agency (EPA) Method TO-3
- VOCs using EPA Method TO-15

ATL analyzed the water samples for the following:

- TPH-g and TPH quantified as fuel product (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 B.

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 for the first, second, and third quarters of 2011 are summarized in Table 6. Well vapor readings for the fourth quarter were not collected do to frequent shutdowns of the SVE. Depths to product and groundwater in the TFE/GWE and SVE wells were measured during the fourth quarter 2011 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.

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 818 pounds during the fourth quarter 2011, for a cumulative mass removal of approximately 35,172 pounds since implementing the Second Addendum system upgrades, and over 3 million pounds since the SVE system began operation in 1995 (Table 2). The cumulative mass removed by SVE does not include the mass removed by biodegradation.

Approximately 1,043,949 gallons of groundwater was extracted during the fourth quarter 2011 (Table 3). This includes water extracted from both the south-central and southeastern areas. No water was extracted from the WSB area during the fourth quarter 2011.

GWE was discontinued in the WSB region during the third quarter 2008 based on the reduced lateral extent and low concentrations of MTBE and 1,2-dichloroethane (1,2-DCA) west of the site. 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. MTBE, 1,2-DCA, and TBA 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 fourth quarter 2011. 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 44 pounds during the fourth quarter 2011, for a cumulative mass removed from these areas of approximately 1,599 pounds since implementing the system upgrades described in the Second Addendum (Table 3). 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 nonoverlapping 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

During the fourth quarter 2011, vapor-phase VOC concentrations were not measured in individual wells due to frequent shutdowns of the SVE system. VOC concentrations were measured in individual wells during the first, second, and third quarters of 2011 (Table 6). The operation status of the SVE wells at the end of each quarter is also shown in Table 6. PID readings recorded in the third quarter 2011, indicate VOC concentrations are close to or higher than 100 ppmv in several SVE wells; therefore, the SVE system will be operated until influent VOC concentrations reach low asymptotic levels.

Groundwater monitoring in the WSB region during the fourth quarter 2011 supports the continued shutdown of GWE in the region. MTBE, 1,2-DCA, and TBA concentrations in the western area will 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. 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 2 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). At the end of the fourth quarter 2011, there were three TFE/GWE wells online from the south-central area (MW-SF-3, MW-SF-11, and MW-SF-15) and three wells from the southeastern area (GMW-O-15, GMW-O-18, and GMW-36). Additional extraction wells will be brought online during the first quarter 2012, as needed.

During the fourth quarter 2011, carbon from the LGAC vessels downgradient of the OWS was not changed out. The two FBBRs, in addition to removing TBA from the process water, were able to remove other fuel oxygenates (e.g., MTBE) from the process water. Therefore, carbon changeouts due to breakthrough of MTBE and petroleum hydrocarbons from the LGAC vessels downgradient of the OWS did not occur. Carbon from the polishing LGAC vessels was changed out during the fourth quarter 2011 due to the formation of precipitates (likely carbonates) in the pretreated groundwater. The precipitates were plugging the void space between the carbon, thereby restricting flow through the discharge. Adjustments to the pH of the pretreated groundwater will continue until this issue is rectified.

6. Planned First Quarter 2012 Activities

During the first quarter 2012, SFPP plans to continue to focus remedial efforts on the south-central and southeastern areas. The following maintenance activities are planned to be completed during the first quarter 2012:

- Continue weekly maintenance and monitoring of the south-central and southeastern SVE and TFE/GWE treatment systems.
- Remove, inspect, and repair TFE/GWE pumps and associated discharge lines.
- Measure individual well vapor concentrations.
- Collect and analyze system influent vapor and groundwater samples.
- Install a pitot tube flow measuring device to the SVE system.
- Rewire/clean up electrical for the TFE/GWE system control panel.
- Continue to adjust pH of pretreated groundwater in the TBA treatment system to control formation of precipitates in the polishing LGAC vessels.
- Begin repairs to onsite southeastern area groundwater conveyance line to allow operation of extraction wells GMW-SF-9 and GMW-SF-10.

Concentrations of MTBE, 1,2-DCA, and TBA 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 first quarter 2012 will be described in the first quarter 2012 remediation progress report to be submitted by April 15, 2012.

7. References

AMEC. 2010a. Letter to Mr. Paul Cho, California Regional Water Quality Control Board. Selenium Management Evaluation Update, Defense Fuel Support Point Norwalk. June 10.

AMEC. 2010b. *Remediation Progress Report, First Quarter 2010, Defense Fuel Support Point Norwalk*. April 15.

AMEC. 2010c. *Remediation Progress Report, Second Quarter 2010, Defense Fuel Support Point Norwalk*. July 15.

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

CH2M HILL. 2010. *Third Quarter 2010 Remediation Progress Report, Defense Fuel Support Point Norwalk, California.* October 15.

CH2M HILL. 2011a. *Fourth Quarter 2010 Remediation Progress Report and Annual 2010 Summary, Defense Fuel Support Point Norwalk, California*. January 14.

CH2M HILL. 2011b. *Remediation System Operational Status, January 2011, Defense Fuel Support Point (DFSP), Norwalk.* February 15.

CH2M HILL. 2011c. *Remediation System Operational Status, February 2011, Defense Fuel Support Point (DFSP), Norwalk.* March 15.

CH2M HILL. 2011d. *Remediation System Operational Status, March 2011, Defense Fuel Support Point (DFSP), Norwalk.* April 12.

CH2M HILL. 2011e. *Remediation System Operational Status, April 2011, Defense Fuel Support Point (DFSP), Norwalk.* May 13.

CH2M HILL. 2011f. *Remediation System Operational Status, May 2011, Defense Fuel Support Point (DFSP), Norwalk.* June 15.

CH2M HILL. 2011g. *Remediation System Operational Status, June 2011, Defense Fuel Support Point (DFSP), Norwalk.* July 15.

CH2M HILL. 2011h. *Draft First Semiannual 2011 Groundwater Monitoring Report, Defense Fuel Support Point, Norwalk, California.* July 7.

CH2M HILL, 2011i. *First Quarter 2011 Remediation Progress Report, Defense Fuel Support Point, Norwalk, California.* April 15.

CH2M HILL, 2011j. *Second Quarter 2011 Remediation Progress Report, Defense Fuel Support Point, Norwalk, California.* July 15.

CH2M HILL, 2011k. *Third Quarter 2011 Remediation Progress Report, Defense Fuel Support Point, Norwalk, California.* October 15.

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

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

Kinder Morgan Energy Partners, LP (KMEP). 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 Norwalk Pump Station
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 First Quarter 2011[1]		Well Operation Status at End of Second Quarter 2011[1]		Well Operation Status at End of Third Quarter 2011[1]		Well Operation Status at End of Fourth Quarter 2011[1]	
						SVE	TFE/GWE	SVE	TFE/GWE	SVE	TFE/GWE	SVE	TFE/GWE
South-Central	MW-SF-1	6/18/1990	78.93	25 - 40	SVE	OFF	NA	OFF	NA	OFF	NA	OFF	NA
	MW-SF-2	6/18/1990	78.53	25 - 40	SVE; TFE	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
	MW-SF-3	6/18/1990	78.12	25 - 40	SVE; TFE	OFF	OFF	**ON**	OFF	OFF	**ON**	OFF	**ON**
	MW-SF-4	6/19/1990	79.38	25 - 40	SVE	OFF	NA	OFF	NA	OFF	NA	OFF	NA
	MW-SF-5	9/19/1990	79.74	23 - 38	SVE	OFF	NA	OFF	NA	OFF	NA	OFF	NA
	MW-SF-6	9/19/1990	76.80	25 - 40	SVE; TFE	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
	MW-SF-9	6/15/1995	74.10	--	SVE	OFF	NA	OFF	NA	OFF	NA	OFF	NA
	MW-SF-10	9/23/2003	76.53	10 - 30	SVE	OFF	NA	OFF	NA	OFF	NA	OFF	NA
	MW-SF-11	6/19/2007	78.56	20 - 40	SVE; TFE	OFF	OFF	OFF	**ON**	**ON**	OFF	**ON**	**ON**
	MW-SF-12	6/18/2007	78.07	20 - 40	SVE; TFE	OFF	OFF	**ON**	OFF	**ON**	OFF	**ON**	OFF
	MW-SF-13	6/19/2007	73.40	20 - 40	SVE; TFE	OFF	**ON**	OFF	OFF	OFF	**ON**	OFF	OFF
	MW-SF-14	6/21/2007	78.16	20 - 40	SVE; TFE	OFF	**ON**	OFF	OFF	**ON**	OFF	**ON**	OFF
	MW-SF-15	6/21/2007	78.27	20 - 40	SVE; TFE	**ON**	**ON**	OFF	OFF	OFF	**ON**	OFF	**ON**
	MW-SF-16	6/20/2007	78.21	20 - 40	SVE; TFE	**ON**	**ON**	**ON**	OFF	**ON**	**ON**	**ON**	OFF
	GMW-9	7/8/1991	74.44	20 - 50	SVE; TFE	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
	GMW-10	7/8/1991	74.67	25 - 50	SVE	**ON**	NA	**ON**	NA	**ON**	NA	**ON**	NA
	GMW-22	8/2/1991	74.17	25 - 60	SVE; TFE	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
	GMW-24	8/5/1991	74.04	25 - 60	SVE; TFE	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
	GMW-25	1/10/1992	74.29	20 - 50	SVE; GWE	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
	GWR-3	1/10/1992	74.93	20 - 50	SVE; GWE	**ON**	OFF	**ON**	OFF	**ON**	OFF	**ON**	OFF
	VEW-1	--	--	--	SVE	OFF	NA	OFF	NA	OFF	NA	OFF	NA
	VEW-2	--	--	--	SVE	OFF	NA	OFF	NA	OFF	NA	OFF	NA
	MW-O-1	1/22/1991	75.48	25 - 40	SVE; TFE	**ON**	OFF	**ON**	OFF	**ON**	OFF	**ON**	OFF
	MW-O-2	1/23/1991	71.90	25 - 40	SVE; TFE	**ON**	OFF	**ON**	OFF	**ON**	OFF	**ON**	OFF
	GMW-O-11	5/20/1992	74.17	20 - 50	SVE; TFE	**ON**	OFF	**ON**	OFF	**ON**	OFF	**ON**	OFF
	GMW-O-12	5/21/1992	73.49	20 - 50	SVE	**ON**	NA	**ON**	NA	**ON**	NA	**ON**	NA
	GMW-O-20	6/15/1995	73.32	--	SVE; TFE	**ON**	OFF	**ON**	OFF	**ON**	OFF	**ON**	OFF
	GMW-O-21	10/1/1997	71.43	26 - 46	TFE	OFF	OFF	NA	OFF	NA	OFF	NA	OFF
	GMW-O-23	6/25/2007	73.63	20 - 40	SVE; TFE	**ON**	OFF	**ON**	OFF	**ON**	OFF	**ON**	OFF
	MW-18 (MID)	6/10/1991	75.67	50 - 60	SVE	OFF	NA	OFF	NA	OFF	NA	OFF	NA
	HW-2	--	--	--	SVE	OFF	NA	OFF	NA	OFF	NA	OFF	NA
Southeastern	GMW-O-15	4/19/1994	74.23	20 - 50	SVE; TFE	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**
	GMW-O-18	7/25/1994	74.36	21 - 40	SVE; TFE	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**
	GMW-36	4/11/1994	74.53	20 - 50	TFE	NA	**ON**	NA	**ON**	NA	**ON**	NA	**ON**
	GMW-SF-9	4/1/2003	73.00	37 - 46	GWE	NA	OFF	NA	OFF	NA	OFF	NA	OFF
	GMW-SF-10	4/2/2003	75.77	37 - 46	GWE	NA	OFF	NA	OFF	NA	OFF	NA	OFF
West Side Barrier	BW-2	5/20/1996	73.57	27 - 47	GWE	NA	OFF	NA	OFF	NA	OFF	NA	OFF
	BW-3	5/17/1996	74.16	31 - 50	GWE	NA	OFF	NA	OFF	NA	OFF	NA	OFF
	BW-4	5/20/1996	74.61	28 - 47	GWE	NA	OFF	NA	OFF	NA	OFF	NA	OFF
	BW-5	5/23/1996	73.59	27 - 46	GWE	NA	OFF	NA	OFF	NA	OFF	NA	OFF
	BW-6	5/22/1996	73.48	28 - 47	GWE	NA	OFF	NA	OFF	NA	OFF	NA	OFF
	BW-7	5/22/1996	74.65	27 - 46	GWE	NA	OFF	NA	OFF	NA	OFF	NA	OFF
	BW-8	5/21/1996	75.08	27 - 46	GWE	NA	OFF	NA	OFF	NA	OFF	NA	OFF
	BW-9	5/21/1996	76.19	27 - 46	GWE	NA	OFF	NA	OFF	NA	OFF	NA	OFF

Notes
1. Based on information provided by SFPP, L.P.

Abbreviations
NA = Not Applicable
-- = 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 Norwalk Pump Station
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**
2010 Totals	**72,369**	**3,511**	**--**	**--**	**--**	**--**	**1,501**
01/04/11	72,534.4	165	--	4	2,048	20	6
01/14/11	72,606.2	72	68	35	1,854	50	52
01/19/11	72,722.3	116	--	12	1,849	50	39
01/25/11	72,866.1	144	--	18	1,858	50	71
02/01/11	73,027.7	162	--	17	1,839	50	75
02/08/11	73,194.4	167	210	1,249	1,882	50	5,880
02/18/11	73,409.0	215	--	33	1,916	50	205
02/22/11	73,504.2	95	--	54	2,170	50	168
03/01/11	73,661.5	157	--	15	1,861	50	66
03/29/11	73,662.1	1	5000	10	1,919	60	0
First Quarter 2011 Totals	**73,662**	**1,293**	**--**	**--**	**--**	**--**	**6,561**
04/19/11	73,899.5	237	--	8	1,949	50	58
04/26/11	74,061.2	162	1.9	0	1,976	60	0
05/03/11	74,224.9	164	--	6	2,047	50	31
05/13/11	74,461.4	236	--	38	2,048	50	278
05/17/11	74,532.8	71	90	29	1,847	50	57
05/24/11	74,695.1	162	--	46	1,827	50	203
06/01/11	74,814.5	119	--	62	1,831	55	204
06/03/11	74,860.4	46	--	--	1961	50	84[5]
06/07/11	74,951.8	91	--	--	1955	50	167[5]
06/08/11	74,974.4	23	--	31	1781	56	19
06/09/11	74,997.3	23	--	--	1782	50	19[5]
06/10/11	75,018.5	21	--	--	1785	50	17[5]
06/14/11	75,114.1	96	--	1	1811	50	3
06/17/11	75,180.6	67	--	--	1808	50	2
06/21/11	75,207.3	27	--	3	1807	50	2
06/23/11	75,256.0	49	--	--	1818	52	3
06/27/11	75,346.4	90	--	--	--	--	6[6]
Second Quarter 2011 Totals	**75,346**	**1,684**	**--**	**--**	**--**	**--**	**1,153**
07/15/11	75,413	67	--	85	2,050	50	173
07/19/11	75,509	95	80	193	1,654	60	455
07/22/11	75,580	71	--	--	1,681	60	345[5]
07/26/11	75,678	98	--	82	1,661	60	201
07/27/11	75,697	19	--	--	1,640	60	39[5]
07/29/11	75,749	52	--	--	1,679	60	107[5]
08/02/11	75,844	95	--	118	1,689	60	286
08/05/11	75,915	71	--	--	1,991	60	250[5]
08/09/11	76,009	94	--	130	2,288	60	416
08/12/11	76,081	72	--	--	1,833	60	256[5]
08/16/11	76,175	94	140	62	1,735	60	153
08/19/11	76,246	71	--	--	1,720	65	113[5]
08/23/11	76,343	98	--	198	1,804	65	522
08/26/11	76,413	70	--	--	1,978	65	408[5]
08/30/11	76,508	95	--	78	1,949	65	217
09/02/11	76,580	72	--	--	2,252	65	191[5]
09/06/11	76,673	93	--	--	2,413	66	262[5]
09/09/11	76,743	70	--	87	2,566	68	234
09/13/11	76,838	95	--	82	2,209	60	257
09/16/11	76,910	72	--	--	2,093	55	185[5]
09/20/11	76,933	23	100	222	2,895	65	224
09/23/11	76,962	29	--	--	1,866	60	182[5]
09/27/11	77,061	99	--	--	2,000[7]	64	657[5]
Third Quarter 2011 Totals	**77,061**	**1,714**	**--**	**--**	**--**	**--**	**6,132**
10/13/11	77,062	1	--	222	2,000	50	3
10/25/11	77,063	1	--	362	2,180	50	13
11/22/11	77,066	3	11	152	2,095	55	4
11/29/11	77,155	90	--	152	2,095	55	428[5]
12/16/11	77,158	3	--	58	2,106	50	3
12/20/11	77,255	97	0.13	26	2,014	50	76
12/24/11	77,348	93	--	26	2,098	60	76[5]
12/27/11	77,422	74	--	50	2,046	60	113
12/30/11	77,489	67		50	2,046	56	102
Fourth Quarter 2011 Totals	**77,489**	**428**	**--**	**--**	**--**	**--**	**818**
Cumulative Mass Removed Since Implementation of RAP Upgrades[4]							**35,172**

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 (Geomatrix, 2006).
5. Used previous PID reading to obtain mass removed.
6. System was turned off prior to obtaining data. Used previous PID reading and flow to obtain mass removed.
7. Estimated flow of 2,000 scfm as the flow measuring device was out of calibration.

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

Abbreviations
TPH-g = total petroleum hydrocarbons quantified as gasoline (C4-C12)
ppmv = parts per million by volume
FID = flame ionization detector
PID = photoionization 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 Norwalk Pump Station
Norwalk, California

System Inspection Date	Groundwater Removed from the South-Central and Southeastern Areas (gallons)[8]	Groundwater Removed from the West Side Barrier Area (gallons)	Total Groundwater Removed (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]	**2,610,173**	**630,877**	**3,241,050**	**--**	**395**
2008 Totals	**6,092,742**	**405,954[4]**	**6,498,696**	**--**	**311**
2009 Totals	**8,815,705**	**0**	**8,815,705**	**--**	**161**
2010 Totals	**5,724,835**	**2,244**	**5,727,079**	**--**	**334**
1/4/11	257,320	0	257,320	7,100	15.22
1/7/11	103,344	0	103,344	7,100	6.11
1/11/11	134,053	0	134,053	7,100	7.93
1/14/11	104,826	0	104,826	7,400	6.46
1/19/11	192,290	0	192,290	7,400	11.85
1/21/11	71,307	0	71,307	7,400	4.40
1/25/11	142,737	0	142,737	7,400	8.80
1/26/11	30,137	0	30,137	7,400	1.86
1/28/11	65,966	0	65,966	7,400	4.07
2/1/11	133,382	0	133,382	7,400	8.22
2/4/11	118,102	0	118,102	7,400	7.28
2/8/11	149,248	0	149,248	5,600	6.96
2/10/11	87,066	0	87,066	5,600	4.06
2/15/11	274,387	0	274,387	5,600	12.80
2/18/11	197,118	0	197,118	5,600	9.20
2/22/11	72,819	0	72,819	5,600	3.40
2/25/11	187,013	0	187,013	5,600	8.72
3/18/11	119,976	0	119,976	5,600	5.60
3/22/11	163,516	0	163,516	5,600	7.63
3/25/11	176,355	0	176,355	3,100	4.55
4/1/11	354,066	0	354,066	3,100	9.14
First Quarter 2011 Totals	**3,135,028**	**0**	**3,135,028**	**--**	**154**
04/01/11	354,066	0	354,066	3,100	9.13
04/04/11	141,268	0	141,268	3,100	3.64
04/15/11	1,224	0	1,224	3,100	0.03
04/19/11	183,614	0	183,614	3,100	4.73
04/21/11	26,480	0	26,480	3,100	0.68
04/22/11	38,674	0	38,674	3,100	1.00
04/26/11	2,044	0	2,044	1,400	0.02
04/29/11	146,238	0	146,238	1,400	1.70
05/03/11	108,476	0	108,476	1,400	1.26
05/06/11	66,317	0	66,317	1,400	0.77
05/09/11	151,172	0	151,172	1,400	1.76
05/10/11	47,705	0	47,705	1,400	0.56
05/13/11	138,230	0	138,230	1,400	1.61
05/17/11	176,394	0	176,394	3,300	4.84
05/20/11	140,882	0	140,882	3,300	3.87
05/24/11	178,439	0	178,439	3,300	4.90
05/27/11	126,505	0	126,505	3,300	3.47
05/31/11	158,243	0	158,243	3,300	4.34
06/01/11	46,420	0	46,420	3,300	1.27
06/03/11	90,961	0	90,961	3,300	2.50
06/07/11	92,840	0	92,840	3,300	2.55
06/08/11	1,758	0	1,758	3,300	0.05
06/09/11	41,721	0	41,721	3,300	1.14
06/10/11	46,338	0	46,338	3,300	1.27
06/14/11	93,780	0	93,780	3,300	2.57
06/17/11	21,828	0	21,828	3,300	0.60
06/21/11	77,960	0	77,960	1,200	0.78
06/23/11	44,965	0	44,965	1,200	0.45
06/27/11	81,323	0	81,323	1,200	0.81
06/28/11	23,843	0	23,843	1,200	0.24
07/01/11	56,769	0	56,769	1,200	0.57
Second Quarter 2011 Totals	**2,906,477**	**0**	**2,906,477**	**--**	**63**
07/02/11	19,463	0	19,463	1,200	0.19
07/03/11	22,135	0	22,135	1,200	0.22
07/04/11	26,252	0	26,252	1,200	0.26
07/05/11	20,828	0	20,828	1,200	0.21
07/06/11	25,534	0	25,534	1,200	0.25
07/07/11	25,534	0	25,534	1,200	0.25
07/08/11	25,534	0	25,534	1,200	0.25
07/09/11	9,588	0	9,588	1,200	0.10
07/10/11	9,588	0	9,588	1,200	0.10
07/11/11	9,588	0	9,588	1,200	0.10
07/12/11	10,303	0	10,303	1,200	0.10
07/13/11	19,090	0	19,090	1,200	0.19
07/14/11	18,400	0	18,400	1,200	0.18
07/15/11	19,110	0	19,110	1,200	0.19
07/16/11	27,840	0	27,840	1,200	0.28
07/17/11	27,530	0	27,530	1,200	0.27
07/18/11	22,250	0	22,250	1,200	0.22
07/19/11	15,540	0	15,540	1,200	0.16
07/20/11	20,790	0	20,790	1,200	0.21
07/21/11	18,430	0	18,430	1,200	0.18
07/22/11	28,310	0	28,310	1,200	0.28

TABLE 3
Groundwater Remediation System Operation Summary
SFPP Norwalk Pump Station
Norwalk, California

System Inspection Date	Groundwater Removed from the South-Central and Southeastern Areas (gallons)[8]	Groundwater Removed from the West Side Barrier Area (gallons)	Total Groundwater Removed (gallons)	Influent TPH-g Concentration (µg/L)[1]	TPH-g Removed from the South-Central, Southeastern, and West Side Barrier Areas (pounds)[2]
07/23/11	11,760	0	11,760	1,200	0.12
07/24/11	0	0	0	1,200	0.00
07/25/11	0	0	0	1,200	0.00
07/26/11	8,130	0	8,130	1,200	0.08
07/27/11	32,520	0	32,520	14,000	3.79
07/28/11	34,160	0	34,160	14,000	3.98
07/29/11	21,240	0	21,240	14,000	2.47
07/30/11	29,410	0	29,410	14,000	3.42
07/31/11	37,470	0	37,470	14,000	4.36
08/01/11	35,870	0	35,870	14,000	4.18
08/02/11	36,270	0	36,270	14,000	4.22
08/03/11	39,590	0	39,590	14,000	4.61
08/04/11	37,240	0	37,240	14,000	4.34
08/05/11	41,970	0	41,970	14,000	4.89
08/06/11	50,390	0	50,390	14,000	5.87
08/07/11	49,190	0	49,190	14,000	5.73
08/08/11	32,530	0	32,530	14,000	3.79
08/09/11	29,320	0	29,320	14,000	3.41
08/10/11	17,670	0	17,670	14,000	2.06
08/11/11	0	0	0	14,000	0.00
08/12/11	13,480	0	13,480	14,000	1.57
08/13/11	13,110	0	13,110	14,000	1.53
08/14/11	0	0	0	14,000	0.00
08/15/11	14,670	0	14,670	14,000	1.71
08/16/11	8,190	0	8,190	14,000	0.95
08/17/11	10	0	10	14,000	0.00
08/18/11	7,180	0	7,180	14,000	0.84
08/19/11	3,970	0	3,970	14,000	0.46
08/20/11	0	0	0	14,000	0.00
08/21/11	0	0	0	14,000	0.00
08/22/11	19,110	0	19,110	14,000	2.22
08/23/11	18,820	0	18,820	14,000	2.19
08/24/11	38,730	0	38,730	14,000	4.51
08/25/11	48,290	0	48,290	14,000	5.62
08/26/11	49,820	0	49,820	7,400	3.07
08/27/11	51,560	0	51,560	7,400	3.17
08/28/11	51,480	0	51,480	7,400	3.17
08/29/11	26,170	0	26,170	7,400	1.61
08/30/11	8,090	0	8,090	7,400	0.50
08/31/11	16,790	0	16,790	7,400	1.03
09/01/11	10	0	10	7,400	0.00
09/02/11	0	0	0	7,400	0.00
09/03/11	14,960	0	14,960	7,400	0.92
09/04/11	0	0	0	7,400	0.00
09/05/11	0	0	0	7,400	0.00
09/06/11	0	0	0	7,400	0.00
09/07/11	19,870	0	19,870	7,400	1.22
09/08/11	35,580	0	35,580	7,400	2.19
09/09/11	39,900	0	39,900	7,400	2.46
09/10/11	26,580	0	26,580	7,400	1.64
09/11/11	32,840	0	32,840	7,400	2.02
09/12/11	31,520	0	31,520	7,400	1.94
09/13/11	26,880	0	26,880	7,400	1.65
09/14/11	36,060	0	36,060	7,400	2.22
09/15/11	36,810	0	36,810	7,400	2.27
09/16/11	23,650	0	23,650	7,400	1.46
09/17/11	26,250	0	26,250	7,400	1.62
09/18/11	31,880	0	31,880	7,400	1.96
09/19/11	12,030	0	12,030	7,400	0.74
09/20/11	10,530	0	10,530	7,400	0.65
09/21/11	30,990	0	30,990	7,400	1.91
09/22/11	31,400	0	31,400	7,400	1.93
09/23/11	28,170	0	28,170	6,400	1.50
09/24/11	33,950	0	33,950	6,400	1.81
09/25/11	17,550	0	17,550	6,400	0.93
09/26/11	11,780	0	11,780	6,400	0.63
09/27/11	8,310	0	8,310	6,400	0.44
09/28/11	24,580	0	24,580	6,400	1.31
09/29/11	17,170	0	17,170	6,400	0.91
09/30/11	0	0	0	6,400	0.00
Third Quarter 2011 Totals	**1,965,087**	**0**	**1,965,087**	**--**	**136**
10/04/11	68,461	0	68,461	6,400	3.64
10/13/11	87	0	87	6,400	0.00
10/18/11	86,350	0	86,350	6,400	4.60
10/21/11	71,730	0	71,730	6,400	3.82
10/25/11	114,921	0	114,921	6,000	5.73
10/28/11	77,116	0	77,116	6,000	3.85
11/01/11	31,944	0	31,944	6,000	1.59
11/04/11	78,673	0	78,673	6,000	3.93

TABLE 3
Groundwater Remediation System Operation Summary
SFPP Norwalk Pump Station
Norwalk, California

System Inspection Date	Groundwater Removed from the South-Central and Southeastern Areas (gallons)[8]	Groundwater Removed from the West Side Barrier Area (gallons)	Total Groundwater Removed (gallons)	Influent TPH-g Concentration (µg/L)[1]	TPH-g Removed from the South-Central, Southeastern, and West Side Barrier Areas (pounds)[2]
11/07/11	21,477	0	21,477	6,000	1.07
11/08/11	15,680	0	15,680	6,000	0.78
11/16/11	16,413	0	16,413	6,000	0.82
11/17/11	15,591	0	15,591	6,000	0.78
11/18/11	11,981	0	11,981	6,000	0.60
11/19/11	15,412	0	15,412	6,000	0.77
11/20/11	16,381	0	16,381	6,000	0.82
11/21/11	16,265	0	16,265	6,000	0.81
11/22/11	15,850	0	15,850	5,900	0.78
11/23/11	14,241	0	14,241	5,900	0.70
11/24/11	13,408	0	13,408	5,900	0.66
11/25/11	1,926	0	1,926	5,900	0.09
11/26/11	1	0	1	5,900	0.00
11/27/11	0	0	0	5,900	0.00
11/28/11	4,845	0	4,845	5,900	0.24
11/29/11	439	0	439	5,900	0.02
11/30/11	3	0	3	5,900	0.00
12/01/11	1	0	1	5,900	0.00
12/02/11	0	0	0	5,900	0.00
12/03/11	3,896	0	3,896	5,900	0.19
12/04/11	7,723	0	7,723	5,900	0.38
12/05/11	6,640	0	6,640	5,900	0.33
12/06/11	7,355	0	7,355	5,900	0.36
12/09/11	42,392	0	42,392	5,900	2.08
12/13/11	41,057	0	41,057	5,900	2.01
12/16/11	30,104	0	30,104	5,900	1.48
12/20/11	17,757	0	17,757	780	0.12
12/27/11	126,589	0	126,589	780	0.82
12/30/11	51,240	0	51,240	780	0.33
Fourth Quarter 2011 Totals	**1,043,949**	**0**	**1,043,949**	**--**	**44**
Cumulative TPH-g Removed Since Implementation of RAP Upgrades[5]					**1,599**

Notes
1. The TPH-g concentration reflects analytical results for samples collected from the influent of the total fluids extraction (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. 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. TPH-fp concentrations 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 (Geomatrix, 2006).

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

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

TABLE 4

Extracted Vapor Analytical Results[1]

SFPP Norwalk Pump Station

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	<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 [3]	<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
11/2/2010	ON	--	--	--	11	140	<10	31	28	<10
11/17/2010	ON	0.00075	0.4	22.0	--	--	--	--	--	--
12/28/2010	ON	0.0052	0.27	22.0	16	160	37	230	324	4.5
1/14/2011	ON	0.016	0.20	22.0	68	340	34	89	183	<10
2/8/2011	ON	0.026	0.24	21.0	210	3,000	1,700	11,000	7,400	110
3/29/2011	ON	0.013	0.13	20.0	5	170	15	18	41.5	<2.5
4/26/2011	ON	0.0011	0.079	20.0	1.9	16	2.4	8.8	7.7	<1.2
5/17/2011	ON	0.021	0.65	22.0	90	2,600	140	2,200	1,100	220
6/17/2011	ON	0.001	0.20	22.0	3	59	8.1	31	56	<0.25
7/19/2011	ON	0.0056	0.49	22.0	80	1,800	130	2,200	1,000	<31
8/16/2011	ON	0.0026	0.31	22.0	140	3,000	600	4,000	2,330	490
9/20/2011	ON	--	--	--	100	2,100	740.0	2,700	2,040	660.0
11/22/2011	ON	0.070	0.70	20.0	11	150	12.0	67	35	<5.0
12/20/2011	ON	0.020	0.34	22.0	0.13	110	<25	260	216	<25

Notes

1. Influent vapor samples were collected from the manifold conveying soil vapors extracted from the south-central and southeastern areas.
2. Other detected VOCs are included in the laboratory analytical reports in Appendix B.
3. Method used is South Coast Air Quality Management District (SCAQMD) 25.1M.

Abbreviations

ASTM = American Society for Testing and Materials
EPA = United States Environmental Protection Agency
VOC = volatile organic compound
%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 Norwalk Pump Station

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)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (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	--	--	--	--
10/12/2010	5,700	1,000	2,200	43	140	138	120	--	--	--	--
11/16/2010	1,100	1,600	290	4	15	78	84	--	--	--	--
12/14/2010	7,100	3,200	2,600	76	200	315	340	--	--	--	--
1/14/2011	7,400	3,500	3,700	56	110	220	280	--	--	--	--
2/8/2011	5,600	3,500	2,400	43	110	190	420	--	--	--	--
3/25/2011	3,100	1,200	1,300	51	92	200	300	--	--	--	--
4/26/2011	1,400	1,200	610	5.8	5.7	20	130	--	--	--	--
5/17/2011	3,300	1,700	3,600	82	180	300	240	--	--	--	--
6/21/2011	1,200	720	860	9.6	31	82	190	2,200	6.6	<0.07	<0.1
7/27/2011	14,000	--[4]	2,800	150	490	2,100	350	2,800	27	<0.07	<0.1
8/26/2011	7,400	57,000	1,400	120	480	1,300	270	1,600	16	<0.07	<0.1
9/23/2011	6,400	2,800	2,800	83.0	160	340	300	1,300	22	<0.07	<0.1
10/25/2011	6,000	2,300	3,000	52	93	200	200	970	20	<0.70	<1.0
11/22/2011	5,900	2,000	3,600	62	140	240	300	2,900	26	<0.07	<0.1
12/20/2011	780	2,000	330	8	14	43	160	1,000	18	<0.07	<0.1

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 B.
3. TPH-fp result from influent extracted groundwater sample collected on July 10, 2008.
4. July 27, 2011 sample was not analyzed for TPH-fp, but for TPH-diesel (10,000 µg/L) and TPH-oil (44J µg/L).

Abbreviations

TPH-g = total petroleum hydrocarbons as gasoline (C4-C12)
TPH-fp = total petroleum hydrocarbons as fuel products (C7-C28)
MTBE = methyl tertiary butyl ether
µg/L = micrograms per liter
-- = 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
TBA = tertiary butyl alcohol
DIPE = di-isopropyl ether
ETBE = ethyl tertiary butyl ether
TAME = tertiary amyl methyl ether

TABLE 6
Remediation Well Vapor Concentrations
SFPP Norwalk Pump Station
Norwalk, California

Remediation Area	Remediation Well ID	Remediation Well Function	Well Operation Status at End of First Quarter 2011[1]	1/19/2011 (ppmv as Hexane)[2]	2/8/2011 (ppmv as Hexane)[2]	Well Operation Status at End of Second Quarter 2011[1]	4/26/2011 (ppmv as Hexane)[2]	5/20/2011 (ppmv as Hexane)[2]	Well Operation Status at End of Third Quarter 2011[1]	7/15/2011 (ppmv as Hexane)[2]	8/16/2011 (ppmv as Hexane)[2]	9/20/2011 (ppmv as Hexane)[2]
South-Central	MW-SF-1	SVE	OFF	90.6	0.7	OFF	0.0	42.2	OFF	1.9	22.1	0.0
	MW-SF-2	SVE; TFE	OFF; OFF	2.2	0.0	OFF; OFF	0.0	0.0	OFF; OFF	2.4	4.4	0.0
	MW-SF-3	SVE; TFE	OFF; OFF	5.5	2.6	**ON**; OFF	102.2	55.5	OFF; **ON**	164.3	105.6	10.8
	MW-SF-4	SVE	OFF	68.4	0.0	OFF	31.6	1.2	OFF	1.2	2.1	0.0
	MW-SF-5	SVE	OFF	6.2	0.0	OFF	0.0	10.8	OFF	1.7	7.5	0.0
	MW-SF-6	SVE; TFE	OFF; OFF	12.6	15.5	OFF; OFF	10.8	7.2	OFF; OFF	2.3	11.5	0.5
	MW-SF-9	SVE	OFF	0.0	0.0	OFF	0.0	0.0	OFF	0.0	0.3	0.85
	MW-SF-10	SVE	OFF	6.5	4.2	OFF	0.0	6.5	OFF	0.4	5.2	2.6
	MW-SF-11	SVE; TFE	OFF; OFF	16.3	--	OFF; **ON**	0.0	22.0	**ON**; OFF	1.7	11.4	6.6
	MW-SF-12	SVE; TFE	OFF; OFF	36.2	44.2	**ON**; OFF	148.3	130.9	**ON**; OFF	12.1	192	24.7
	MW-SF-13	SVE; TFE	OFF; **ON**	3.1	5.3	OFF; OFF	9.8	8.0	OFF; **ON**	4.4	45	5.4
	MW-SF-14	SVE; TFE	OFF; **ON**	8.4	3.4	OFF; OFF	--	11.9	**ON**; OFF	14.3	5.3	32.2
	MW-SF-15	SVE; TFE	**ON; ON**	56.5	133.8	OFF; OFF	21.5	2.8	OFF; **ON**	0.4	3.1	0.2
	MW-SF-16	SVE; TFE	**ON; ON**	188.6	378.4	**ON**; OFF	68.1	843.5	**ON; ON**	47.55	124.7	367.5
	GMW-9	SVE; TFE	OFF; OFF	23.5	5.6	OFF; OFF	0.0	23.8	OFF; OFF	0.4	0.8	0.0
	GMW-10	SVE	**ON**	120.6	56.6	**ON**	89.2	219.5	**ON**	36.9	399	420.2
	GMW-22	SVE; TFE	OFF; OFF	23.5	5.6	OFF; OFF	0.0	23.8	OFF; OFF	0.4	0.8	0.0
	GMW-24	SVE; TFE	OFF; OFF	1.6	0.1	OFF; OFF	0.0	0.0	OFF; OFF	23.7	55.7	2.9
	GMW-25	SVE; GWE	OFF; OFF	1.6	0.1	OFF; OFF	0.0	0.0	OFF; OFF	23.7	55.7	2.9
	GWR-3	SVE; GWE	**ON;** OFF	23.1	240.4	**ON;** OFF	0.9	258.6	**ON;** OFF	16.6	267.4	5.5
	VEW-1	SVE	OFF	2.7	0.1	OFF	0.0	9.2	OFF	5.6	10.2	0.0
	VEW-2	SVE	OFF	4.3	3.9	OFF	13.2	28.7	OFF	2.9	15.8	0.1
	MW-O-1	SVE; TFE	**ON;** OFF	5.0	2.9	**ON;** OFF	13.1	30.8	**ON;** OFF	4.0	21	6.4
	MW-O-2	SVE; TFE	**ON**; OFF	--[3]	--	**ON**; OFF	6.9	39.5	**ON**; OFF	1.2	3.2	0.0
	GMW-O-11	SVE; TFE	**ON**; OFF	5.8	3.5	**ON**; OFF	2.5	3.8	**ON**; OFF	0.4	12.7	1.3
	GMW-O-12	SVE	**ON**	8.7	15.1	**ON**	106.6	9.2	**ON**	9.3	19.3	1.5
	GMW-O-20	SVE; TFE	**ON**; OFF	3.7	1.4	**ON**; OFF	24.2	2738	**ON**; OFF	52	381.2	9.2
	GMW-O-23	SVE; TFE	**ON;** OFF	5.5	3.1	**ON;** OFF	--	4.9	**ON;** OFF	3.8	5.2	4.0
	MW-18 (MID)	SVE	OFF	3.7	0.9	OFF	0.0	4.6	OFF	2.8	0.8	4.4
	HW-2	SVE	OFF	5,000	12.1	OFF	18	27.7	OFF	3.5	14.9	1.1
Southeastern	GMW-O-15	SVE; TFE	**ON; ON**	32.9	20.0	**ON; ON**	3.5	1530	**ON; ON**	928.1	1188	458.2
	GMW-O-18	SVE; TFE	**ON; ON**	32.9	20.0	**ON; ON**	3.5	1530	**ON; ON**	928.1	1188	458.2

Notes
1. The well operations listed correspond to the well functions indicated in the Remediation Well Function Column.
2. Vapor readings measured in the field with a photoionization detector (PID) calibrated using 50 ppmv of hexane.
-- = Vapor readings could not be measured due to water from the sample port.
Vapor readings were not measured during the fourth quarter 2011 due to periodic system downtime.
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 Norwalk Pump Station
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
	10/4/2010	74.44	30.30	---	---	44.14	Blaine Tech
	1/10/2011	74.44	32.02	---	---	42.42	Blaine Tech
	4/11/2011	74.44	25.41	---	---	49.03	Blaine Tech
	10/10/2011	74.44	28.91	---	---	45.53	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
	10/4/2010	74.67	27.15	---	---	47.52	Blaine Tech
	4/11/2011	74.67	25.21	---	---	49.46	Blaine Tech
	10/10/2011	74.67	27.75	---	---	46.92	Blaine Tech
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
	10/4/2010	74.17	27.65	---	---	46.52	Blaine Tech
	4/11/2011	74.17	26.45	---	---	47.72	Blaine Tech
	10/10/2011	74.17	29.68	---	---	44.49	Blaine Tech
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
	10/4/2010	74.04	29.50	---	---	44.54	Blaine Tech
	4/11/2011	74.04	28.21	---	---	45.83	Blaine Tech
	10/10/2011	74.04	28.78			45.26	Blaine Tech
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
	10/4/2010	74.29	29.25	---	---	45.04	Blaine Tech
	4/11/2011	74.29	26.21	---	---	48.08	Blaine Tech
	10/10/2011	74.29	30.02	---	---	44.27	Blaine Tech

TABLE 7

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

SFPP Norwalk Pump Station
Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (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	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
	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	74.53	25.94	25.91	0.03	---	Blaine Tech
	10/24/2010	74.53	26.90	---	---	47.63	Blaine Tech
	11/23/2010	74.53	27.35	27.10	0.25	---	Blaine Tech
	12/22/2010	74.53	28.35	26.84	1.51	---	Blaine Tech
	1/10/2011	74.53	29.10	27.70	1.40	--	Blaine Tech
	4/12/2011	74.53	26.98	25.05	1.93	--	Blaine Tech
	10/10/2011	74.53	25.96	---	---	48.57	Blaine Tech
	12/2/2011	74.53	26.71	---	---	47.82	Kinder Morgan
	12/21/2011	74.53	28.17	---	---	46.36	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
	10/4/2010	74.17	30.00	---	---	44.17	Blaine Tech
	4/13/2011	74.17	24.19	---	---	49.98	Blaine Tech
	10/10/2011	74.17	24.38	---	---	49.79	Blaine Tech
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
	10/4/2010	73.49	25.31	25.20	0.11	---	Blaine Tech
	1/10/2011	73.49	26.42	26.32	0.10	---	Blaine Tech
	4/11/2011	73.49	24.04	---	---	49.45	Blaine Tech
	10/10/2011	73.49	24.68	---	---	48.81	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

TABLE 7

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

SFPP Norwalk Pump Station
Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (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-15	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
	10/4/2010	74.23	25.85	25.80	0.05	---	Blaine Tech
	11/23/2010	74.23	53.17	---	---	21.06	Blaine Tech
	12/22/2010	74.23	26.31	---	---	47.92	Blaine Tech
	1/10/2011	74.23	25.97	---	---	48.26	Blaine Tech
	4/12/2011	74.23	22.55	22.53	0.02	---	Blaine Tech
	10/10/2011	74.23	23.79	23.22	0.57	---	Blaine Tech
	12/2/2011	74.23	23.92	23.86	0.06	---	Kinder Morgan
	12/21/2011	74.23	31.13	---	---	48.26	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
	10/4/2010	74.36	29.95	---	---	44.41	Blaine Tech
	4/12/2011	74.36	22.88	---	---	51.48	Blaine Tech
	10/10/2011	74.36	23.68	---	---	50.68	Blaine Tech
	12/2/2011	74.36	24.22	---	---	50.14	Blaine Tech
	12/21/2011	74.36	27.14	---	---	47.22	Blaine Tech
GMW-O-20	8/15/2008	73.32	25.90	---	---	47.42	Envent
	10/17/2008	73.32	25.82	---	---	47.50	Envent
	12/19/2008	73.32	27.15	---	---	46.17	Envent
	1/15/2009	73.32	26.53	26.09	0.44	---	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
	10/4/2010	73.32	31.20	31.10	0.10	---	Blaine Tech
	1/10/2011	73.32	26.62	26.48	0.14	---	Blaine Tech
	4/11/2011	73.32	23.82	---	---	49.50	Blaine Tech
	10/10/2011	73.32	24.05	---	---	49.27	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
	10/4/2010	71.43	25.40	---	---	46.03	Blaine Tech
	4/13/2011	71.43	23.72	---	---	47.71	Blaine Tech
	10/10/2011	71.43	24.65	---	---	46.78	Blaine Tech
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

TABLE 7

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

SFPP Norwalk Pump Station
Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (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-23	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
	10/4/2010	73.63	25.92	---	---	47.71	Blaine Tech
	1/10/2011	73.63	27.45	---	---	46.18	Blaine Tech
	4/11/2011	73.63	25.03	---	---	48.60	Blaine Tech
	10/10/2011	73.63	25.25	---	---	48.38	Blaine Tech
GMW-SF-9	4/21/2009	73.00	24.19	---	---	48.81	Envent
	5/24/2010	73.00	28.31	---	---	44.69	Blaine Tech
	5/28/2010	73.00	28.37	---	---	44.63	Blaine Tech
	10/4/2010	73.00	25.28	---	---	47.72	Blaine Tech
	4/11/2011	73.00	23.90	---	---	49.10	Blaine Tech
	10/10/2011	73.00	24.70	---	---	48.30	Blaine Tech
GMW-SF-10	4/21/2009	75.77	27.1	---	---	48.67	Envent
	10/4/2010	75.77	28.03	---	---	47.74	Blaine Tech
	4/11/2011	75.77	26.80	---	---	48.97	Blaine Tech
	10/10/2011	75.77	27.60	---	---	48.17	Blaine Tech
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
	10/4/2010	74.93	30.67	---	---	44.26	Blaine Tech
	4/11/2011	74.93	29.94	---	---	44.99	Blaine Tech
	10/10/2011	74.93	29.22	---	---	45.71	Blaine Tech
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	---	---	43.50	Blaine Tech
	10/4/2010	75.67	32.30	---	---	43.37	Blaine Tech
	4/11/2011	75.67	31.28	---	---	44.39	Blaine Tech
	10/10/2011	75.67	31.51	---	---	44.16	Blaine Tech
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
	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
	10/4/2010	75.48	26.90	---	---	48.58	Blaine Tech
	4/11/2011	75.48	25.59	---	---	49.89	Blaine Tech
	10/10/2011	75.48	26.52	---	---	48.96	Blaine Tech
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
	10/4/2010	71.90	26.05	---	---	45.85	Blaine Tech
	4/13/2011	71.90	23.31	---	---	48.59	Blaine Tech
	10/10/2011	71.90	27.53	---	---	44.37	Blaine Tech
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

TABLE 7

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

SFPP Norwalk Pump Station
Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (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-1	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
	10/4/2010	78.93	30.88	---	---	48.05	Blaine Tech
	1/10/2011	78.93	32.51	---	---	46.42	Blaine Tech
	4/11/2011	78.93	29.87	---	---	49.06	Blaine Tech
	7/11/2011	78.93	29.84	---	---	49.09	Blaine Tech
	10/10/2011	78.93	29.60	---	---	49.33	Blaine Tech
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
	10/4/2010	78.53	30.96	30.75	0.21	---	Blaine Tech
	1/10/2011	78.53	32.62	32.50	0.12	---	Blaine Tech
	4/11/2011	78.53	29.83	---	---	48.70	Blaine Tech
	10/10/2011	78.53	29.82	---	---	48.71	Blaine Tech
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
	10/4/2010	78.12	30.88	30.30	0.58	---	Blaine Tech
	4/12/2011	78.12	29.44	---	---	48.68	Blaine Tech
	10/10/2011	78.12	30.75	---	---	47.37	Blaine Tech
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
	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

TABLE 7

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

SFPP Norwalk Pump Station
Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (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	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
	10/4/2010	79.38	31.81	---	---	47.57	Blaine Tech
	1/10/2011	79.38	32.99	---	---	46.39	Blaine Tech
	4/11/2011	79.38	30.85	---	---	48.53	Blaine Tech
	7/11/2011	79.38	30.35	---	---	49.03	Blaine Tech
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
	10/4/2010	79.74	31.39	---	---	48.35	Blaine Tech
	1/10/2011	79.74	33.80	---	---	45.94	Blaine Tech
	4/11/2011	79.74	31.03	---	---	48.71	Blaine Tech
	10/10/2011	79.74	31.28	---	---	48.46	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
	10/4/2010	76.80	29.09	---	---	47.71	Blaine Tech
	1/10/2011	76.80	30.87	---	---	45.93	Blaine Tech
	4/11/2011	76.80	28.16	---	---	48.64	Blaine Tech
	10/10/2011	76.80	28.21	---	---	48.59	Blaine Tech
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
	10/4/2010	74.10	26.10	---	---	48.00	Blaine Tech
	1/10/2011	74.10	27.41	---	---	46.69	Blaine Tech
	4/11/2011	74.10	24.16	---	---	49.94	Blaine Tech
	10/10/2011	74.10	25.02	---	---	49.08	Blaine Tech
MW-SF-10	10/17/2008	76.53	27.49	---	---	49.04	Envent
	10/19/2009	76.53	28.61	---	---	47.92	Blaine Tech
	10/4/2010	76.53	28.5	28.36	0.14	---	Blaine Tech
	4/11/2011	76.53	27.41	27.37	0.04	---	Blaine Tech
	10/10/2011	76.53	27.6	---	---	47.92	Blaine Tech

TABLE 7

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

SFPP Norwalk Pump Station
Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (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	8/14/2007	78.56	28.58	28.30	0.28	---	Geomatrix
	8/21/2007	78.56	28.76	28.63	0.13	---	Geomatrix
	8/28/2007	78.56	28.22	---	---	50.34	Stantec
	9/11/2007	78.56	26.90	---	---	51.66	Geomatrix
	10/5/2007	78.56	28.43	---	---	50.13	Geomatrix
	11/2/2007	78.56	29.48	29.38	0.10	---	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
	10/4/2010	78.56	30.94	---	---	47.62	Blaine Tech
	4/12/2011	78.56	30.82	---	---	47.74	Blaine Tech
	10/10/2011	78.56	30.10	---	---	48.46	Blaine Tech
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
	10/4/2010	78.07	30.70	---	---	47.37	Blaine Tech
	4/11/2011	78.07	29.47	---	---	48.60	Blaine Tech
	10/10/2011	78.07	26.60	---	---	51.47	Blaine Tech
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
	10/4/2010	73.40	26.95	25.92	1.03	---	Blaine Tech
	4/12/2011	73.40	24.79	24.78	0.01	---	Blaine Tech
	10/10/2011	73.40	26.00	---	---	47.68	Blaine Tech
MW-SF-14	8/14/2007	78.16	27.68	---	---	50.48	Geomatrix
	8/21/2007	78.16	27.60	---	---	50.56	Geomatrix
	8/28/2007	78.16	27.53	---	---	50.63	Stantec
	9/11/2007	78.16	27.66	---	---	50.50	Geomatrix
	10/5/2007	78.16	27.75	---	---	50.41	Geomatrix
	11/2/2007	78.16	29.83	---	---	48.33	Geomatrix
	8/15/2008	78.16	29.77	29.24	0.53	---	Envent
	10/17/2008	78.16	29.52	29.50	0.02	---	Envent

TABLE 7

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

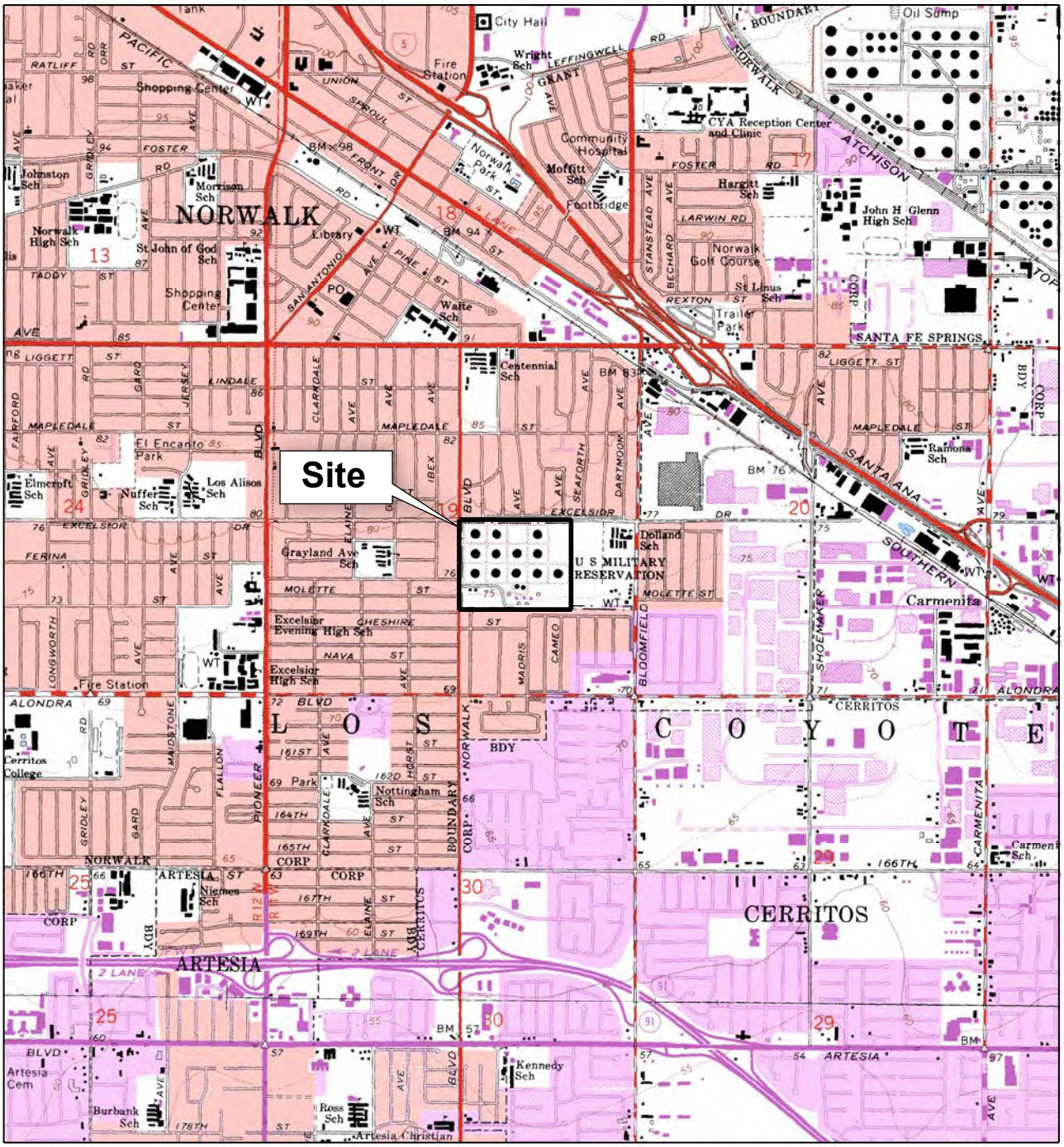
SFPP Norwalk Pump Station
Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (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	12/18/2008	78.16	30.62	---	---	47.54	Envent
	1/15/2009	78.16	30.08	---	---	48.08	Envent
	3/24/2009	78.16	29.73	---	---	48.43	Envent
	4/21/2009	78.16	29.61	---	---	48.55	Envent
	7/21/2009	78.16	29.20	---	---	48.96	Envent
	11/6/2009	78.16	30.48	---	---	47.68	Kinder Morgan
	12/9/2009	78.16	30.68	---	---	47.48	Kinder Morgan
	6/22/2010	78.16	26.17	---	---	51.99	Blaine Tech
	10/4/2010	78.16	30.54	---	---	47.62	Blaine Tech
	4/12/2011	78.16	29.55	---	---	48.61	Blaine Tech
	10/10/2011	78.16	29.84	---	---	48.32	Blaine Tech
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
	10/4/2010	78.27	30.66	30.65	0.01	---	Blaine Tech
	4/12/2011	78.27	30.50	29.40	1.1	---	Blaine Tech
	10/10/2011	78.27	29.60	---	---	48.67	Blaine Tech
	12/2/2011	78.27	31.40	30.05	1.4	---	Blaine Tech
MW-SF-16	8/14/2007	78.21	27.68	---	---	50.53	Geomatrix
	8/21/2007	78.21	27.33	---	---	50.88	Geomatrix
	8/28/2007	78.21	27.51	---	---	50.70	Stantec
	9/11/2007	78.21	27.59	---	---	50.62	Geomatrix
	10/5/2007	78.21	28.10	---	---	50.11	Geomatrix
	11/2/2007	78.21	29.81	---	---	48.40	Geomatrix
	11/12/2007	78.21	28.40	---	---	49.81	Stantec
	8/15/2008	78.21	29.36	---	---	48.85	Envent
	10/17/2008	78.21	29.51	---	---	48.70	Envent
	12/18/2008	78.21	30.94	---	---	47.27	Envent
	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
	10/4/2010	78.21	30.49	---	---	47.72	Blaine Tech
	4/12/2011	78.21	29.52	---	---	48.69	Blaine Tech
	10/10/2011	78.21	29.85	---	---	48.36	Blaine Tech

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



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

SCO420070.B1.01 Figure 2_RemediationSystemLayout.ai 9/11

Appendix A
Summary of Shutdowns in 2011

Appendix A
Summary of System Shutdowns in 2011

The remediation systems operated continuously during 2011 with some exceptions as described below and in previously submitted quarterly progress reports for 2011.

First Quarter 2011

- The soil vapor extraction (SVE) and total fluids extraction/groundwater extraction (TFE/GWE) systems were shut down on January 4, 2011, to clean the oil-water separator (OWS). The systems were restarted on the same day.
- The SVE system was shut down between January 7 and January 14, 2011, to allow pumping water levels and groundwater samples to be collected for the January 2011 sentry groundwater monitoring event.
- The SVE system was shut down on January 21, 2011, to drain water due to condensation from the knock-out tank. The system was restarted on the same day.
- The SVE system was shut down on January 25, 2011, to inspect the wiring of the thermocouples. The system was restarted on the same day.
- The SVE and TFE/GWE systems were shut down on January 26, 2011, to change the granulated activated carbon (GAC) from the lead vessel. The systems were restarted on the same day.
- The SVE and TFE/GWE systems were shut down on February 8, 2011, to change the GAC from the second vessel. Water from the SVE manifold was also drained while the system was off. The systems were restarted on the same day.
- The SVE system was off upon arrival on February 15, 2011. There were no alarms that indicated the reason for the shutdown. The system was restarted on the same day.
- The TFE/GWE system was off upon arrival on February 22, 2011, due to a high water level alarm at the transfer tank. The bag filters were clogged, which caused the high water level in the transfer tank. The bag filters were replaced, and the system was restarted.
- The TFE/GWE system was off upon arrival on February 28, 2011, due to an inoperable transfer pump. The transfer pump was replaced, and the system was restarted on March 18, 2011.
- The SVE system was shut down on March 1, 2011, to inspect and upgrade the wiring and controls to the SVE. During the inspection, the low pressure natural gas switch was found to be faulty. The low-pressure switch was replaced, and the system was restarted on March 29, 2011.

Second Quarter 2011

- The SVE and TFE/GWE systems were shut down from April 4 through April 15, 2011, to allow static water levels and groundwater samples to be collected for the April 2011 semiannual groundwater monitoring event.
- The SVE system was shut down on April 19, 2011, to drain water due to condensation from the SVE manifold, and to troubleshoot the dilution air valve. The air valve did not close or open automatically when needed.
- The TFE/GWE system was off on arrival on April 19, 2011, due to clogged bag filters. Water was drained from one of the two 8,000-gallon holding tanks. The water in the tank was full of particulates that clogged the filters. The bag filters were replaced and the system was restarted on the same day.
- The TFE/GWE system was shut down on April 20, 2011, for repairs to the manifold piping. The system was turned on the next day.
- The TFE/GWE system was shut down on April 22, 2011, to change the GAC from the first carbon vessel. However, the piping in the first vessel broke during the changeout. The system stayed off until the piping was repaired. The TFE/GWE system was restarted on April 27, 2011.
- On May 3, 2011, the SVE system was shut down to drain water due to condensation from the manifold. The SVE system was restarted on the same day.
- The TFE/GWE system was shut down on May 10, 2011, for routine cleaning of the OWS, the bag filter housing, and the transfer tank. The system was restarted on the same day.
- The SVE system was off upon arrival on May 17, 2011, due to a high temperature alarm. The system was restarted on the same day.
- The TFE/GWE system was shut down on May 20, 2011, to change the GAC from the first vessel. The systems were restarted on the same day.
- The SVE system was shut down from May 24 through May 27, 2011, for groundwater monitoring.
- The TFE/GWE system was off upon arrival on May 31, 2011, due to clogged filters. The filters were replaced and the system was restarted on the same day.
- From June 6 through June 8, 2011, the TFE/GWE system was shut off in order to redevelop the southeastern wells (GMW-36, GMW-O-15, and GMW-O-18) and MW-SF-11 in the south-central area to remove the fine particulates from the wells. The southeastern conveyance lines were also cleaned on June 14, 2011.
- On June 7, 2011, the SVE and TFE/GWE system was turned off to change the GAC from the first carbon vessel. The system was restarted on the same day.
- The TFE/GWE system was off upon arrival on June 10, 2011, due to clogged filters. The southeast wells were shut off due to fine particulates in the lines and the wells. The system was restarted on the same day.

- On June 21, 2011, the SVE system was off upon arrival. The reason for the shutdown was unknown. The SVE system was restarted on the same day.
- On June 27, 2011, the SVE system was shut down to add a digital chart recorder on the SVE and to repair the motor and actuator that controls the dilution and process valves. The system was repaired and back online on July 12, 2011.

Third Quarter 2011

- On June 27, 2011, the SVE system was turned off to repair the actuator and motor for the dilution and process valves and to install a digital chart recorder. The SVE system was back online on July 12, 2011.
- On July 26, 27, and 29, 2011, the TFE/GWE system was off on arrival due to a high water level in the transfer tank. On July 26 and 27, 2011, the high level was thought to be the result of clogged bag filters. Therefore, the bag filters were replaced and the system was restarted on the same day. On July 29, 2011, the transfer pump was discovered to be faulty and may have been the reason for the system shutdowns on July 26 and 27, 2011. The pump motor was repaired, and the system was restarted on the same day.
- The SVE system was turned off on August 5, 2011, to remove condensate from the SVE well manifold at the treatment pad. It was restarted on the same day.
- On August 12 and 15, and September 6, 2011, the system was off on arrival due to a high level in the product tank. Free product was not found inside the product tank. Sludge material in the OWS was causing water to drain into the product tank, which caused a high level to occur. On August 12 and 15, the sludge material was removed, and the OWS was cleaned by the technicians. The product tank was also drained and the system restarted the same day. On September 6, 2011, the media inside the OWS was replaced, and the OWS and transfer tank were cleaned with a pressure washer. Unexpected shutdowns due to groundwater flowing into the product tank have not occurred since the media inside the OWS was replaced.
- From August 15 through August 17, 2011, the TFE/GWE system was turned off for system upgrades, which included installation of an automated 3-inch ball valve upgradient of the OWS; installation of the total effluent, total influent, and southeastern influent flowmeters and flow sensors; and installation of flow totalizers for the south-central wells.
- The SVE and TFE/GWE system was turned off on August 23, 2011, to connect alarm signals from the SVE and TFE/GWE control panels to an automated notification system (autodialer) to inform technicians of a system shutdown.
- On August 29 and 30, and September 7, 2011, the system was off on arrival due to a high level in the equalization tank upgradient of the fluidized bed bioreactors (FBBRs). The bag filters for the FBBRs and polishing liquid-phase granular activated carbon (LGAC) vessels were clogged with fine-grained material causing a decrease in flow through the FBBRs and polishing LGAC vessels. This decrease in flow caused water in the equalization tank to reach a high level and turn the entire treatment system off.

On August 29 and 30, 2011, the bag filters were replaced, and the system was restarted on the same day. On September 7, 2011, fines were removed from the lead polishing LGAC vessel; however, when trying to close the vessel, the technicians could not get a proper seal due to a damaged cap. The lead LGAC vessel was therefore bypassed and the secondary LGAC vessel was utilized for polishing. The treatment system was restarted that same day. On September 13, 2011, the lead polishing vessel was replaced and filled with new carbon.

- On September 9, 2011, the system was turned off so that KMEP's remediation contractor, American Integrated Services, could make some repairs to the treatment system flow/ totalizer meters and extraction well box enclosures. Glue was applied and required at least 24 hours to cure; therefore, the system remained off during the weekend and was restarted on September 13, 2011.
- The SVE system was down on September 16, 2011, due to low pressure in the natural gas line that feeds the burner for the SVE system. It is believed that the low pressure was a result of the ruptured natural gas line near the truck fill stand (the SVE natural gas feed line and natural gas line near the truck fill stand are likely connected). The gas line was ruptured as a result of the military's demolition activities in that area. The system was restarted on September 19, 2011, after the gas line was repaired and adequate gas pressure was restored to the SVE system. An attempt will be made to trace the gas line from the truck fill stand area to the SVE system, then cut and cap the line near SFPP's remediation pad.
- The SVE system was shut down on September 19, 2011, for 3 days and again on September 27, 2011, through the end of the month as a result of mechanical issues with the SVE flow sensor. It was anticipated that KMEP's remediation contractor, Northstar, would replace the sensor in early October 2011.
- Frequent shutdowns of the treatment system continued during September 2011 due to high water levels in the equalization tank. The reason for the frequent shutdowns was the presence of fine particulates clogging the FBBR bag filters and lead polishing LGAC vessel. The particulates are believed to be carbonates precipitating from the pretreated groundwater. The pH of the pretreated groundwater will be adjusted in order to eliminate the formation of these carbonate precipitates.

Fourth Quarter 2011

- The TFE/GWE system was down between October 2 and 4, 2011, due to a high water level in the transfer tank, likely caused by clogged bag filters. The bag filters were replaced, but the TFE/GWE system remained off to facilitate quarterly groundwater monitoring for the second semiannual 2011 groundwater sampling event. The SVE was also turned off on October 4, 2011, to facilitate groundwater monitoring. The TFE/GWE system was restarted on October 13, 2011; however, the SVE system remained off for the remainder of October 2011 due to mechanical issues with the SVE flow sensor.
- Throughout the month of October 2011, the TFE/GWE would turn off occasionally due to a high water level in the equalization tank. The high level in the equalization tank was due to decreased flow through the FBBR (tertiary butyl alcohol [TBA]) treatment system,

as a result of plugging of the lead LGAC polishing vessel. Between October 21 and 24, 2011, the carbon in the lead polishing LGAC vessel was changed out. The carbon in this vessel had solidified; therefore, several days were required to clean out the vessel. It is believed that the solidification in the lead carbon vessel is a result of carbonates precipitating from the pretreated groundwater. Adjustments to the pH of the pretreated groundwater have been implemented in order to eliminate the formation of these carbonate precipitates. The TFE/GWE system was restarted on October 25, 2011.

- On November 4, 2011, the TFE/GWE system was off on arrival due to a high level in the transfer tank, which was caused by the bag filters downstream of the OWS being clogged. The bag filters were replaced and the system was restarted the same day.
- On November 7 and 8, 2011, the TFE/GWE system was down on arrival due to water in the product tank. The air vent for the transfer tank was blocked, which caused water to go into the product tank instead of being treated by the TFE/GWE system. The vent was repaired on November 8, 2011. The system stayed off to connect the new southeastern influent flowmeter, total influent flowmeter, and total effluent flowmeter to a separate power source from the TFE/GWE and SVE systems. The system was restarted on November 15, 2011.
- On November 27, 2011, the TFE/GWE system was turned off to drain the 8,000-gallon equalization tank so that it could be moved and replaced with the 3,000-gallon equalization tank. The system was restarted on December 2, 2011.
- The SVE system was off between November 1 and 22, 2011, due to mechanical issues with the SVE flow sensor. Malfunctioning of the SVE flow sensor was due to damage to the flow sensor stainless steel tubing and a plugged flame arrestor. The stainless steel tubing for the flow sensor was replaced by KMEP's remediation contractor, Northstar. Northstar also inspected and cleaned the flame arrestor the week of November 7, 2011. On November 22, 2011, the flow recorder was recalibrated based on the blower curve.
- On November 29, 2011, the SVE system was off on arrival due to the pilot light malfunctioning. Troubleshooting of the pilot light continued for the remainder of November 2011.
- The SVE system was off between December 1 and 15, 2011, because the pilot light was unable to light. The KMEP technicians replaced the ultraviolet (UV) flame sensor but the pilot light was still unable to light. The SVE was operational on December 16, 2011, after the Veri-flame controller was replaced.
- On December 13, 2011, the TFE/GWE system was turned off to replace the carbon from the two polishing LGAC vessels. The system was restarted the same day.
- On December 24, 2011, the TFE/GWE system was off on arrival due to a high level in the transfer tank, which was caused by the bag filters downstream of the OWS being clogged. The bag filters were replaced and the system was restarted the same day.
- The system was shut down between December 30, 2011, and January 3, 2012, due to malfunctioning of the digital chart recorder, which records daily effluent flow. The system was restarted on January 3, 2012, and the chart recorder repaired on January 6, 2012.

Appendix B
Laboratory Analytical Reports

October 31, 2011

Daniel Jablonski
CH2M HILL
155 Grand Avenue, Suite 1000
Oakland, CA 94612

TEL: (213)228-8271
FAX: (510) 622-9129

CA-ELAP No.:2676
NV Cert. No.:NV-009222007A

Workorder No.: N006707

RE: SFPP - Norwalk Site

Attention: Daniel Jablonski

Enclosed are the results for sample(s) received on October 27, 2011 by Advanced Technology Laboratories, Inc. . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

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

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

Sincerely,

for gsgesmundt

Jose Tenorio Jr.
Laboratory Director

CLIENT: CH2M HILL
Project: SFPP - Norwalk Site
Lab Order: N006707

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

Samples were received intact with proper chain of custody documentation.

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

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

Samples were analyzed within method holding time.

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

Advanced Technology Laboratories, Inc. *3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691*

Advanced Technology Laboratories, Inc.

Date: *31-Oct-11*

CLIENT: CH2M HILL
Project: SFPP - Norwalk Site
Lab Order: N006707
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N006707-001A	INF-10-25	Waste Water	10/25/2011 1:00:00 PM	10/27/2011	
N006707-001B	INF-10-25	Waste Water	10/25/2011 1:00:00 PM	10/27/2011	
N006707-001C	INF-10-25	Waste Water	10/25/2011 1:00:00 PM	10/27/2011	

CLIENT: CH2M HILL
Lab Order: N006707
Project: SFPP - Norwalk Site
Lab ID: N006707-001

Client Sample ID: INF-10-25
Collection Date: 10/25/2011 1:00:00 PM
Matrix: WASTE WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: **MS1_111027B** QC Batch: **D11VW158** PrepDate: Analyst: **QBM**

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.61	10		µg/L	10	10/28/2011 12:31 AM
1,1,1-Trichloroethane	ND	0.68	10		µg/L	10	10/28/2011 12:31 AM
1,1,2,2-Tetrachloroethane	ND	0.54	10		µg/L	10	10/28/2011 12:31 AM
1,1,2-Trichloroethane	ND	0.83	10		µg/L	10	10/28/2011 12:31 AM
1,1-Dichloroethane	ND	0.99	5.0		µg/L	10	10/28/2011 12:31 AM
1,1-Dichloroethene	ND	0.94	10		µg/L	10	10/28/2011 12:31 AM
1,1-Dichloropropene	ND	0.82	10		µg/L	10	10/28/2011 12:31 AM
1,2,3-Trichlorobenzene	ND	1.0	10		µg/L	10	10/28/2011 12:31 AM
1,2,3-Trichloropropane	ND	1.2	10		µg/L	10	10/28/2011 12:31 AM
1,2,4-Trichlorobenzene	ND	1.2	10		µg/L	10	10/28/2011 12:31 AM
1,2,4-Trimethylbenzene	47	0.95	10		µg/L	10	10/28/2011 12:31 AM
1,2-Dibromo-3-chloropropane	ND	1.5	20		µg/L	10	10/28/2011 12:31 AM
1,2-Dibromoethane	ND	1.4	10		µg/L	10	10/28/2011 12:31 AM
1,2-Dichlorobenzene	ND	0.70	10		µg/L	10	10/28/2011 12:31 AM
1,2-Dichloroethane	ND	1.7	5.0		µg/L	10	10/28/2011 12:31 AM
1,2-Dichloropropane	ND	0.85	10		µg/L	10	10/28/2011 12:31 AM
1,3,5-Trimethylbenzene	14	0.87	10		µg/L	10	10/28/2011 12:31 AM
1,3-Dichlorobenzene	ND	0.90	10		µg/L	10	10/28/2011 12:31 AM
1,3-Dichloropropane	ND	0.74	10		µg/L	10	10/28/2011 12:31 AM
1,4-Dichlorobenzene	ND	0.92	10		µg/L	10	10/28/2011 12:31 AM
2,2-Dichloropropane	ND	0.61	10		µg/L	10	10/28/2011 12:31 AM
2-Butanone	ND	10	100		µg/L	10	10/28/2011 12:31 AM
2-Chlorotoluene	ND	0.80	10		µg/L	10	10/28/2011 12:31 AM
4-Chlorotoluene	ND	1.0	10		µg/L	10	10/28/2011 12:31 AM
4-Isopropyltoluene	ND	0.80	10		µg/L	10	10/28/2011 12:31 AM
4-Methyl-2-pentanone	ND	7.6	100		µg/L	10	10/28/2011 12:31 AM
Acetone	ND	16	100		µg/L	10	10/28/2011 12:31 AM
Acrolein	ND	43	200		µg/L	10	10/28/2011 12:31 AM
Acrylonitrile	ND	6.1	200		µg/L	10	10/28/2011 12:31 AM
Benzene	3000	3.8	50		µg/L	50	10/28/2011 12:09 AM
Bromobenzene	ND	0.82	10		µg/L	10	10/28/2011 12:31 AM
Bromochloromethane	ND	1.5	10		µg/L	10	10/28/2011 12:31 AM
Bromodichloromethane	ND	0.63	10		µg/L	10	10/28/2011 12:31 AM
Bromoform	ND	0.86	10		µg/L	10	10/28/2011 12:31 AM
Bromomethane	ND	1.3	10		µg/L	10	10/28/2011 12:31 AM
Carbon disulfide	ND	0.54	10		µg/L	10	10/28/2011 12:31 AM

Qualifiers:

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

CLIENT: CH2M HILL
Lab Order: N006707
Project: SFPP - Norwalk Site
Lab ID: N006707-001

Client Sample ID: INF-10-25
Collection Date: 10/25/2011 1:00:00 PM
Matrix: WASTE WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: **MS1_111027B** QC Batch: **D11VW158** PrepDate: Analyst: **QBM**

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
Carbon tetrachloride	ND	1.0	10		µg/L	10	10/28/2011 12:31 AM
Chlorobenzene	ND	0.92	10		µg/L	10	10/28/2011 12:31 AM
Chloroethane	ND	1.4	10		µg/L	10	10/28/2011 12:31 AM
Chloroform	ND	0.58	10		µg/L	10	10/28/2011 12:31 AM
Chloromethane	ND	0.54	10		µg/L	10	10/28/2011 12:31 AM
cis-1,2-Dichloroethene	ND	1.1	10		µg/L	10	10/28/2011 12:31 AM
cis-1,3-Dichloropropene	ND	1.0	10		µg/L	10	10/28/2011 12:31 AM
Di-isopropyl ether	20	0.72	10		µg/L	10	10/28/2011 12:31 AM
Dibromochloromethane	ND	0.61	10		µg/L	10	10/28/2011 12:31 AM
Dibromomethane	ND	1.5	10		µg/L	10	10/28/2011 12:31 AM
Dichlorodifluoromethane	ND	1.2	10		µg/L	10	10/28/2011 12:31 AM
Ethyl tert-butyl ether	ND	0.70	10		µg/L	10	10/28/2011 12:31 AM
Ethylbenzene	52	0.51	10		µg/L	10	10/28/2011 12:31 AM
Freon-113	ND	0.80	10		µg/L	10	10/28/2011 12:31 AM
Hexachlorobutadiene	ND	1.7	10		µg/L	10	10/28/2011 12:31 AM
Isopropylbenzene	11	0.57	10		µg/L	10	10/28/2011 12:31 AM
m,p-Xylene	150	1.7	10		µg/L	10	10/28/2011 12:31 AM
Methylene chloride	5.3	1.0	20	J	µg/L	10	10/28/2011 12:31 AM
MTBE	200	0.89	10		µg/L	10	10/28/2011 12:31 AM
n-Butylbenzene	ND	0.82	10		µg/L	10	10/28/2011 12:31 AM
n-Propylbenzene	22	0.87	10		µg/L	10	10/28/2011 12:31 AM
Naphthalene	70	0.56	10		µg/L	10	10/28/2011 12:31 AM
o-Xylene	45	0.77	10		µg/L	10	10/28/2011 12:31 AM
sec-Butylbenzene	ND	0.98	10		µg/L	10	10/28/2011 12:31 AM
Styrene	ND	0.72	10		µg/L	10	10/28/2011 12:31 AM
Tert-amyl methyl ether	ND	1.0	10		µg/L	10	10/28/2011 12:31 AM
Tert-Butanol	970	12	50		µg/L	10	10/28/2011 12:31 AM
tert-Butylbenzene	ND	0.62	10		µg/L	10	10/28/2011 12:31 AM
Tetrachloroethene	ND	1.3	10		µg/L	10	10/28/2011 12:31 AM
Toluene	93	1.2	20		µg/L	10	10/28/2011 12:31 AM
trans-1,2-Dichloroethene	ND	0.94	10		µg/L	10	10/28/2011 12:31 AM
trans-1,3-Dichloropropene	ND	1.0	10		µg/L	10	10/28/2011 12:31 AM
Trichloroethene	ND	0.60	10		µg/L	10	10/28/2011 12:31 AM
Trichlorofluoromethane	ND	0.97	10		µg/L	10	10/28/2011 12:31 AM
Vinyl chloride	ND	1.2	10		µg/L	10	10/28/2011 12:31 AM
Xylenes, Total	200	15	20		µg/L	10	10/28/2011 12:31 AM

Qualifiers:

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

CLIENT: CH2M HILL
Lab Order: N006707
Project: SFPP - Norwalk Site
Lab ID: N006707-001

Client Sample ID: INF-10-25
Collection Date: 10/25/2011 1:00:00 PM
Matrix: WASTE WATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS1_111027B**	QC Batch: **D11VW158**			PrepDate:			Analyst: **QBM**
Surr: 1,2-Dichloroethane-d4	107	0	72-119		%REC	10	10/28/2011 12:31 AM
Surr: 1,2-Dichloroethane-d4	95.6	0	72-119		%REC	50	10/28/2011 12:09 AM
Surr: 4-Bromofluorobenzene	108	0	76-119		%REC	50	10/28/2011 12:09 AM
Surr: 4-Bromofluorobenzene	108	0	76-119		%REC	10	10/28/2011 12:31 AM
Surr: Dibromofluoromethane	98.4	0	85-115		%REC	50	10/28/2011 12:09 AM
Surr: Dibromofluoromethane	110	0	85-115		%REC	10	10/28/2011 12:31 AM
Surr: Toluene-d8	106	0	81-120		%REC	10	10/28/2011 12:31 AM
Surr: Toluene-d8	110	0	81-120		%REC	50	10/28/2011 12:09 AM
TPH-FUEL PRODUCT BY GC/FID							
	EPA 3510C		**EPA 8015B**				
RunID: **GC3_111029A**	QC Batch: **38180**			PrepDate:	**10/29/2011**		Analyst: **PYW**
TPH-Fuel Product	2300	13	50		ug/L	1	10/29/2011 09:21 PM
Surr: Octacosane	71.0	0	26-152		%REC	1	10/29/2011 09:21 PM
Surr: p-Terphenyl	78.1	0	57-132		%REC	1	10/29/2011 09:21 PM
GASOLINE RANGE ORGANICS BY GC/FID							
			EPA 8015B				
RunID: **GC4_111027A**	QC Batch: **E11VW058**			PrepDate:			Analyst: **QBM**
TPH-Gasoline (C4-C12)	6000	12	200		µg/L	2	10/27/2011
Surr: Chlorobenzene - d5	90.7	0	74-138		%REC	2	10/27/2011

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N006707
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_FP_SFPP

Sample ID: **MB-38180**	SampType: **MBLK**	TestCode: **8015_W_FP_**	Units: **ug/L**	Prep Date: **10/29/2011**	RunNo: **81992**
Client ID: **PBW**	Batch ID: **38180**	TestNo: **EPA 8015B**	**EPA 3510C**	Analysis Date: **10/29/2011**	SeqNo: **1320346**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Fuel Product	51.850	50									
Surr: Octacosane	64.345		80.00		80.4	26	152				
Surr: p-Terphenyl	80.460		80.00		101	57	132				

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL
Work Order: N006707
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_GSFPP

Sample ID: **E111027LCS**	SampType: **LCS**	TestCode: **8015_W_GSF**	Units: **µg/L**	Prep Date:	RunNo: **81974**
Client ID: **LCSW**	Batch ID: **E11VW058**	TestNo: **EPA 8015B**		Analysis Date: **10/27/2011**	SeqNo: **1320013**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	784.000	100	1000	0	78.4	67	136				
Surr: Chlorobenzene - d5	48.732		50.00		97.5	74	138				

Sample ID: **E111027MB1**	SampType: **MBLK**	TestCode: **8015_W_GSF**	Units: **µg/L**	Prep Date:	RunNo: **81974**
Client ID: **PBW**	Batch ID: **E11VW058**	TestNo: **EPA 8015B**		Analysis Date: **10/27/2011**	SeqNo: **1320014**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	ND	100									
Surr: Chlorobenzene - d5	51.963		50.00		104	74	138				

Sample ID: **N006699-001BMS**	SampType: **MS**	TestCode: **8015_W_GSF**	Units: **µg/L**	Prep Date:	RunNo: **81974**
Client ID: **ZZZZZZ**	Batch ID: **E11VW058**	TestNo: **EPA 8015B**		Analysis Date: **10/27/2011**	SeqNo: **1320015**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	671.000	100	1000	0	67.1	67	136				
Surr: Chlorobenzene - d5	44.414		50.00		88.8	74	138				

Sample ID: **N006699-001BMSD**	SampType: **MSD**	TestCode: **8015_W_GSF**	Units: **µg/L**	Prep Date:	RunNo: **81974**
Client ID: **ZZZZZZ**	Batch ID: **E11VW058**	TestNo: **EPA 8015B**		Analysis Date: **10/27/2011**	SeqNo: **1320016**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	725.000	100	1000	0	72.5	67	136	671.0	7.74	30	
Surr: Chlorobenzene - d5	45.239		50.00		90.5	74	138		0	0	

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL
Work Order: N006707
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111027LCS2** SampType: **LCS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **81979**
Client ID: **LCSW** Batch ID: **D11VW158** TestNo: **EPA 8260B** Analysis Date: **10/27/2011** SeqNo: **1320080**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	17.790	1.0	20.00	0	89.0	81	129				
1,1,1-Trichloroethane	15.470	1.0	20.00	0	77.4	67	132				
1,1,2,2-Tetrachloroethane	18.950	1.0	20.00	0	94.8	63	128				
1,1,2-Trichloroethane	18.580	1.0	20.00	0	92.9	75	125				
1,1-Dichloroethane	18.820	0.50	20.00	0	94.1	69	133				
1,1-Dichloroethene	19.060	1.0	20.00	0	95.3	68	130				
1,1-Dichloropropene	19.130	1.0	20.00	0	95.7	73	132				
1,2,3-Trichlorobenzene	19.530	1.0	20.00	0	97.6	67	137				
1,2,3-Trichloropropane	19.090	1.0	20.00	0	95.4	73	124				
1,2,4-Trichlorobenzene	20.110	1.0	20.00	0	101	66	134				
1,2,4-Trimethylbenzene	20.990	1.0	20.00	0	105	74	132				
1,2-Dibromo-3-chloropropane	17.160	2.0	20.00	0	85.8	50	132				
1,2-Dibromoethane	19.000	1.0	20.00	0	95.0	80	121				
1,2-Dichlorobenzene	20.000	1.0	20.00	0	100	71	122				
1,2-Dichloroethane	18.920	0.50	20.00	0	94.6	69	132				
1,2-Dichloropropane	18.610	1.0	20.00	0	93.0	75	125				
1,3,5-Trimethylbenzene	20.950	1.0	20.00	0	105	74	131				
1,3-Dichlorobenzene	20.430	1.0	20.00	0	102	75	124				
1,3-Dichloropropane	18.660	1.0	20.00	0	93.3	73	126				
1,4-Dichlorobenzene	20.160	1.0	20.00	0	101	74	123				
2,2-Dichloropropane	16.140	1.0	20.00	0	80.7	69	137				
2-Butanone	199.640	10	200.0	0	99.8	49	136				
2-Chlorotoluene	20.230	1.0	20.00	0	101	73	126				
4-Chlorotoluene	20.560	1.0	20.00	0	103	74	128				
4-Isopropyltoluene	21.490	1.0	20.00	0	107	73	130				
4-Methyl-2-pentanone	195.080	10	200.0	0	97.5	58	134				
Acetone	204.990	10	200.0	0	102	40	135				
Acrolein	175.790	20	200.0	0	87.9	75	125				
Acrylonitrile	174.760	20	200.0	0	87.4	75	125				
Benzene	19.250	1.0	20.00	0	96.2	81	122				

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL
Work Order: N006707
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111027LCS2** SampType: **LCS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **81979**
Client ID: **LCSW** Batch ID: **D11VW158** TestNo: **EPA 8260B** Analysis Date: **10/27/2011** SeqNo: **1320080**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	20.380	1.0	20.00	0	102	76	124				
Bromochloromethane	18.370	1.0	20.00	0	91.9	65	129				
Bromodichloromethane	16.490	1.0	20.00	0	82.5	76	121				
Bromoform	16.470	1.0	20.00	0	82.4	69	128				
Bromomethane	20.390	1.0	20.00	0	102	53	141				
Carbon disulfide	18.060	1.0	20.00	0	90.3	75	125				
Carbon tetrachloride	15.670	1.0	20.00	0	78.4	66	138				
Chlorobenzene	20.280	1.0	20.00	0	101	81	122				
Chloroethane	21.920	1.0	20.00	0	110	58	133				
Chloroform	18.610	1.0	20.00	0	93.0	69	128				
Chloromethane	18.890	1.0	20.00	0	94.4	56	131				
cis-1,2-Dichloroethene	19.100	1.0	20.00	0	95.5	72	126				
cis-1,3-Dichloropropene	18.290	1.0	20.00	0	91.4	69	131				
Di-isopropyl ether	18.590	1.0	20.00	0	93.0	70	130				
Dibromochloromethane	16.990	1.0	20.00	0	85.0	66	133				
Dibromomethane	19.050	1.0	20.00	0	95.2	76	125				
Dichlorodifluoromethane	21.410	1.0	20.00	0	107	53	153				
Ethyl tert-butyl ether	18.250	1.0	20.00	0	91.2	70	130				
Ethylbenzene	20.570	1.0	20.00	0	103	73	127				
Freon-113	19.180	1.0	20.00	0	95.9	75	125				
Hexachlorobutadiene	21.160	1.0	20.00	0	106	67	131				
Isopropylbenzene	21.390	1.0	20.00	0	107	75	127				
m,p-Xylene	41.630	1.0	40.00	0	104	76	128				
Methylene chloride	18.090	2.0	20.00	0	90.4	63	137				
MTBE	16.630	1.0	20.00	0	83.2	65	123				
n-Butylbenzene	21.300	1.0	20.00	0	106	69	137				
n-Propylbenzene	21.280	1.0	20.00	0	106	72	129				
Naphthalene	17.090	1.0	20.00	0	85.4	54	138				
o-Xylene	20.310	1.0	20.00	0	102	80	121				
sec-Butylbenzene	21.220	1.0	20.00	0	106	72	127				

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL
Work Order: N006707
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111027LCS2** SampType: **LCS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **81979**
Client ID: **LCSW** Batch ID: **D11VW158** TestNo: **EPA 8260B** Analysis Date: **10/27/2011** SeqNo: **1320080**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	20.360	1.0	20.00	0	102	65	134				
Tert-amyl methyl ether	18.600	1.0	20.00	0	93.0	70	130				
Tert-Butanol	75.290	5.0	100.0	0	75.3	70	130				
tert-Butylbenzene	20.950	1.0	20.00	0	105	70	129				
Tetrachloroethene	21.110	1.0	20.00	0	106	66	128				
Toluene	19.560	2.0	20.00	0	97.8	77	122				
trans-1,2-Dichloroethene	19.390	1.0	20.00	0	97.0	63	137				
trans-1,3-Dichloropropene	18.970	1.0	20.00	0	94.8	59	135				
Trichloroethene	18.940	1.0	20.00	0	94.7	70	127				
Trichlorofluoromethane	20.700	1.0	20.00	0	104	57	129				
Vinyl chloride	19.630	1.0	20.00	0	98.2	50	134				
Xylenes, Total	61.940	2.0	60.00	0	103	75	125				
Surr: 1,2-Dichloroethane-d4	22.180		25.00		88.7	72	119				
Surr: 4-Bromofluorobenzene	24.210		25.00		96.8	76	119				
Surr: Dibromofluoromethane	23.200		25.00		92.8	85	115				
Surr: Toluene-d8	24.900		25.00		99.6	81	120				

Sample ID: **N006706-005AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **81979**
Client ID: **ZZZZZZ** Batch ID: **D11VW158** TestNo: **EPA 8260B** Analysis Date: **10/27/2011** SeqNo: **1320081**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	17.790	1.0	20.00	0	89.0	81	129				
1,1,1-Trichloroethane	15.070	1.0	20.00	0	75.4	67	132				
1,1,2,2-Tetrachloroethane	17.310	1.0	20.00	0	86.6	63	128				
1,1,2-Trichloroethane	17.370	1.0	20.00	0	86.9	75	125				
1,1-Dichloroethane	18.410	0.50	20.00	0	92.0	69	133				
1,1-Dichloroethene	18.500	1.0	20.00	0	92.5	68	130				
1,1-Dichloropropene	18.790	1.0	20.00	0	94.0	73	132				
1,2,3-Trichlorobenzene	19.310	1.0	20.00	0	96.6	67	137				
1,2,3-Trichloropropane	17.420	1.0	20.00	0	87.1	73	124				

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL
Work Order: N006707
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N006706-005AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **81979**
Client ID: **ZZZZZZ** Batch ID: **D11VW158** TestNo: **EPA 8260B** Analysis Date: **10/27/2011** SeqNo: **1320081**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	19.970	1.0	20.00	0	99.8	66	134				
1,2,4-Trimethylbenzene	20.920	1.0	20.00	0	105	74	132				
1,2-Dibromo-3-chloropropane	15.620	2.0	20.00	0	78.1	50	132				
1,2-Dibromoethane	17.240	1.0	20.00	0	86.2	80	121				
1,2-Dichlorobenzene	19.770	1.0	20.00	0	98.8	71	122				
1,2-Dichloroethane	17.230	0.50	20.00	0	86.2	69	132				
1,2-Dichloropropane	18.220	1.0	20.00	0	91.1	75	125				
1,3,5-Trimethylbenzene	21.170	1.0	20.00	0	106	74	131				
1,3-Dichlorobenzene	20.460	1.0	20.00	0	102	75	124				
1,3-Dichloropropane	17.350	1.0	20.00	0	86.8	73	126				
1,4-Dichlorobenzene	19.940	1.0	20.00	0	99.7	74	123				
2,2-Dichloropropane	15.660	1.0	20.00	0	78.3	69	137				
2-Butanone	91.690	10	200.0	0	45.8	49	136				S
2-Chlorotoluene	20.790	1.0	20.00	0	104	73	126				
4-Chlorotoluene	20.680	1.0	20.00	0	103	74	128				
4-Isopropyltoluene	21.720	1.0	20.00	0	109	73	130				
4-Methyl-2-pentanone	161.620	10	200.0	0	80.8	58	134				
Acetone	67.430	10	200.0	0	33.7	40	135				S
Acrolein	135.270	20	200.0	0	67.6	75	125				S
Acrylonitrile	133.740	20	200.0	0	66.9	75	125				S
Benzene	18.910	1.0	20.00	0	94.6	81	122				
Bromobenzene	20.100	1.0	20.00	0	101	76	124				
Bromochloromethane	17.530	1.0	20.00	0	87.6	65	129				
Bromodichloromethane	16.120	1.0	20.00	0	80.6	76	121				
Bromoform	15.570	1.0	20.00	0	77.8	69	128				
Bromomethane	20.090	1.0	20.00	0	100	53	141				
Carbon disulfide	17.610	1.0	20.00	0	88.0	75	125				
Carbon tetrachloride	15.620	1.0	20.00	0	78.1	66	138				
Chlorobenzene	19.960	1.0	20.00	0	99.8	81	122				
Chloroethane	21.290	1.0	20.00	0	106	58	133				

Qualifiers:

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

Calculations are based on raw values

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL
Work Order: N006707
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N006706-005AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **81979**
Client ID: **ZZZZZZ** Batch ID: **D11VW158** TestNo: **EPA 8260B** Analysis Date: **10/27/2011** SeqNo: **1320081**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	18.180	1.0	20.00	0	90.9	69	128				
Chloromethane	18.910	1.0	20.00	0	94.6	56	131				
cis-1,2-Dichloroethene	18.490	1.0	20.00	0	92.5	72	126				
cis-1,3-Dichloropropene	17.790	1.0	20.00	0	89.0	69	131				
Di-isopropyl ether	18.120	1.0	20.00	0	90.6	70	130				
Dibromochloromethane	16.180	1.0	20.00	0	80.9	66	133				
Dibromomethane	17.100	1.0	20.00	0	85.5	76	125				
Dichlorodifluoromethane	20.830	1.0	20.00	0	104	53	153				
Ethyl tert-butyl ether	17.240	1.0	20.00	0	86.2	70	130				
Ethylbenzene	20.420	1.0	20.00	0	102	73	127				
Freon-113	18.440	1.0	20.00	0	92.2	75	125				
Hexachlorobutadiene	22.050	1.0	20.00	0	110	67	131				
Isopropylbenzene	22.110	1.0	20.00	0	111	75	127				
m,p-Xylene	41.200	1.0	40.00	0	103	76	128				
Methylene chloride	17.080	2.0	20.00	0	85.4	63	137				
MTBE	15.670	1.0	20.00	0	78.4	65	123				
n-Butylbenzene	21.440	1.0	20.00	0	107	69	137				
n-Propylbenzene	21.420	1.0	20.00	0	107	72	129				
Naphthalene	15.690	1.0	20.00	0	78.4	54	138				
o-Xylene	20.220	1.0	20.00	0	101	80	121				
sec-Butylbenzene	21.490	1.0	20.00	0	107	72	127				
Styrene	19.760	1.0	20.00	0	98.8	65	134				
Tert-amyl methyl ether	17.420	1.0	20.00	0	87.1	70	130				
Tert-Butanol	70.100	5.0	100.0	0	70.1	70	130				
tert-Butylbenzene	21.310	1.0	20.00	0	107	70	129				
Tetrachloroethene	20.830	1.0	20.00	0	104	66	128				
Toluene	19.380	2.0	20.00	0	96.9	77	122				
trans-1,2-Dichloroethene	19.060	1.0	20.00	0	95.3	63	137				
trans-1,3-Dichloropropene	17.890	1.0	20.00	0	89.4	59	135				
Trichloroethene	18.560	1.0	20.00	0	92.8	70	127				

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL
Work Order: N006707
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N006706-005AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **81979**
Client ID: **ZZZZZZ** Batch ID: **D11VW158** TestNo: **EPA 8260B** Analysis Date: **10/27/2011** SeqNo: **1320081**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichlorofluoromethane	20.080	1.0	20.00	0	100	57	129				
Vinyl chloride	19.220	1.0	20.00	0	96.1	50	134				
Xylenes, Total	61.420	2.0	60.00	0	102	75	125				
Surr: 1,2-Dichloroethane-d4	20.370		25.00		81.5	72	119				
Surr: 4-Bromofluorobenzene	24.130		25.00		96.5	76	119				
Surr: Dibromofluoromethane	22.210		25.00		88.8	85	115				
Surr: Toluene-d8	24.920		25.00		99.7	81	120				

Sample ID: **N006706-005AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **81979**
Client ID: **ZZZZZZ** Batch ID: **D11VW158** TestNo: **EPA 8260B** Analysis Date: **10/27/2011** SeqNo: **1320082**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	17.920	1.0	20.00	0	89.6	81	129	17.79	0.728	20	
1,1,1-Trichloroethane	15.070	1.0	20.00	0	75.4	67	132	15.07	0	20	
1,1,2,2-Tetrachloroethane	17.340	1.0	20.00	0	86.7	63	128	17.31	0.173	20	
1,1,2-Trichloroethane	17.100	1.0	20.00	0	85.5	75	125	17.37	1.57	20	
1,1-Dichloroethane	18.250	0.50	20.00	0	91.2	69	133	18.41	0.873	20	
1,1-Dichloroethene	18.420	1.0	20.00	0	92.1	68	130	18.50	0.433	20	
1,1-Dichloropropene	18.860	1.0	20.00	0	94.3	73	132	18.79	0.372	20	
1,2,3-Trichlorobenzene	18.850	1.0	20.00	0	94.3	67	137	19.31	2.41	20	
1,2,3-Trichloropropane	17.400	1.0	20.00	0	87.0	73	124	17.42	0.115	20	
1,2,4-Trichlorobenzene	19.550	1.0	20.00	0	97.8	66	134	19.97	2.13	20	
1,2,4-Trimethylbenzene	20.950	1.0	20.00	0	105	74	132	20.92	0.143	20	
1,2-Dibromo-3-chloropropane	15.400	2.0	20.00	0	77.0	50	132	15.62	1.42	20	
1,2-Dibromoethane	16.940	1.0	20.00	0	84.7	80	121	17.24	1.76	20	
1,2-Dichlorobenzene	19.960	1.0	20.00	0	99.8	71	122	19.77	0.956	20	
1,2-Dichloroethane	16.840	0.50	20.00	0	84.2	69	132	17.23	2.29	20	
1,2-Dichloropropane	17.870	1.0	20.00	0	89.4	75	125	18.22	1.94	20	
1,3,5-Trimethylbenzene	21.290	1.0	20.00	0	106	74	131	21.17	0.565	20	
1,3-Dichlorobenzene	20.740	1.0	20.00	0	104	75	124	20.46	1.36	20	

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL
Work Order: N006707
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N006706-005AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **81979**
Client ID: **ZZZZZZ** Batch ID: **D11VW158** TestNo: **EPA 8260B** Analysis Date: **10/27/2011** SeqNo: **1320082**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichloropropane	16.960	1.0	20.00	0	84.8	73	126	17.35	2.27	20	
1,4-Dichlorobenzene	20.250	1.0	20.00	0	101	74	123	19.94	1.54	20	
2,2-Dichloropropane	15.340	1.0	20.00	0	76.7	69	137	15.66	2.06	20	
2-Butanone	86.740	10	200.0	0	43.4	49	136	91.69	5.55	20	S
2-Chlorotoluene	20.880	1.0	20.00	0	104	73	126	20.79	0.432	20	
4-Chlorotoluene	21.140	1.0	20.00	0	106	74	128	20.68	2.20	20	
4-Isopropyltoluene	22.030	1.0	20.00	0	110	73	130	21.72	1.42	20	
4-Methyl-2-pentanone	158.810	10	200.0	0	79.4	58	134	161.6	1.75	20	
Acetone	64.180	10	200.0	0	32.1	40	135	67.43	4.94	20	S
Acrolein	130.280	20	200.0	0	65.1	75	125	135.3	3.76	20	S
Acrylonitrile	129.310	20	200.0	0	64.7	75	125	133.7	3.37	20	S
Benzene	19.090	1.0	20.00	0	95.4	81	122	18.91	0.947	20	
Bromobenzene	20.280	1.0	20.00	0	101	76	124	20.10	0.892	20	
Bromochloromethane	17.060	1.0	20.00	0	85.3	65	129	17.53	2.72	20	
Bromodichloromethane	15.890	1.0	20.00	0	79.4	76	121	16.12	1.44	20	
Bromoform	15.680	1.0	20.00	0	78.4	69	128	15.57	0.704	20	
Bromomethane	20.670	1.0	20.00	0	103	53	141	20.09	2.85	20	
Carbon disulfide	17.490	1.0	20.00	0	87.5	75	125	17.61	0.684	20	
Carbon tetrachloride	15.880	1.0	20.00	0	79.4	66	138	15.62	1.65	20	
Chlorobenzene	20.500	1.0	20.00	0	103	81	122	19.96	2.67	20	
Chloroethane	21.770	1.0	20.00	0	109	58	133	21.29	2.23	20	
Chloroform	17.750	1.0	20.00	0	88.8	69	128	18.18	2.39	20	
Chloromethane	19.240	1.0	20.00	0	96.2	56	131	18.91	1.73	20	
cis-1,2-Dichloroethene	18.320	1.0	20.00	0	91.6	72	126	18.49	0.924	20	
cis-1,3-Dichloropropene	17.590	1.0	20.00	0	88.0	69	131	17.79	1.13	20	
Di-isopropyl ether	17.880	1.0	20.00	0	89.4	70	130	18.12	1.33	20	
Dibromochloromethane	16.100	1.0	20.00	0	80.5	66	133	16.18	0.496	20	
Dibromomethane	16.910	1.0	20.00	0	84.6	76	125	17.10	1.12	20	
Dichlorodifluoromethane	21.480	1.0	20.00	0	107	53	153	20.83	3.07	20	
Ethyl tert-butyl ether	16.960	1.0	20.00	0	84.8	70	130	17.24	1.64	20	

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL
Work Order: N006707
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N006706-005AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **81979**
Client ID: **ZZZZZZ** Batch ID: **D11VW158** TestNo: **EPA 8260B** Analysis Date: **10/27/2011** SeqNo: **1320082**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	21.040	1.0	20.00	0	105	73	127	20.42	2.99	20	
Freon-113	18.080	1.0	20.00	0	90.4	75	125	18.44	1.97	20	
Hexachlorobutadiene	22.410	1.0	20.00	0	112	67	131	22.05	1.62	20	
Isopropylbenzene	22.230	1.0	20.00	0	111	75	127	22.11	0.541	20	
m,p-Xylene	42.560	1.0	40.00	0	106	76	128	41.20	3.25	20	
Methylene chloride	17.030	2.0	20.00	0	85.2	63	137	17.08	0.293	20	
MTBE	15.070	1.0	20.00	0	75.4	65	123	15.67	3.90	20	
n-Butylbenzene	21.770	1.0	20.00	0	109	69	137	21.44	1.53	20	
n-Propylbenzene	22.100	1.0	20.00	0	110	72	129	21.42	3.13	20	
Naphthalene	14.930	1.0	20.00	0	74.7	54	138	15.69	4.96	20	
o-Xylene	20.690	1.0	20.00	0	103	80	121	20.22	2.30	20	
sec-Butylbenzene	22.150	1.0	20.00	0	111	72	127	21.49	3.02	20	
Styrene	19.610	1.0	20.00	0	98.0	65	134	19.76	0.762	20	
Tert-amyl methyl ether	17.250	1.0	20.00	0	86.2	70	130	17.42	0.981	20	
Tert-Butanol	66.220	5.0	100.0	0	66.2	70	130	70.10	5.69	20	S
tert-Butylbenzene	21.810	1.0	20.00	0	109	70	129	21.31	2.32	20	
Tetrachloroethene	21.330	1.0	20.00	0	107	66	128	20.83	2.37	20	
Toluene	20.000	2.0	20.00	0	100	77	122	19.38	3.15	20	
trans-1,2-Dichloroethene	18.730	1.0	20.00	0	93.6	63	137	19.06	1.75	20	
trans-1,3-Dichloropropene	17.620	1.0	20.00	0	88.1	59	135	17.89	1.52	20	
Trichloroethene	18.620	1.0	20.00	0	93.1	70	127	18.56	0.323	20	
Trichlorofluoromethane	19.990	1.0	20.00	0	100	57	129	20.08	0.449	20	
Vinyl chloride	19.590	1.0	20.00	0	98.0	50	134	19.22	1.91	20	
Xylenes, Total	63.250	2.0	60.00	0	105	75	125	61.42	2.94	20	
Surr: 1,2-Dichloroethane-d4	19.680		25.00		78.7	72	119		0		
Surr: 4-Bromofluorobenzene	24.440		25.00		97.8	76	119		0		
Surr: Dibromofluoromethane	21.740		25.00		87.0	85	115		0		
Surr: Toluene-d8	25.060		25.00		100	81	120		0		

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL
Work Order: N006707
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111027MB5** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **81979**
Client ID: **PBW** Batch ID: **D11VW158** TestNo: **EPA 8260B** Analysis Date: **10/27/2011** SeqNo: **1320083**

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

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL
Work Order: N006707
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111027MB5** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **81979**
Client ID: **PBW** Batch ID: **D11VW158** TestNo: **EPA 8260B** Analysis Date: **10/27/2011** SeqNo: **1320083**

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

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL
Work Order: N006707
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111027MB5** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **81979**
Client ID: **PBW** Batch ID: **D11VW158** TestNo: **EPA 8260B** Analysis Date: **10/27/2011** SeqNo: **1320083**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	ND	1.0									
Tert-amyl methyl ether	ND	1.0									
Tert-Butanol	ND	5.0									
tert-Butylbenzene	ND	1.0									
Tetrachloroethene	ND	1.0									
Toluene	ND	2.0									
trans-1,2-Dichloroethene	ND	1.0									
trans-1,3-Dichloropropene	ND	1.0									
Trichloroethene	ND	1.0									
Trichlorofluoromethane	ND	1.0									
Vinyl chloride	ND	1.0									
Xylenes, Total	ND	2.0									
Surr: 1,2-Dichloroethane-d4	22.130		25.00		88.5	72	119				
Surr: 4-Bromofluorobenzene	27.370		25.00		109	76	119				
Surr: Dibromofluoromethane	22.850		25.00		91.4	85	115				
Surr: Toluene-d8	28.190		25.00		113	81	120				

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

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

CHAIN OF CUSTODY RECORD

DATE:

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

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 + Oxygenates (8260B)	Comments
	INF-10-25	Influent	10/25/11	1300	WW	9	X	X	X	

N006707-1

Relinquished by: (Signature)	Received by: (Signature)	Date: 10/26/11	Time: 10K
Relinquished by: (Signature)	Received by: (Signature)	Date: 10/26/11	Time: 1418
Relinquished by: (Signature)	Received by: (Signature)	Date: 10/27/11	Time: 8:50 am

Revised: 07/25/2011

Advanced Technology Laboratories, Inc.

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

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

Cooler Received/Opened On:	10/27/2011	Workorder:	N006707
Rep sample Temp (Deg C):	6.0	IR Gun ID:	1
Temp Blank:	☐ Yes ☑ No		
Carrier name:	OnTrac		
Last 4 digits of Tracking No.:	8545	Packing Material Used:	Bubble Wrap
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

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

Comments:

Checklist Completed B NS 10/27/11

Reviewed By: 10/31/11

December 08, 2011

Daniel Jablonski
CH2M HILL
155 Grand Avenue, Suite 1000
Oakland, CA 94612

TEL: (213)228-8271
FAX: (510) 622-9129

CA-ELAP No.:2676
NV Cert. No.:NV-009222007A

Workorder No.: N006884

RE: SFPP - Norwalk Site

Attention: Daniel Jablonski

Enclosed are the results for sample(s) received on November 23, 2011 by Advanced Technology Laboratories, Inc. . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

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

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

Sincerely,

for gsgesmundo

Jose Tenorio Jr.
Laboratory Director

CLIENT: CH2M HILL
Project: SFPP - Norwalk Site
Lab Order: N006884

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

Samples were received intact with proper chain of custody documentation.

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

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

Samples were analyzed within method holding time.

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL
Project: SFPP - Norwalk Site
Lab Order: N006884
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N006884-001A	INF-11-22	Waste Water	11/22/2011 12:30:00 PM	11/23/2011	12/8/2011
N006884-001B	INF-11-22	Waste Water	11/22/2011 12:30:00 PM	11/23/2011	12/8/2011
N006884-001C	INF-11-22	Waste Water	11/22/2011 12:30:00 PM	11/23/2011	12/8/2011

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL
Lab Order: N006884
Project: SFPP - Norwalk Site
Lab ID: N006884-001

Client Sample ID: INF-11-22
Collection Date: 11/22/2011 12:30:00 PM
Matrix: WASTE WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: **MS1_111130B** QC Batch: **D11VW176** PrepDate: Analyst: **QBM**

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.061	1.0		µg/L	1	12/1/2011 02:48 AM
1,1,1-Trichloroethane	ND	0.068	1.0		µg/L	1	12/1/2011 02:48 AM
1,1,2,2-Tetrachloroethane	ND	0.054	1.0		µg/L	1	12/1/2011 02:48 AM
1,1,2-Trichloroethane	ND	0.083	1.0		µg/L	1	12/1/2011 02:48 AM
1,1-Dichloroethane	ND	0.099	0.50		µg/L	1	12/1/2011 02:48 AM
1,1-Dichloroethene	ND	0.094	1.0		µg/L	1	12/1/2011 02:48 AM
1,1-Dichloropropene	ND	0.082	1.0		µg/L	1	12/1/2011 02:48 AM
1,2,3-Trichlorobenzene	ND	0.10	1.0		µg/L	1	12/1/2011 02:48 AM
1,2,3-Trichloropropane	ND	0.12	1.0		µg/L	1	12/1/2011 02:48 AM
1,2,4-Trichlorobenzene	ND	0.12	1.0		µg/L	1	12/1/2011 02:48 AM
1,2,4-Trimethylbenzene	55	0.095	1.0		µg/L	1	12/1/2011 02:48 AM
1,2-Dibromo-3-chloropropane	ND	0.15	2.0		µg/L	1	12/1/2011 02:48 AM
1,2-Dibromoethane	ND	0.14	1.0		µg/L	1	12/1/2011 02:48 AM
1,2-Dichlorobenzene	ND	0.070	1.0		µg/L	1	12/1/2011 02:48 AM
1,2-Dichloroethane	ND	0.17	0.50		µg/L	1	12/1/2011 02:48 AM
1,2-Dichloropropane	ND	0.085	1.0		µg/L	1	12/1/2011 02:48 AM
1,3,5-Trimethylbenzene	15	0.087	1.0		µg/L	1	12/1/2011 02:48 AM
1,3-Dichlorobenzene	ND	0.090	1.0		µg/L	1	12/1/2011 02:48 AM
1,3-Dichloropropane	ND	0.074	1.0		µg/L	1	12/1/2011 02:48 AM
1,4-Dichlorobenzene	ND	0.092	1.0		µg/L	1	12/1/2011 02:48 AM
2,2-Dichloropropane	ND	0.061	1.0		µg/L	1	12/1/2011 02:48 AM
2-Butanone	ND	1.0	10		µg/L	1	12/1/2011 02:48 AM
2-Chlorotoluene	ND	0.080	1.0		µg/L	1	12/1/2011 02:48 AM
4-Chlorotoluene	ND	0.10	1.0		µg/L	1	12/1/2011 02:48 AM
4-Isopropyltoluene	ND	0.080	1.0		µg/L	1	12/1/2011 02:48 AM
4-Methyl-2-pentanone	ND	0.76	10		µg/L	1	12/1/2011 02:48 AM
Acetone	ND	1.6	10		µg/L	1	12/1/2011 02:48 AM
Acrolein	ND	4.3	20		µg/L	1	12/1/2011 02:48 AM
Acrylonitrile	ND	0.61	20		µg/L	1	12/1/2011 02:48 AM
Benzene	3600	3.8	50		µg/L	50	11/29/2011 07:35 PM
Bromobenzene	ND	0.082	1.0		µg/L	1	12/1/2011 02:48 AM
Bromochloromethane	ND	0.15	1.0		µg/L	1	12/1/2011 02:48 AM
Bromodichloromethane	ND	0.063	1.0		µg/L	1	12/1/2011 02:48 AM
Bromoform	ND	0.086	1.0		µg/L	1	12/1/2011 02:48 AM
Bromomethane	ND	0.13	1.0		µg/L	1	12/1/2011 02:48 AM
Carbon disulfide	ND	0.054	1.0		µg/L	1	12/1/2011 02:48 AM

Qualifiers:

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

CLIENT: CH2M HILL
Lab Order: N006884
Project: SFPP - Norwalk Site
Lab ID: N006884-001

Client Sample ID: INF-11-22
Collection Date: 11/22/2011 12:30:00 PM
Matrix: WASTE WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: **MS1_111130B** QC Batch: **D11VW176** PrepDate: Analyst: **QBM**

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
Carbon tetrachloride	ND	0.10	1.0		µg/L	1	12/1/2011 02:48 AM
Chlorobenzene	ND	0.092	1.0		µg/L	1	12/1/2011 02:48 AM
Chloroethane	ND	0.14	1.0		µg/L	1	12/1/2011 02:48 AM
Chloroform	ND	0.058	1.0		µg/L	1	12/1/2011 02:48 AM
Chloromethane	ND	0.054	1.0		µg/L	1	12/1/2011 02:48 AM
cis-1,2-Dichloroethene	ND	0.11	1.0		µg/L	1	12/1/2011 02:48 AM
cis-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	12/1/2011 02:48 AM
Di-isopropyl ether	26	0.072	1.0		µg/L	1	12/1/2011 02:48 AM
Dibromochloromethane	ND	0.061	1.0		µg/L	1	12/1/2011 02:48 AM
Dibromomethane	ND	0.15	1.0		µg/L	1	12/1/2011 02:48 AM
Dichlorodifluoromethane	ND	0.12	1.0		µg/L	1	12/1/2011 02:48 AM
Ethyl tert-butyl ether	ND	0.070	1.0		µg/L	1	12/1/2011 02:48 AM
Ethylbenzene	62	0.051	1.0		µg/L	1	12/1/2011 02:48 AM
Freon-113	ND	0.080	1.0		µg/L	1	12/1/2011 02:48 AM
Hexachlorobutadiene	ND	0.17	1.0		µg/L	1	12/1/2011 02:48 AM
Isopropylbenzene	9.6	0.057	1.0		µg/L	1	12/1/2011 02:48 AM
m,p-Xylene	190	0.17	1.0		µg/L	1	12/1/2011 02:48 AM
Methylene chloride	ND	0.10	2.0		µg/L	1	12/1/2011 02:48 AM
MTBE	300	0.89	10		µg/L	10	11/29/2011 08:25 PM
n-Butylbenzene	1.5	0.082	1.0		µg/L	1	12/1/2011 02:48 AM
n-Propylbenzene	19	0.087	1.0		µg/L	1	12/1/2011 02:48 AM
Naphthalene	89	0.056	1.0		µg/L	1	12/1/2011 02:48 AM
o-Xylene	50	0.077	1.0		µg/L	1	12/1/2011 02:48 AM
sec-Butylbenzene	1.6	0.098	1.0		µg/L	1	12/1/2011 02:48 AM
Styrene	ND	0.072	1.0		µg/L	1	12/1/2011 02:48 AM
Tert-amyl methyl ether	ND	0.10	1.0		µg/L	1	12/1/2011 02:48 AM
Tert-Butanol	2900	12	50		µg/L	10	11/29/2011 08:25 PM
tert-Butylbenzene	ND	0.062	1.0		µg/L	1	12/1/2011 02:48 AM
Tetrachloroethene	ND	0.13	1.0		µg/L	1	12/1/2011 02:48 AM
Toluene	140	1.2	20		µg/L	10	11/29/2011 08:25 PM
trans-1,2-Dichloroethene	ND	0.094	1.0		µg/L	1	12/1/2011 02:48 AM
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	12/1/2011 02:48 AM
Trichloroethene	ND	0.060	1.0		µg/L	1	12/1/2011 02:48 AM
Trichlorofluoromethane	ND	0.097	1.0		µg/L	1	12/1/2011 02:48 AM
Vinyl chloride	ND	0.12	1.0		µg/L	1	12/1/2011 02:48 AM
Xylenes, Total	240	1.5	2.0		µg/L	1	12/1/2011 02:48 AM

Qualifiers:

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

CLIENT: CH2M HILL
Lab Order: N006884
Project: SFPP - Norwalk Site
Lab ID: N006884-001

Client Sample ID: INF-11-22
Collection Date: 11/22/2011 12:30:00 PM
Matrix: WASTE WATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS1_111130B**	QC Batch: **D11VW176**			PrepDate:			Analyst: **QBM**
Surr: 1,2-Dichloroethane-d4	109	0	72-119		%REC	1	12/1/2011 02:48 AM
Surr: 4-Bromofluorobenzene	93.2	0	76-119		%REC	1	12/1/2011 02:48 AM
Surr: Dibromofluoromethane	97.9	0	85-115		%REC	1	12/1/2011 02:48 AM
Surr: Toluene-d8	92.5	0	81-120		%REC	1	12/1/2011 02:48 AM
TPH-FUEL PRODUCT BY GC/FID							
	EPA 3510C		**EPA 8015B**				
RunID: **GC3_111130E**	QC Batch: **38418**			PrepDate:			Analyst: **PYW**
TPH-Fuel Product	2000	13	50		ug/L	1	11/30/2011 06:53 PM
Surr: Octacosane	111	0	26-152		%REC	1	11/30/2011 06:53 PM
Surr: p-Terphenyl	98.0	0	57-132		%REC	1	11/30/2011 06:53 PM
GASOLINE RANGE ORGANICS BY GC/FID							
			EPA 8015B				
RunID: **GC4_111130B**	QC Batch: **E11VW064**			PrepDate:			Analyst: **MCS**
TPH-Gasoline (C4-C12)	5900	6.0	100		µg/L	1	11/30/2011
Surr: Chlorobenzene - d5	113	0	74-138		%REC	1	11/30/2011

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_FP_SFPP

Sample ID: **MB-38418** SampType: **MBLK** TestCode: **8015_W_FP_** Units: **ug/L** Prep Date: RunNo: **82394**
Client ID: **PBW** Batch ID: **38418** TestNo: **EPA 8015B** **EPA 3510C** Analysis Date: **11/30/2011** SeqNo: **1333433**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Fuel Product	32.658	50									
Surr: Octacosane	81.853		80.00		102	26	152				
Surr: p-Terphenyl	77.839		80.00		97.3	57	132				

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_GSFPP

Sample ID: **E111130LCS2**	SampType: **LCS**	TestCode: **8015_W_GSF**	Units: **µg/L**	Prep Date:	RunNo: **82323**
Client ID: **LCSW**	Batch ID: **E11VW064**	TestNo: **EPA 8015B**		Analysis Date: **11/30/2011**	SeqNo: **1331089**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	1015.000	100	1000	0	102	67	136				
Surr: Chlorobenzene - d5	53.464		50.00		107	74	138				

Sample ID: **E111130MB2**	SampType: **MBLK**	TestCode: **8015_W_GSF**	Units: **µg/L**	Prep Date:	RunNo: **82323**
Client ID: **PBW**	Batch ID: **E11VW064**	TestNo: **EPA 8015B**		Analysis Date: **11/30/2011**	SeqNo: **1331091**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	ND	100									
Surr: Chlorobenzene - d5	54.391		50.00		109	74	138				

Sample ID: **N006884-001AMS**	SampType: **MS**	TestCode: **8015_W_GSF**	Units: **µg/L**	Prep Date:	RunNo: **82323**
Client ID: **ZZZZZZ**	Batch ID: **E11VW064**	TestNo: **EPA 8015B**		Analysis Date: **11/30/2011**	SeqNo: **1331092**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	6806.000	100	1000	5893	91.3	67	136				
Surr: Chlorobenzene - d5	60.640		50.00		121	74	138				

Sample ID: **N006884-001AMSD**	SampType: **MSD**	TestCode: **8015_W_GSF**	Units: **µg/L**	Prep Date:	RunNo: **82323**
Client ID: **ZZZZZZ**	Batch ID: **E11VW064**	TestNo: **EPA 8015B**		Analysis Date: **11/30/2011**	SeqNo: **1331093**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	7592.000	100	1000	5893	170	67	136	6806	10.9	30	S
Surr: Chlorobenzene - d5	58.796		50.00		118	74	138		0	0	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111129LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82298**
Client ID: **LCSW** Batch ID: **D11VW175** TestNo: **EPA 8260B** Analysis Date: **11/29/2011** SeqNo: **1330567**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	19.400	1.0	20.00	0	97.0	81	129				
1,1,1-Trichloroethane	16.450	1.0	20.00	0	82.2	67	132				
1,1,2,2-Tetrachloroethane	19.420	1.0	20.00	0	97.1	63	128				
1,1,2-Trichloroethane	18.920	1.0	20.00	0	94.6	75	125				
1,1-Dichloroethane	22.050	0.50	20.00	0	110	69	133				
1,1-Dichloroethene	21.580	1.0	20.00	0	108	68	130				
1,1-Dichloropropene	18.960	1.0	20.00	0	94.8	73	132				
1,2,3-Trichlorobenzene	19.970	1.0	20.00	0	99.8	67	137				
1,2,3-Trichloropropane	18.300	1.0	20.00	0	91.5	73	124				
1,2,4-Trichlorobenzene	20.240	1.0	20.00	0	101	66	134				
1,2,4-Trimethylbenzene	19.390	1.0	20.00	0	97.0	74	132				
1,2-Dibromo-3-chloropropane	17.170	2.0	20.00	0	85.9	50	132				
1,2-Dibromoethane	19.720	1.0	20.00	0	98.6	80	121				
1,2-Dichlorobenzene	19.140	1.0	20.00	0	95.7	71	122				
1,2-Dichloroethane	20.090	0.50	20.00	0	100	69	132				
1,2-Dichloropropane	19.200	1.0	20.00	0	96.0	75	125				
1,3,5-Trimethylbenzene	19.170	1.0	20.00	0	95.9	74	131				
1,3-Dichlorobenzene	19.440	1.0	20.00	0	97.2	75	124				
1,3-Dichloropropane	18.800	1.0	20.00	0	94.0	73	126				
1,4-Dichlorobenzene	19.440	1.0	20.00	0	97.2	74	123				
2,2-Dichloropropane	16.390	1.0	20.00	0	82.0	69	137				
2-Butanone	252.800	10	200.0	0	126	49	136				
2-Chlorotoluene	19.140	1.0	20.00	0	95.7	73	126				
4-Chlorotoluene	19.090	1.0	20.00	0	95.4	74	128				
4-Isopropyltoluene	19.500	1.0	20.00	0	97.5	73	130				
4-Methyl-2-pentanone	210.320	10	200.0	0	105	58	134				
Acetone	352.250	10	200.0	0	176	40	135				S
Acrolein	180.520	20	200.0	0	90.3	75	125				
Acrylonitrile	192.450	20	200.0	0	96.2	75	125				
Benzene	19.690	1.0	20.00	0	98.4	81	122				

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111129LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82298**
Client ID: **LCSW** Batch ID: **D11VW175** TestNo: **EPA 8260B** Analysis Date: **11/29/2011** SeqNo: **1330567**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	19.020	1.0	20.00	0	95.1	76	124				
Bromochloromethane	21.000	1.0	20.00	0	105	65	129				
Bromodichloromethane	18.390	1.0	20.00	0	92.0	76	121				
Bromoform	16.860	1.0	20.00	0	84.3	69	128				
Bromomethane	17.260	1.0	20.00	0	86.3	53	141				
Carbon disulfide	17.060	1.0	20.00	0	85.3	75	125				
Carbon tetrachloride	16.070	1.0	20.00	0	80.4	66	138				
Chlorobenzene	19.300	1.0	20.00	0	96.5	81	122				
Chloroethane	21.790	1.0	20.00	0	109	58	133				
Chloroform	21.250	1.0	20.00	0	106	69	128				
Chloromethane	19.510	1.0	20.00	0	97.6	56	131				
cis-1,2-Dichloroethene	21.720	1.0	20.00	0	109	72	126				
cis-1,3-Dichloropropene	18.820	1.0	20.00	0	94.1	69	131				
Di-isopropyl ether	20.680	1.0	20.00	0	103	70	130				
Dibromochloromethane	16.480	1.0	20.00	0	82.4	66	133				
Dibromomethane	20.650	1.0	20.00	0	103	76	125				
Dichlorodifluoromethane	20.680	1.0	20.00	0	103	53	153				
Ethyl tert-butyl ether	20.340	1.0	20.00	0	102	70	130				
Ethylbenzene	19.060	1.0	20.00	0	95.3	73	127				
Freon-113	17.750	1.0	20.00	0	88.8	75	125				
Hexachlorobutadiene	20.210	1.0	20.00	0	101	67	131				
Isopropylbenzene	19.190	1.0	20.00	0	96.0	75	127				
m,p-Xylene	37.900	1.0	40.00	0	94.8	76	128				
Methylene chloride	20.110	2.0	20.00	0	101	63	137				
MTBE	19.210	1.0	20.00	0	96.0	65	123				
n-Butylbenzene	19.900	1.0	20.00	0	99.5	69	137				
n-Propylbenzene	19.290	1.0	20.00	0	96.5	72	129				
Naphthalene	19.190	1.0	20.00	0	96.0	54	138				
o-Xylene	18.900	1.0	20.00	0	94.5	80	121				
sec-Butylbenzene	19.320	1.0	20.00	0	96.6	72	127				

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111129LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82298**
Client ID: **LCSW** Batch ID: **D11VW175** TestNo: **EPA 8260B** Analysis Date: **11/29/2011** SeqNo: **1330567**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	19.310	1.0	20.00	0	96.6	65	134				
Tert-amyl methyl ether	18.650	1.0	20.00	0	93.3	70	130				
Tert-Butanol	91.400	5.0	100.0	0	91.4	70	130				
tert-Butylbenzene	18.990	1.0	20.00	0	95.0	70	129				
Tetrachloroethene	19.750	1.0	20.00	0	98.8	66	128				
Toluene	19.680	2.0	20.00	0	98.4	77	122				
trans-1,2-Dichloroethene	22.040	1.0	20.00	0	110	63	137				
trans-1,3-Dichloropropene	19.070	1.0	20.00	0	95.4	59	135				
Trichloroethene	19.610	1.0	20.00	0	98.0	70	127				
Trichlorofluoromethane	22.440	1.0	20.00	0	112	57	129				
Vinyl chloride	20.730	1.0	20.00	0	104	50	134				
Xylenes, Total	56.800	2.0	60.00	0	94.7	75	125				
Surr: 1,2-Dichloroethane-d4	26.730		25.00		107	72	119				
Surr: 4-Bromofluorobenzene	24.270		25.00		97.1	76	119				
Surr: Dibromofluoromethane	28.100		25.00		112	85	115				
Surr: Toluene-d8	25.640		25.00		103	81	120				

Sample ID: **N006880-007AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82298**
Client ID: **ZZZZZZ** Batch ID: **D11VW175** TestNo: **EPA 8260B** Analysis Date: **11/29/2011** SeqNo: **1330568**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	18.550	1.0	20.00	0	92.8	81	129				
1,1,1-Trichloroethane	16.110	1.0	20.00	0	80.6	67	132				
1,1,2,2-Tetrachloroethane	15.490	1.0	20.00	0	77.4	63	128				
1,1,2-Trichloroethane	15.400	1.0	20.00	0	77.0	75	125				
1,1-Dichloroethane	20.530	0.50	20.00	0	103	69	133				
1,1-Dichloroethene	20.930	1.0	20.00	0	105	68	130				
1,1-Dichloropropene	18.890	1.0	20.00	0	94.4	73	132				
1,2,3-Trichlorobenzene	17.740	1.0	20.00	0	88.7	67	137				
1,2,3-Trichloropropane	14.390	1.0	20.00	0	72.0	73	124				S

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N006880-007AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82298**
Client ID: **ZZZZZZ** Batch ID: **D11VW175** TestNo: **EPA 8260B** Analysis Date: **11/29/2011** SeqNo: **1330568**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	19.230	1.0	20.00	0	96.2	66	134				
1,2,4-Trimethylbenzene	19.500	1.0	20.00	0	97.5	74	132				
1,2-Dibromo-3-chloropropane	13.070	2.0	20.00	0	65.4	50	132				
1,2-Dibromoethane	15.540	1.0	20.00	0	77.7	80	121				S
1,2-Dichlorobenzene	18.120	1.0	20.00	0	90.6	71	122				
1,2-Dichloroethane	16.630	0.50	20.00	0	83.2	69	132				
1,2-Dichloropropane	17.860	1.0	20.00	0	89.3	75	125				
1,3,5-Trimethylbenzene	19.750	1.0	20.00	0	98.8	74	131				
1,3-Dichlorobenzene	19.220	1.0	20.00	0	96.1	75	124				
1,3-Dichloropropane	16.370	1.0	20.00	0	81.8	73	126				
1,4-Dichlorobenzene	19.050	1.0	20.00	0	95.2	74	123				
2,2-Dichloropropane	15.870	1.0	20.00	0	79.4	69	137				
2-Butanone	85.490	10	200.0	0	42.7	49	136				S
2-Chlorotoluene	19.440	1.0	20.00	0	97.2	73	126				
4-Chlorotoluene	19.400	1.0	20.00	0	97.0	74	128				
4-Isopropyltoluene	20.210	1.0	20.00	0	101	73	130				
4-Methyl-2-pentanone	136.500	10	200.0	0	68.2	58	134				
Acetone	73.210	10	200.0	0	36.6	40	135				S
Acrolein	126.820	20	200.0	0	63.4	75	125				S
Acrylonitrile	137.220	20	200.0	0	68.6	75	125				S
Benzene	19.200	1.0	20.00	0	96.0	81	122				
Bromobenzene	18.440	1.0	20.00	0	92.2	76	124				
Bromochloromethane	17.110	1.0	20.00	0	85.6	65	129				
Bromodichloromethane	16.730	1.0	20.00	0	83.6	76	121				
Bromoform	13.910	1.0	20.00	0	69.6	69	128				
Bromomethane	16.250	1.0	20.00	0	81.2	53	141				
Carbon disulfide	16.350	1.0	20.00	0	81.8	75	125				
Carbon tetrachloride	16.140	1.0	20.00	0	80.7	66	138				
Chlorobenzene	18.980	1.0	20.00	0	94.9	81	122				
Chloroethane	20.510	1.0	20.00	0	103	58	133				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N006880-007AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82298**
Client ID: **ZZZZZZ** Batch ID: **D11VW175** TestNo: **EPA 8260B** Analysis Date: **11/29/2011** SeqNo: **1330568**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	19.230	1.0	20.00	0	96.2	69	128				
Chloromethane	18.800	1.0	20.00	0	94.0	56	131				
cis-1,2-Dichloroethene	19.940	1.0	20.00	0	99.7	72	126				
cis-1,3-Dichloropropene	16.610	1.0	20.00	0	83.0	69	131				
Di-isopropyl ether	18.920	1.0	20.00	0	94.6	70	130				
Dibromochloromethane	14.950	1.0	20.00	0	74.8	66	133				
Dibromomethane	16.300	1.0	20.00	0	81.5	76	125				
Dichlorodifluoromethane	19.700	1.0	20.00	0	98.5	53	153				
Ethyl tert-butyl ether	17.610	1.0	20.00	0	88.0	70	130				
Ethylbenzene	19.040	1.0	20.00	0	95.2	73	127				
Freon-113	17.330	1.0	20.00	0	86.7	75	125				
Hexachlorobutadiene	20.770	1.0	20.00	0	104	67	131				
Isopropylbenzene	19.920	1.0	20.00	0	99.6	75	127				
m,p-Xylene	38.300	1.0	50.00	0	76.6	76	128				
Methylene chloride	18.670	2.0	20.00	2.080	83.0	63	137				
MTBE	15.800	1.0	20.00	0	79.0	65	123				
n-Butylbenzene	20.620	1.0	20.00	0	103	69	137				
n-Propylbenzene	20.070	1.0	20.00	0	100	72	129				
Naphthalene	15.050	1.0	20.00	0	75.2	54	138				
o-Xylene	18.740	1.0	20.00	0	93.7	80	121				
sec-Butylbenzene	19.790	1.0	20.00	0	99.0	72	127				
Styrene	18.110	1.0	20.00	0	90.6	65	134				
Tert-amyl methyl ether	15.900	1.0	20.00	0	79.5	70	130				
Tert-Butanol	61.500	5.0	100.0	0	61.5	70	130				S
tert-Butylbenzene	19.600	1.0	20.00	0	98.0	70	129				
Tetrachloroethene	20.720	1.0	20.00	0	104	66	128				
Toluene	18.660	2.0	20.00	0	93.3	77	122				
trans-1,2-Dichloroethene	20.690	1.0	20.00	0	103	63	137				
trans-1,3-Dichloropropene	16.190	1.0	20.00	0	81.0	59	135				
Trichloroethene	19.020	1.0	20.00	0	95.1	70	127				

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N006880-007AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82298**
Client ID: **ZZZZZZ** Batch ID: **D11VW175** TestNo: **EPA 8260B** Analysis Date: **11/29/2011** SeqNo: **1330568**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichlorofluoromethane	21.240	1.0	20.00	0	106	57	129				
Vinyl chloride	20.230	1.0	20.00	0	101	50	134				
Xylenes, Total	57.040	2.0	60.00	0	95.1	75	125				
Surr: 1,2-Dichloroethane-d4	21.600		25.00		86.4	72	119				
Surr: 4-Bromofluorobenzene	23.160		25.00		92.6	76	119				
Surr: Dibromofluoromethane	24.950		25.00		99.8	85	115				
Surr: Toluene-d8	24.500		25.00		98.0	81	120				

Sample ID: **N006880-007AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82298**
Client ID: **ZZZZZZ** Batch ID: **D11VW175** TestNo: **EPA 8260B** Analysis Date: **11/29/2011** SeqNo: **1330569**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	18.670	1.0	20.00	0	93.4	81	129	18.55	0.645	20	
1,1,1-Trichloroethane	16.180	1.0	20.00	0	80.9	67	132	16.11	0.434	20	
1,1,2,2-Tetrachloroethane	16.040	1.0	20.00	0	80.2	63	128	15.49	3.49	20	
1,1,2-Trichloroethane	15.790	1.0	20.00	0	79.0	75	125	15.40	2.50	20	
1,1-Dichloroethane	20.710	0.50	20.00	0	104	69	133	20.53	0.873	20	
1,1-Dichloroethene	21.540	1.0	20.00	0	108	68	130	20.93	2.87	20	
1,1-Dichloropropene	19.310	1.0	20.00	0	96.6	73	132	18.89	2.20	20	
1,2,3-Trichlorobenzene	18.330	1.0	20.00	0	91.7	67	137	17.74	3.27	20	
1,2,3-Trichloropropane	15.130	1.0	20.00	0	75.6	73	124	14.39	5.01	20	
1,2,4-Trichlorobenzene	19.550	1.0	20.00	0	97.8	66	134	19.23	1.65	20	
1,2,4-Trimethylbenzene	19.730	1.0	20.00	0	98.6	74	132	19.50	1.17	20	
1,2-Dibromo-3-chloropropane	13.930	2.0	20.00	0	69.6	50	132	13.07	6.37	20	
1,2-Dibromoethane	15.970	1.0	20.00	0	79.8	80	121	15.54	2.73	20	S
1,2-Dichlorobenzene	18.470	1.0	20.00	0	92.4	71	122	18.12	1.91	20	
1,2-Dichloroethane	17.120	0.50	20.00	0	85.6	69	132	16.63	2.90	20	
1,2-Dichloropropane	17.820	1.0	20.00	0	89.1	75	125	17.86	0.224	20	
1,3,5-Trimethylbenzene	20.040	1.0	20.00	0	100	74	131	19.75	1.46	20	
1,3-Dichlorobenzene	19.660	1.0	20.00	0	98.3	75	124	19.22	2.26	20	

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N006880-007AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82298**
Client ID: **ZZZZZZ** Batch ID: **D11VW175** TestNo: **EPA 8260B** Analysis Date: **11/29/2011** SeqNo: **1330569**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichloropropane	16.270	1.0	20.00	0	81.4	73	126	16.37	0.613	20	
1,4-Dichlorobenzene	19.400	1.0	20.00	0	97.0	74	123	19.05	1.82	20	
2,2-Dichloropropane	15.680	1.0	20.00	0	78.4	69	137	15.87	1.20	20	
2-Butanone	90.810	10	200.0	0	45.4	49	136	85.49	6.04	20	S
2-Chlorotoluene	19.610	1.0	20.00	0	98.0	73	126	19.44	0.871	20	
4-Chlorotoluene	19.540	1.0	20.00	0	97.7	74	128	19.40	0.719	20	
4-Isopropyltoluene	20.450	1.0	20.00	0	102	73	130	20.21	1.18	20	
4-Methyl-2-pentanone	147.200	10	200.0	0	73.6	58	134	136.5	7.54	20	
Acetone	78.510	10	200.0	0	39.3	40	135	73.21	6.99	20	S
Acrolein	136.520	20	200.0	0	68.3	75	125	126.8	7.37	20	S
Acrylonitrile	147.710	20	200.0	0	73.9	75	125	137.2	7.36	20	S
Benzene	19.220	1.0	20.00	0	96.1	81	122	19.20	0.104	20	
Bromobenzene	18.680	1.0	20.00	0	93.4	76	124	18.44	1.29	20	
Bromochloromethane	17.870	1.0	20.00	0	89.4	65	129	17.11	4.35	20	
Bromodichloromethane	16.880	1.0	20.00	0	84.4	76	121	16.73	0.893	20	
Bromoform	14.700	1.0	20.00	0	73.5	69	128	13.91	5.52	20	
Bromomethane	17.130	1.0	20.00	0	85.7	53	141	16.25	5.27	20	
Carbon disulfide	16.670	1.0	20.00	0	83.4	75	125	16.35	1.94	20	
Carbon tetrachloride	16.430	1.0	20.00	0	82.2	66	138	16.14	1.78	20	
Chlorobenzene	19.020	1.0	20.00	0	95.1	81	122	18.98	0.211	20	
Chloroethane	21.150	1.0	20.00	0	106	58	133	20.51	3.07	20	
Chloroform	19.520	1.0	20.00	0	97.6	69	128	19.23	1.50	20	
Chloromethane	19.920	1.0	20.00	0	99.6	56	131	18.80	5.79	20	
cis-1,2-Dichloroethene	20.300	1.0	20.00	0	102	72	126	19.94	1.79	20	
cis-1,3-Dichloropropene	17.270	1.0	20.00	0	86.4	69	131	16.61	3.90	20	
Di-isopropyl ether	19.250	1.0	20.00	0	96.2	70	130	18.92	1.73	20	
Dibromochloromethane	15.100	1.0	20.00	0	75.5	66	133	14.95	0.998	20	
Dibromomethane	17.040	1.0	20.00	0	85.2	76	125	16.30	4.44	20	
Dichlorodifluoromethane	21.030	1.0	20.00	0	105	53	153	19.70	6.53	20	
Ethyl tert-butyl ether	18.080	1.0	20.00	0	90.4	70	130	17.61	2.63	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N006880-007AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82298**
Client ID: **ZZZZZZ** Batch ID: **D11VW175** TestNo: **EPA 8260B** Analysis Date: **11/29/2011** SeqNo: **1330569**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	19.180	1.0	20.00	0	95.9	73	127	19.04	0.733	20	
Freon-113	17.350	1.0	20.00	0	86.8	75	125	17.33	0.115	20	
Hexachlorobutadiene	20.680	1.0	20.00	0	103	67	131	20.77	0.434	20	
Isopropylbenzene	20.040	1.0	20.00	0	100	75	127	19.92	0.601	20	
m,p-Xylene	38.710	1.0	50.00	0	77.4	76	128	38.30	1.06	20	
Methylene chloride	19.740	2.0	20.00	2.080	88.3	63	137	18.67	5.57	20	
MTBE	16.710	1.0	20.00	0	83.6	65	123	15.80	5.60	20	
n-Butylbenzene	20.930	1.0	20.00	0	105	69	137	20.62	1.49	20	
n-Propylbenzene	20.300	1.0	20.00	0	102	72	129	20.07	1.14	20	
Naphthalene	15.680	1.0	20.00	0	78.4	54	138	15.05	4.10	20	
o-Xylene	18.810	1.0	20.00	0	94.1	80	121	18.74	0.373	20	
sec-Butylbenzene	20.210	1.0	20.00	0	101	72	127	19.79	2.10	20	
Styrene	18.450	1.0	20.00	0	92.2	65	134	18.11	1.86	20	
Tert-amyl methyl ether	16.260	1.0	20.00	0	81.3	70	130	15.90	2.24	20	
Tert-Butanol	71.490	5.0	100.0	0	71.5	70	130	61.50	15.0	20	
tert-Butylbenzene	19.760	1.0	20.00	0	98.8	70	129	19.60	0.813	20	
Tetrachloroethene	20.160	1.0	20.00	0	101	66	128	20.72	2.74	20	
Toluene	19.220	2.0	20.00	0	96.1	77	122	18.66	2.96	20	
trans-1,2-Dichloroethene	21.560	1.0	20.00	0	108	63	137	20.69	4.12	20	
trans-1,3-Dichloropropene	16.590	1.0	20.00	0	83.0	59	135	16.19	2.44	20	
Trichloroethene	19.170	1.0	20.00	0	95.9	70	127	19.02	0.786	20	
Trichlorofluoromethane	21.590	1.0	20.00	0	108	57	129	21.24	1.63	20	
Vinyl chloride	20.880	1.0	20.00	0	104	50	134	20.23	3.16	20	
Xylenes, Total	57.520	2.0	60.00	0	95.9	75	125	57.04	0.838	20	
Surr: 1,2-Dichloroethane-d4	22.560		25.00		90.2	72	119		0		
Surr: 4-Bromofluorobenzene	23.520		25.00		94.1	76	119		0		
Surr: Dibromofluoromethane	26.040		25.00		104	85	115		0		
Surr: Toluene-d8	25.280		25.00		101	81	120		0		

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111129MB2** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82298**
Client ID: **PBW** Batch ID: **D11VW175** TestNo: **EPA 8260B** Analysis Date: **11/29/2011** SeqNo: **1330570**

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

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111129MB2** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82298**
Client ID: **PBW** Batch ID: **D11VW175** TestNo: **EPA 8260B** Analysis Date: **11/29/2011** SeqNo: **1330570**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	ND	1.0									
Bromochloromethane	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	1.0									
Carbon disulfide	ND	1.0									
Carbon tetrachloride	ND	1.0									
Chlorobenzene	ND	1.0									
Chloroethane	ND	1.0									
Chloroform	ND	1.0									
Chloromethane	ND	1.0									
cis-1,2-Dichloroethene	ND	1.0									
cis-1,3-Dichloropropene	ND	1.0									
Di-isopropyl ether	ND	1.0									
Dibromochloromethane	ND	1.0									
Dibromomethane	ND	1.0									
Dichlorodifluoromethane	ND	1.0									
Ethyl tert-butyl ether	ND	1.0									
Ethylbenzene	ND	1.0									
Freon-113	ND	1.0									
Hexachlorobutadiene	ND	1.0									
Isopropylbenzene	ND	1.0									
m,p-Xylene	ND	1.0									
Methylene chloride	0.480	2.0									
MTBE	ND	1.0									
n-Butylbenzene	ND	1.0									
n-Propylbenzene	ND	1.0									
Naphthalene	ND	1.0									
o-Xylene	ND	1.0									
sec-Butylbenzene	ND	1.0									

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111129MB2** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82298**
Client ID: **PBW** Batch ID: **D11VW175** TestNo: **EPA 8260B** Analysis Date: **11/29/2011** SeqNo: **1330570**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	ND	1.0									
Tert-amyl methyl ether	ND	1.0									
Tert-Butanol	ND	5.0									
tert-Butylbenzene	ND	1.0									
Tetrachloroethene	ND	1.0									
Toluene	ND	2.0									
trans-1,2-Dichloroethene	ND	1.0									
trans-1,3-Dichloropropene	ND	1.0									
Trichloroethene	ND	1.0									
Trichlorofluoromethane	ND	1.0									
Vinyl chloride	ND	1.0									
Xylenes, Total	ND	2.0									
Surr: 1,2-Dichloroethane-d4	21.920		25.00		87.7	72	119				
Surr: 4-Bromofluorobenzene	22.490		25.00		90.0	76	119				
Surr: Dibromofluoromethane	22.390		25.00		89.6	85	115				
Surr: Toluene-d8	24.410		25.00		97.6	81	120				

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111130LCS2** SampType: **LCS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82322**
Client ID: **LCSW** Batch ID: **D11VW176** TestNo: **EPA 8260B** Analysis Date: **11/30/2011** SeqNo: **1331072**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	17.760	1.0	20.00	0	88.8	81	129				
1,1,1-Trichloroethane	19.100	1.0	20.00	0	95.5	67	132				
1,1,2,2-Tetrachloroethane	18.750	1.0	20.00	0	93.8	63	128				
1,1,2-Trichloroethane	20.260	1.0	20.00	0	101	75	125				
1,1-Dichloroethane	21.900	0.50	20.00	0	110	69	133				
1,1-Dichloroethene	22.080	1.0	20.00	0	110	68	130				
1,1-Dichloropropene	20.580	1.0	20.00	0	103	73	132				
1,2,3-Trichlorobenzene	21.150	1.0	20.00	0	106	67	137				
1,2,3-Trichloropropane	17.210	1.0	20.00	0	86.1	73	124				
1,2,4-Trichlorobenzene	20.920	1.0	20.00	0	105	66	134				
1,2,4-Trimethylbenzene	18.500	1.0	20.00	0	92.5	74	132				
1,2-Dibromo-3-chloropropane	20.170	2.0	20.00	0	101	50	132				
1,2-Dibromoethane	20.260	1.0	20.00	0	101	80	121				
1,2-Dichlorobenzene	18.720	1.0	20.00	0	93.6	71	122				
1,2-Dichloroethane	23.600	0.50	20.00	0	118	69	132				
1,2-Dichloropropane	19.890	1.0	20.00	0	99.4	75	125				
1,3,5-Trimethylbenzene	18.320	1.0	20.00	0	91.6	74	131				
1,3-Dichlorobenzene	18.620	1.0	20.00	0	93.1	75	124				
1,3-Dichloropropane	19.020	1.0	20.00	0	95.1	73	126				
1,4-Dichlorobenzene	19.120	1.0	20.00	0	95.6	74	123				
2,2-Dichloropropane	18.560	1.0	20.00	0	92.8	69	137				
2-Butanone	319.890	10	200.0	0	160	49	136				S
2-Chlorotoluene	17.770	1.0	20.00	0	88.8	73	126				
4-Chlorotoluene	18.070	1.0	20.00	0	90.4	74	128				
4-Isopropyltoluene	18.710	1.0	20.00	0	93.6	73	130				
4-Methyl-2-pentanone	247.740	10	200.0	0	124	58	134				
Acetone	519.520	10	200.0	0	260	40	135				S
Acrolein	237.260	20	200.0	0	119	75	125				
Acrylonitrile	274.710	20	200.0	0	137	75	125				S
Benzene	20.350	1.0	20.00	0	102	81	122				

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111130LCS2** SampType: **LCS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82322**
Client ID: **LCSW** Batch ID: **D11VW176** TestNo: **EPA 8260B** Analysis Date: **11/30/2011** SeqNo: **1331072**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	17.660	1.0	20.00	0	88.3	76	124				
Bromochloromethane	25.330	1.0	20.00	0	127	65	129				
Bromodichloromethane	21.420	1.0	20.00	0	107	76	121				
Bromoform	16.890	1.0	20.00	0	84.4	69	128				
Bromomethane	11.330	1.0	20.00	0	56.6	53	141				
Carbon disulfide	22.730	1.0	20.00	0	114	75	125				
Carbon tetrachloride	19.070	1.0	20.00	0	95.4	66	138				
Chlorobenzene	18.900	1.0	20.00	0	94.5	81	122				
Chloroethane	21.450	1.0	20.00	0	107	58	133				
Chloroform	22.370	1.0	20.00	0	112	69	128				
Chloromethane	19.580	1.0	20.00	0	97.9	56	131				
cis-1,2-Dichloroethene	22.380	1.0	20.00	0	112	72	126				
cis-1,3-Dichloropropene	18.770	1.0	20.00	0	93.8	69	131				
Di-isopropyl ether	20.000	1.0	20.00	0	100	70	130				
Dibromochloromethane	16.440	1.0	20.00	0	82.2	66	133				
Dibromomethane	23.030	1.0	20.00	0	115	76	125				
Dichlorodifluoromethane	24.020	1.0	20.00	0	120	53	153				
Ethyl tert-butyl ether	20.470	1.0	20.00	0	102	70	130				
Ethylbenzene	19.090	1.0	20.00	0	95.4	73	127				
Freon-113	20.750	1.0	20.00	0	104	75	125				
Hexachlorobutadiene	19.990	1.0	20.00	0	100	67	131				
Isopropylbenzene	17.340	1.0	20.00	0	86.7	75	127				
m,p-Xylene	39.450	1.0	50.00	0	78.9	76	128				
Methylene chloride	23.580	2.0	20.00	0	118	63	137				
MTBE	21.990	1.0	20.00	0	110	65	123				
n-Butylbenzene	19.400	1.0	20.00	0	97.0	69	137				
n-Propylbenzene	17.900	1.0	20.00	0	89.5	72	129				
Naphthalene	21.280	1.0	20.00	0	106	54	138				
o-Xylene	19.570	1.0	20.00	0	97.9	80	121				
sec-Butylbenzene	17.900	1.0	20.00	0	89.5	72	127				

Qualifiers:

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

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111130LCS2** SampType: **LCS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82322**
Client ID: **LCSW** Batch ID: **D11VW176** TestNo: **EPA 8260B** Analysis Date: **11/30/2011** SeqNo: **1331072**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	19.950	1.0	20.00	0	99.8	65	134				
Tert-amyl methyl ether	19.670	1.0	20.00	0	98.4	70	130				
Tert-Butanol	116.710	5.0	100.0	0	117	70	130				
tert-Butylbenzene	17.670	1.0	20.00	0	88.4	70	129				
Tetrachloroethene	19.440	1.0	20.00	0	97.2	66	128				
Toluene	20.170	2.0	20.00	0	101	77	122				
trans-1,2-Dichloroethene	22.850	1.0	20.00	0	114	63	137				
trans-1,3-Dichloropropene	19.300	1.0	20.00	0	96.5	59	135				
Trichloroethene	20.060	1.0	20.00	0	100	70	127				
Trichlorofluoromethane	19.880	1.0	20.00	0	99.4	57	129				
Vinyl chloride	22.740	1.0	20.00	0	114	50	134				
Xylenes, Total	59.020	2.0	60.00	0	98.4	75	125				
Surr: 1,2-Dichloroethane-d4	28.040		25.00		112	72	119				
Surr: 4-Bromofluorobenzene	23.380		25.00		93.5	76	119				
Surr: Dibromofluoromethane	27.580		25.00		110	85	115				
Surr: Toluene-d8	24.350		25.00		97.4	81	120				

Sample ID: **N006877-001AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82322**
Client ID: **ZZZZZZ** Batch ID: **D11VW176** TestNo: **EPA 8260B** Analysis Date: **11/30/2011** SeqNo: **1331073**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	18.590	1.0	20.00	0	93.0	81	129				
1,1,1-Trichloroethane	19.760	1.0	20.00	0	98.8	67	132				
1,1,2,2-Tetrachloroethane	17.580	1.0	20.00	0	87.9	63	128				
1,1,2-Trichloroethane	18.610	1.0	20.00	0	93.0	75	125				
1,1-Dichloroethane	23.580	0.50	20.00	0	118	69	133				
1,1-Dichloroethene	23.970	1.0	20.00	0	120	68	130				
1,1-Dichloropropene	21.330	1.0	20.00	0	107	73	132				
1,2,3-Trichlorobenzene	20.900	1.0	20.00	0	104	67	137				
1,2,3-Trichloropropane	15.980	1.0	20.00	0	79.9	73	124				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N006877-001AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82322**
Client ID: **ZZZZZZ** Batch ID: **D11VW176** TestNo: **EPA 8260B** Analysis Date: **11/30/2011** SeqNo: **1331073**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	21.330	1.0	20.00	0	107	66	134				
1,2,4-Trimethylbenzene	19.340	1.0	20.00	0	96.7	74	132				
1,2-Dibromo-3-chloropropane	17.020	2.0	20.00	0	85.1	50	132				
1,2-Dibromoethane	18.390	1.0	20.00	0	92.0	80	121				
1,2-Dichlorobenzene	19.600	1.0	20.00	0	98.0	71	122				
1,2-Dichloroethane	22.620	0.50	20.00	0	113	69	132				
1,2-Dichloropropane	20.470	1.0	20.00	0	102	75	125				
1,3,5-Trimethylbenzene	19.830	1.0	20.00	0	99.2	74	131				
1,3-Dichlorobenzene	20.300	1.0	20.00	0	102	75	124				
1,3-Dichloropropane	18.130	1.0	20.00	0	90.7	73	126				
1,4-Dichlorobenzene	20.420	1.0	20.00	0	102	74	123				
2,2-Dichloropropane	19.400	1.0	20.00	0	97.0	69	137				
2-Butanone	125.910	10	200.0	0	63.0	49	136				
2-Chlorotoluene	19.570	1.0	20.00	0	97.9	73	126				
4-Chlorotoluene	19.780	1.0	20.00	0	98.9	74	128				
4-Isopropyltoluene	20.460	1.0	20.00	0	102	73	130				
4-Methyl-2-pentanone	192.930	10	200.0	0	96.5	58	134				
Acetone	128.840	10	200.0	0	64.4	40	135				
Acrolein	188.880	20	200.0	0	94.4	75	125				
Acrylonitrile	217.220	20	200.0	0	109	75	125				
Benzene	21.660	1.0	20.00	0	108	81	122				
Bromobenzene	18.940	1.0	20.00	0	94.7	76	124				
Bromochloromethane	22.890	1.0	20.00	0	114	65	129				
Bromodichloromethane	21.750	1.0	20.00	0	109	76	121				
Bromoform	15.850	1.0	20.00	0	79.2	69	128				
Bromomethane	13.130	1.0	20.00	0	65.6	53	141				
Carbon disulfide	22.830	1.0	20.00	0	114	75	125				
Carbon tetrachloride	20.000	1.0	20.00	0	100	66	138				
Chlorobenzene	20.220	1.0	20.00	0	101	81	122				
Chloroethane	22.920	1.0	20.00	0	115	58	133				

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N006877-001AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82322**
Client ID: **ZZZZZZ** Batch ID: **D11VW176** TestNo: **EPA 8260B** Analysis Date: **11/30/2011** SeqNo: **1331073**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	24.420	1.0	20.00	0.8300	118	69	128				
Chloromethane	20.440	1.0	20.00	0	102	56	131				
cis-1,2-Dichloroethene	23.250	1.0	20.00	0	116	72	126				
cis-1,3-Dichloropropene	19.020	1.0	20.00	0	95.1	69	131				
Di-isopropyl ether	20.820	1.0	20.00	0	104	70	130				
Dibromochloromethane	17.020	1.0	20.00	0	85.1	66	133				
Dibromomethane	21.890	1.0	20.00	0	109	76	125				
Dichlorodifluoromethane	26.070	1.0	20.00	0	130	53	153				
Ethyl tert-butyl ether	20.400	1.0	20.00	0	102	70	130				
Ethylbenzene	20.690	1.0	20.00	0	103	73	127				
Freon-113	21.660	1.0	20.00	0	108	75	125				
Hexachlorobutadiene	21.450	1.0	20.00	0	107	67	131				
Isopropylbenzene	19.320	1.0	20.00	0	96.6	75	127				
m,p-Xylene	42.020	1.0	50.00	0	84.0	76	128				
Methylene chloride	26.880	2.0	20.00	3.350	118	63	137				
MTBE	20.520	1.0	20.00	0	103	65	123				
n-Butylbenzene	21.260	1.0	20.00	0	106	69	137				
n-Propylbenzene	19.860	1.0	20.00	0	99.3	72	129				
Naphthalene	17.990	1.0	20.00	0	90.0	54	138				
o-Xylene	20.450	1.0	20.00	0	102	80	121				
sec-Butylbenzene	19.920	1.0	20.00	0	99.6	72	127				
Styrene	19.410	1.0	20.00	0	97.0	65	134				
Tert-amyl methyl ether	19.320	1.0	20.00	0	96.6	70	130				
Tert-Butanol	93.370	5.0	100.0	0	93.4	70	130				
tert-Butylbenzene	19.520	1.0	20.00	0	97.6	70	129				
Tetrachloroethene	21.770	1.0	20.00	0	109	66	128				
Toluene	21.240	2.0	20.00	0	106	77	122				
trans-1,2-Dichloroethene	24.480	1.0	20.00	0	122	63	137				
trans-1,3-Dichloropropene	18.850	1.0	20.00	0	94.3	59	135				
Trichloroethene	21.310	1.0	20.00	0	107	70	127				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N006877-001AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82322**
Client ID: **ZZZZZZ** Batch ID: **D11VW176** TestNo: **EPA 8260B** Analysis Date: **11/30/2011** SeqNo: **1331073**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichlorofluoromethane	21.300	1.0	20.00	0	106	57	129				
Vinyl chloride	23.380	1.0	20.00	0	117	50	134				
Xylenes, Total	62.470	2.0	60.00	0	104	75	125				
Surr: 1,2-Dichloroethane-d4	26.470		25.00		106	72	119				
Surr: 4-Bromofluorobenzene	23.810		25.00		95.2	76	119				
Surr: Dibromofluoromethane	28.250		25.00		113	85	115				
Surr: Toluene-d8	25.450		25.00		102	81	120				

Sample ID: **N006877-001AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82322**
Client ID: **ZZZZZZ** Batch ID: **D11VW176** TestNo: **EPA 8260B** Analysis Date: **11/30/2011** SeqNo: **1331074**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	18.950	1.0	20.00	0	94.8	81	129	18.59	1.92	20	
1,1,1-Trichloroethane	19.890	1.0	20.00	0	99.4	67	132	19.76	0.656	20	
1,1,2,2-Tetrachloroethane	17.610	1.0	20.00	0	88.0	63	128	17.58	0.171	20	
1,1,2-Trichloroethane	19.140	1.0	20.00	0	95.7	75	125	18.61	2.81	20	
1,1-Dichloroethane	23.480	0.50	20.00	0	117	69	133	23.58	0.425	20	
1,1-Dichloroethene	23.730	1.0	20.00	0	119	68	130	23.97	1.01	20	
1,1-Dichloropropene	21.700	1.0	20.00	0	108	73	132	21.33	1.72	20	
1,2,3-Trichlorobenzene	21.420	1.0	20.00	0	107	67	137	20.90	2.46	20	
1,2,3-Trichloropropane	15.280	1.0	20.00	0	76.4	73	124	15.98	4.48	20	
1,2,4-Trichlorobenzene	21.670	1.0	20.00	0	108	66	134	21.33	1.58	20	
1,2,4-Trimethylbenzene	18.520	1.0	20.00	0	92.6	74	132	19.34	4.33	20	
1,2-Dibromo-3-chloropropane	17.050	2.0	20.00	0	85.2	50	132	17.02	0.176	20	
1,2-Dibromoethane	18.960	1.0	20.00	0	94.8	80	121	18.39	3.05	20	
1,2-Dichlorobenzene	20.050	1.0	20.00	0	100	71	122	19.60	2.27	20	
1,2-Dichloroethane	23.130	0.50	20.00	0	116	69	132	22.62	2.23	20	
1,2-Dichloropropane	20.620	1.0	20.00	0	103	75	125	20.47	0.730	20	
1,3,5-Trimethylbenzene	19.460	1.0	20.00	0	97.3	74	131	19.83	1.88	20	
1,3-Dichlorobenzene	20.320	1.0	20.00	0	102	75	124	20.30	0.0985	20	

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N006877-001AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82322**
Client ID: **ZZZZZZ** Batch ID: **D11VW176** TestNo: **EPA 8260B** Analysis Date: **11/30/2011** SeqNo: **1331074**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichloropropane	18.170	1.0	20.00	0	90.9	73	126	18.13	0.220	20	
1,4-Dichlorobenzene	20.700	1.0	20.00	0	104	74	123	20.42	1.36	20	
2,2-Dichloropropane	19.150	1.0	20.00	0	95.8	69	137	19.40	1.30	20	
2-Butanone	123.410	10	200.0	0	61.7	49	136	125.9	2.01	20	
2-Chlorotoluene	19.610	1.0	20.00	0	98.0	73	126	19.57	0.204	20	
4-Chlorotoluene	19.820	1.0	20.00	0	99.1	74	128	19.78	0.202	20	
4-Isopropyltoluene	20.450	1.0	20.00	0	102	73	130	20.46	0.0489	20	
4-Methyl-2-pentanone	191.560	10	200.0	0	95.8	58	134	192.9	0.713	20	
Acetone	129.030	10	200.0	0	64.5	40	135	128.8	0.147	20	
Acrolein	180.830	20	200.0	0	90.4	75	125	188.9	4.35	20	
Acrylonitrile	212.200	20	200.0	0	106	75	125	217.2	2.34	20	
Benzene	21.650	1.0	20.00	0	108	81	122	21.66	0.0462	20	
Bromobenzene	19.130	1.0	20.00	0	95.7	76	124	18.94	0.998	20	
Bromochloromethane	22.920	1.0	20.00	0	115	65	129	22.89	0.131	20	
Bromodichloromethane	22.170	1.0	20.00	0	111	76	121	21.75	1.91	20	
Bromoform	15.970	1.0	20.00	0	79.8	69	128	15.85	0.754	20	
Bromomethane	13.130	1.0	20.00	0	65.6	53	141	13.13	0	20	
Carbon disulfide	23.230	1.0	20.00	0	116	75	125	22.83	1.74	20	
Carbon tetrachloride	20.160	1.0	20.00	0	101	66	138	20.00	0.797	20	
Chlorobenzene	20.420	1.0	20.00	0	102	81	122	20.22	0.984	20	
Chloroethane	22.770	1.0	20.00	0	114	58	133	22.92	0.657	20	
Chloroform	24.170	1.0	20.00	0.8300	117	69	128	24.42	1.03	20	
Chloromethane	20.590	1.0	20.00	0	103	56	131	20.44	0.731	20	
cis-1,2-Dichloroethene	23.370	1.0	20.00	0	117	72	126	23.25	0.515	20	
cis-1,3-Dichloropropene	19.300	1.0	20.00	0	96.5	69	131	19.02	1.46	20	
Di-isopropyl ether	20.850	1.0	20.00	0	104	70	130	20.82	0.144	20	
Dibromochloromethane	16.800	1.0	20.00	0	84.0	66	133	17.02	1.30	20	
Dibromomethane	22.130	1.0	20.00	0	111	76	125	21.89	1.09	20	
Dichlorodifluoromethane	25.670	1.0	20.00	0	128	53	153	26.07	1.55	20	
Ethyl tert-butyl ether	20.430	1.0	20.00	0	102	70	130	20.40	0.147	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N006877-001AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82322**
Client ID: **ZZZZZZ** Batch ID: **D11VW176** TestNo: **EPA 8260B** Analysis Date: **11/30/2011** SeqNo: **1331074**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	20.580	1.0	20.00	0	103	73	127	20.69	0.533	20	
Freon-113	21.880	1.0	20.00	0	109	75	125	21.66	1.01	20	
Hexachlorobutadiene	22.240	1.0	20.00	0	111	67	131	21.45	3.62	20	
Isopropylbenzene	19.430	1.0	20.00	0	97.2	75	127	19.32	0.568	20	
m,p-Xylene	42.060	1.0	50.00	0	84.1	76	128	42.02	0.0951	20	
Methylene chloride	27.720	2.0	20.00	3.350	122	63	137	26.88	3.08	20	
MTBE	20.890	1.0	20.00	0	104	65	123	20.52	1.79	20	
n-Butylbenzene	21.420	1.0	20.00	0	107	69	137	21.26	0.750	20	
n-Propylbenzene	19.870	1.0	20.00	0	99.4	72	129	19.86	0.0503	20	
Naphthalene	18.270	1.0	20.00	0	91.4	54	138	17.99	1.54	20	
o-Xylene	20.720	1.0	20.00	0	104	80	121	20.45	1.31	20	
sec-Butylbenzene	20.040	1.0	20.00	0	100	72	127	19.92	0.601	20	
Styrene	17.470	1.0	20.00	0	87.4	65	134	19.41	10.5	20	
Tert-amyl methyl ether	19.440	1.0	20.00	0	97.2	70	130	19.32	0.619	20	
Tert-Butanol	93.420	5.0	100.0	0	93.4	70	130	93.37	0.0535	20	
tert-Butylbenzene	19.680	1.0	20.00	0	98.4	70	129	19.52	0.816	20	
Tetrachloroethene	21.720	1.0	20.00	0	109	66	128	21.77	0.230	20	
Toluene	21.240	2.0	20.00	0	106	77	122	21.24	0	20	
trans-1,2-Dichloroethene	24.780	1.0	20.00	0	124	63	137	24.48	1.22	20	
trans-1,3-Dichloropropene	18.890	1.0	20.00	0	94.4	59	135	18.85	0.212	20	
Trichloroethene	21.710	1.0	20.00	0	109	70	127	21.31	1.86	20	
Trichlorofluoromethane	21.240	1.0	20.00	0	106	57	129	21.30	0.282	20	
Vinyl chloride	23.880	1.0	20.00	0	119	50	134	23.38	2.12	20	
Xylenes, Total	62.780	2.0	60.00	0	105	75	125	62.47	0.495	20	
Surr: 1,2-Dichloroethane-d4	25.950		25.00		104	72	119		0		
Surr: 4-Bromofluorobenzene	23.550		25.00		94.2	76	119		0		
Surr: Dibromofluoromethane	27.590		25.00		110	85	115		0		
Surr: Toluene-d8	24.760		25.00		99.0	81	120		0		

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111130MB5** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82322**
Client ID: **PBW** Batch ID: **D11VW176** TestNo: **EPA 8260B** Analysis Date: **11/30/2011** SeqNo: **1331075**

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

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111130MB5** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82322**
Client ID: **PBW** Batch ID: **D11VW176** TestNo: **EPA 8260B** Analysis Date: **11/30/2011** SeqNo: **1331075**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	ND	1.0									
Bromochloromethane	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	1.0									
Carbon disulfide	ND	1.0									
Carbon tetrachloride	ND	1.0									
Chlorobenzene	ND	1.0									
Chloroethane	ND	1.0									
Chloroform	ND	1.0									
Chloromethane	ND	1.0									
cis-1,2-Dichloroethene	ND	1.0									
cis-1,3-Dichloropropene	ND	1.0									
Di-isopropyl ether	ND	1.0									
Dibromochloromethane	ND	1.0									
Dibromomethane	ND	1.0									
Dichlorodifluoromethane	ND	1.0									
Ethyl tert-butyl ether	ND	1.0									
Ethylbenzene	ND	1.0									
Freon-113	ND	1.0									
Hexachlorobutadiene	ND	1.0									
Isopropylbenzene	ND	1.0									
m,p-Xylene	ND	1.0									
Methylene chloride	1.490	2.0									
MTBE	ND	1.0									
n-Butylbenzene	ND	1.0									
n-Propylbenzene	ND	1.0									
Naphthalene	ND	1.0									
o-Xylene	ND	1.0									
sec-Butylbenzene	ND	1.0									

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N006884
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111130MB5** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82322**
Client ID: **PBW** Batch ID: **D11VW176** TestNo: **EPA 8260B** Analysis Date: **11/30/2011** SeqNo: **1331075**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	ND	1.0									
Tert-amyl methyl ether	ND	1.0									
Tert-Butanol	ND	5.0									
tert-Butylbenzene	ND	1.0									
Tetrachloroethene	ND	1.0									
Toluene	ND	2.0									
trans-1,2-Dichloroethene	ND	1.0									
trans-1,3-Dichloropropene	ND	1.0									
Trichloroethene	ND	1.0									
Trichlorofluoromethane	ND	1.0									
Vinyl chloride	ND	1.0									
Xylenes, Total	ND	2.0									
Surr: 1,2-Dichloroethane-d4	28.120		25.00		112	72	119				
Surr: 4-Bromofluorobenzene	24.700		25.00		98.8	76	119				
Surr: Dibromofluoromethane	28.500		25.00		114	85	115				
Surr: Toluene-d8	26.080		25.00		104	81	120				

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

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

CHAIN OF CUSTODY RECORD

DATE: 11/22/11

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

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)	Comments
	INF- 11-22	Influent	11/22/11	1230	WW	8	X	X	X	Temperature* = N/A
										(Temp. as sampled*)
										Monthly

	Date	Time
Relinquished by: (Signature)		
Received by: (Signature)	11/22/11	1535
Relinquished by: (Signature)	11/22/11	1405
Received by: (Signature)	11/23/11	0900
Relinquished by: (Signature)		
Received by: (Signature)		

4.7°C ICE PACK
IR#2

Revised: 01/11/11

Advanced Technology Laboratories, Inc.

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

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

Sample Receipt Checklist

Cooler Received/Opened On:	11/23/2011	Workorder:	N006884
Rep sample Temp (Deg C):	4.7	IR Gun ID:	2
Temp Blank:	☐ Yes ☑ No		
Carrier name:	ontrac		
Last 4 digits of Tracking No.:	6057	Packing Material Used:	Bubble Wrap
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

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

Comments:

Checklist Completed B MBC 11/25/11

Reviewed By: Aty 11/23/11

OnTrac
On Time Delivery For Less

800.334.5000
ontrac.com

D10010429146057

Date Printed 11/22/2011

Tracking#D10010429146057

Shipped From:
ADVANCED TECHNOLOGY LABORATORI
3275 WALNUT AVENUE
SIGNAL HILL, CA 90755

Sent By: CARMEN AGUILA
Phone#: (562)989-4045
wgt(lbs): 7
Reference: SAMPLES
Reference 2:

Ship To Company:	*Service:* **S**
ATL **3151 WEST POST RD.** **LAS VEGAS, NV 89118** **MARLON CARTIN (702)307-2659**	*Sort Code:* **VEG** *Special Services:* **Signature Required**

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

CHAIN OF CUSTODY RECORD

DATE: 11/22/11
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

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)	Comments
	INF- 11-22	Influent	11/22/11	1230	WW	8	X	X	X	Temperature* = N/A
										(Temp. as sampled)*
										Monthly

Relinquished by: (Signature)	Received by: (Signature)	Date: 11/22/11	Time: 1535
Relinquished by: (Signature)	Received by: (Signature)	Date: 11/22/11	Time: 1405
Relinquished by: (Signature)	Received by: (Signature)	Date: 11/23/11	Time: 0900

Revised: 01/11/11

4-7°C ICE PACK
IR#2

December 08, 2011

Daniel Jablonski
CH2M HILL
155 Grand Avenue, Suite 1000
Oakland, CA 94612

TEL: (213)228-8271
FAX: (510) 622-9129

CA-ELAP No.: 2676
NV Cert. No.: NV-009222007A

Workorder No.: N006870

RE: SFPP - Norwalk Site

Attention: Daniel Jablonski

Enclosed are the results for sample(s) received on November 22, 2011 by Advanced Technology Laboratories, Inc. . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

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

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

Sincerely,

for gsycosmurdo

Jose Tenorio Jr.
Laboratory Director

Advanced Technology Laboratories, Inc. **Date:** *08-Dec-11*

CLIENT: CH2M HILL
Project: SFPP - Norwalk Site
Lab Order: N006870

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

Samples were received intact with proper chain of custody documentation.

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

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

Subcontracted Analyses:

EPA TO15 and EPA TO3 were subcontracted to Advanced Technology Laboratories-Signal Hill, CA .

ASTM D1946 was subcontracted to Air Technology Laboratories-City of Industry, CA .

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

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

CHAIN OF CUSTODY RECORD

DATE: 11/22/11

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

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
	VINF-11-22	Header	11/22/11	1158	Air	4	X	X	X										Monthly sample

Relinquished by: (Signature)	Received by: (Signature)	Date: 11/22/11	Time: 1335
Relinquished by: (Signature)	Received by: (Signature)	Date: 11/22/11	Time: 1405
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Revised: 01/11/2011

AIR TECHNOLOGY
Laboratories, Inc.

December 8, 2011

DoD ELAP
ADE-1461
EPA Methods TO-3, TO14A,TO15 SIM & Scan, ASTM D1946

FL Cert E8784/LA Cert 04140
EPA Methods TO3, TO14A, TO15, 25C/3C, RSK-175
TX Cert T104704450-09-TX
EPA Methods TO14A, TO15

Advanced Technology Labs, Inc.
ATTN: Marlon Cartin
3151-3153 W. Post Rd.
Las Vegas, NV 89118

LABORATORY TEST RESULTS

Project Reference: N006870
Lab Number: C112303-01

Enclosed are results for sample(s) received 11/23/11 by Air Technology Laboratories. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

- Sample analyses were performed within method performance criteria, and meet all requirements of the NELAC Standards.
- All results are reported without qualifications unless otherwise noted.
- The enclosed results relate only to the sample(s).

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

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

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

C112303-01

Advanced Technology Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atlglobal.com
TEL. 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: RTNE

Subcontractor:

ATL Air Labs
18501 E. Gale Ave, Suite 130
City of Industry, CA 91748

TEL: (626) 964-4032
FAX: (626) 964-5832
Acct #:

Field Sampler: James Dye

22-Nov-11

	Sample ID	Matrix	Date Collected	Bottle Type	Requested Tests: ASTM D1946
01	N006870-001B / VINF-11-22	Air	11/22/2011 11:58:00 AM	BAG	1

General Comments: Please email sample receipt acknowledgement to the PM.
Please use PO#: N006870 Please fax results by: Normal TAT
Please analyze for O2/Argon, CO2, CH4 by ASTM 1946.

		Date/Time		Date/Time
Relinquished by:		11/22/11 @ 1600	**Received by:**	
Relinquished by:		11/23/11 9:56AM	**Received by:**	11/23/11 956

Client: Advanced Technology Laboratories
Attn: Marlon Cartin
Project Name: NA
Project No.: N006870
Date Received: 11/23/11
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	**C112303-01**							
Client Sample I.D.:	**N006870-001B / VINF-11-22**							
Date Sampled:	**11/22/11**							
Date Analyzed:	**11/23/11**							
QC Batch No.:	**111123GC8A1**							
Analyst Initials:	**ZK**							
Dilution Factor:	**1.0**							
ANALYTE	**Result % v/v**	**RL % v/v**						
Carbon Dioxide	**0.70**	0.010						
Oxygen/Argon	**20**	0.50						
Methane	**0.070**	0.0010						

ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: _____ **Date** 12-7-11

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

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

QC Batch No.: 111123GC8A1
Matrix: Air
Units: % v/v

QC for ASTM D1946

Lab No.:	Method Blank		LCS		LCSD			
Date Analyzed:	11/23/11		11/23/11		11/23/11			
Analyst Initials:	ZK		ZK		ZK			
Datafile:	23nov002		23nov		23nov001			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Oxygen/Argon	0.50	ND	101	70-130%	102	70-130%	0.5	<30
Methane	0.0010	ND	116	70-130%	117	70-130%	0.8	<30
Carbon Dioxide	0.010	ND	102	70-130%	104	70-130%	1.7	<30

PQL = Practical Quantitation Limit
ND = Not Detected (Below RL).
RL = PQL X Dilution Factor

Reviewed/Approved By: _____ **Date:** 12-7-11
Mark J. Johnson
Operations Manager

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

ADVANCED TECHNOLOGY LABORATORIES

December 06, 2011

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

Marlon Cartin
Advanced Technology Laboratory-Las Vegas
3151 W Post Rd.
Las Vegas, NV 89118
Tel: (702) 307-2659
Fax:(702) 307-2691

Re: ATL Work Order Number : 1100334

Client Reference : [none]

Enclosed are the results for sample(s) received on November 22, 2011 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez
Laboratory Director

Advanced Technology Laboratory-Las Vegas	Project Number : -
3151 W Post Rd.	Report To : Marlon Cartin
Las Vegas , NV 89118	Reported : 12/06/2011

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
N006870-001A / VINF-11-22	1100334-01	Air	11/22/11 11:58	11/22/11 16:00

Advanced Technology Laboratory-Las Vegas	Project Number : -
3151 W Post Rd.	Report To : Marlon Cartin
Las Vegas , NV 89118	Reported : 12/06/2011

Client Sample ID N006870-001A / VINF-11-22

Lab ID: 1100334-01

Volatile Organic Compounds in AIR by TO-15 **Analyst: BB/**

Analyte	Result (ppbv)	PQL (ppbv)	MDL (ppbv)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
1,1,1-Trichloroethane	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
1,1,2,2-Tetrachloroethane	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
1,1,2-Trichloroethane	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
1,1-Dichloroethane	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
1,1-Dichloroethene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
1,1-Dichloropropene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
1,2,3-Trichloropropane	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
1,2,4-Trichlorobenzene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
1,2,4-Trimethylbenzene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
1,2-Dibromo-3-chloropropane	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
1,2-Dibromoethane	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
1,2-Dichlorobenzene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
1,2-Dichloroethane	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
1,2-Dichloropropane	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
1,3,5-Trimethylbenzene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
1,3-Butadiene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
1,3-Dichlorobenzene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
1,4-Dichlorobenzene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
1,4-Dioxane	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
2,2,4-Trimethylpentane	**300**	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
2-Butanone	**5.4**	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
2-Chloroethyl vinyl ether	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
2-Chlorotoluene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
2-Hexanone	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
2-Propanol	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
4-Chlorotoluene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
4-Ethyl Toluene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
4-Methyl-2-pentanone	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Acetone	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Acetonitrile	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Acrolein	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Acrylonitrile	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Benzene	**150**	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	

Advanced Technology Laboratory-Las Vegas	Project Number : -
3151 W Post Rd.	Report To : Marlon Cartin
Las Vegas , NV 89118	Reported : 12/06/2011

Client Sample ID N006870-001A / VINF-11-22

Lab ID: 1100334-01

Volatile Organic Compounds in AIR by TO-15 **Analyst: BB/**

Analyte	Result (ppbv)	PQL (ppbv)	MDL (ppbv)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl chloride	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Bromobenzene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Bromodichloromethane	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Bromoform	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Bromomethane	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Carbon disulfide	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Carbon tetrachloride	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Chlorobenzene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Chloroethane	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Chloroform	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Chloromethane	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
cis-1,2-Dichloroethene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
cis-1,3-Dichloropropene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Cyclohexane	**110**	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Dibromochloromethane	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Dibromomethane	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Dichlorodifluoromethane	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Dichlorotetrafluoroethane	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Ethanol	**24**	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Ethylbenzene	**12**	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Freon-113	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Hexachlorobutadiene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Isopropylbenzene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
m,p-Xylene	**27**	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Methylene chloride	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
MTBE	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
n-Butylbenzene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
n-Propylbenzene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Naphthalene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
o-Xylene	**8.0**	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
p-Isopropyltoluene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
sec-Butylbenzene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Styrene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
tert-Butylbenzene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Tetrachloroethene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	

Advanced Technology Laboratory-Las Vegas	Project Number : -
3151 W Post Rd.	Report To : Marlon Cartin
Las Vegas , NV 89118	Reported : 12/06/2011

Client Sample ID N006870-001A / VINF-11-22

Lab ID: 1100334-01

Volatile Organic Compounds in AIR by TO-15 **Analyst: BB/**

Analyte	Result (ppbv)	PQL (ppbv)	MDL (ppbv)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Toluene	**67**	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
trans-1,2-Dichloroethene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
trans-1,3-Dichloropropene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Trichloroethene	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Trichlorofluoromethane	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Vinyl acetate	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Vinyl chloride	ND	5.0	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Surrogate: 4-Bromofluorobenzene	*116 %*	*70 - 130*			B1K0597	11/23/2011	*11/23/11 19:58*	

Gasoline Range Organics in Air by TO-3 **Analyst: BB/**

Analyte	Result (ppbv)	PQL (ppbv)	MDL (ppbv)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**11000**	400	NA	20	B1K0597	11/23/2011	11/23/11 19:58	
Surrogate: 4-Bromofluorobenzene	*96.4 %*	*70 - 130*			B1K0597	11/23/2011	*11/23/11 19:58*	

Advanced Technology Laboratory-Las Vegas
3151 W Post Rd.
Las Vegas , NV 89118

Project Number : -
Report To : Marlon Cartin
Reported : 12/06/2011

QUALITY CONTROL SECTION

Volatile Organic Compounds in AIR by TO-15 - Quality Control

Analyte	Result (ppbv)	PQL (ppbv)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1K0597 - No_Prep_Air									
Blank (B1K0597-BLK1)				Prepared: 11/23/2011 Analyzed: 11/23/2011					
1,1,1,2-Tetrachloroethane	ND	0.25			NR				
1,1,1-Trichloroethane	ND	0.25			NR				
1,1,2,2-Tetrachloroethane	ND	0.25			NR				
1,1,2-Trichloroethane	ND	0.25			NR				
1,1-Dichloroethane	ND	0.25			NR				
1,1-Dichloroethene	ND	0.25			NR				
1,1-Dichloropropene	ND	0.25			NR				
1,2,3-Trichloropropane	ND	0.25			NR				
1,2,4-Trichlorobenzene	ND	0.25			NR				
1,2,4-Trimethylbenzene	ND	0.25			NR				
1,2-Dibromo-3-chloropropane	ND	0.25			NR				
1,2-Dibromoethane	ND	0.25			NR				
1,2-Dichlorobenzene	ND	0.25			NR				
1,2-Dichloroethane	ND	0.25			NR				
1,2-Dichloropropane	ND	0.25			NR				
1,3,5-Trimethylbenzene	ND	0.25			NR				
1,3-Butadiene	ND	0.25			NR				
1,3-Dichlorobenzene	ND	0.25			NR				
1,4-Dichlorobenzene	ND	0.25			NR				
1,4-Dioxane	ND	0.25			NR				
2,2,4-Trimethylpentane	ND	0.25			NR				
2-Butanone	ND	0.25			NR				
2-Chloroethyl vinyl ether	ND	0.25			NR				
2-Chlorotoluene	ND	0.25			NR				
2-Hexanone	ND	0.25			NR				
2-Propanol	ND	0.25			NR				
4-Chlorotoluene	ND	0.25			NR				
4-Ethyl Toluene	ND	0.25			NR				
4-Methyl-2-pentanone	ND	0.25			NR				
Acetone	ND	0.25			NR				
Acetonitrile	ND	0.25			NR				
Acrolein	ND	0.25			NR				
Acrylonitrile	ND	0.25			NR				
Benzene	ND	0.25			NR				
Benzyl chloride	ND	0.25			NR				
Bromobenzene	ND	0.25			NR				
Bromodichloromethane	ND	0.25			NR				
Bromoform	ND	0.25			NR				
Bromomethane	ND	0.25			NR				

Advanced Technology Laboratory-Las Vegas
3151 W Post Rd.
Las Vegas , NV 89118

Project Number : -
Report To : Marlon Cartin
Reported : 12/06/2011

Volatile Organic Compounds in AIR by TO-15 - Quality Control (cont'd)

Analyte	Result (ppbv)	PQL (ppbv)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1K0597 - No_Prep_Air (continued)									
Blank (B1K0597-BLK1) - Continued				Prepared: 11/23/2011 Analyzed: 11/23/2011					
Carbon disulfide	ND	0.25			NR				
Carbon tetrachloride	ND	0.25			NR				
Chlorobenzene	ND	0.25			NR				
Chloroethane	ND	0.25			NR				
Chloroform	ND	0.25			NR				
Chloromethane	ND	0.25			NR				
cis-1,2-Dichloroethene	ND	0.25			NR				
cis-1,3-Dichloropropene	ND	0.25			NR				
Cyclohexane	ND	0.25			NR				
Dibromochloromethane	ND	0.25			NR				
Dibromomethane	ND	0.25			NR				
Dichlorodifluoromethane	ND	0.25			NR				
Dichlorotetrafluoroethane	ND	0.25			NR				
Ethanol	ND	0.25			NR				
Ethylbenzene	ND	0.25			NR				
Freon-113	ND	0.25			NR				
Hexachlorobutadiene	ND	0.25			NR				
Isopropylbenzene	ND	0.25			NR				
m,p-Xylene	ND	0.25			NR				
Methylene chloride	ND	0.25			NR				
MTBE	ND	0.25			NR				
n-Butylbenzene	ND	0.25			NR				
n-Propylbenzene	ND	0.25			NR				
Naphthalene	ND	0.25			NR				
o-Xylene	ND	0.25			NR				
p-Isopropyltoluene	ND	0.25			NR				
sec-Butylbenzene	ND	0.25			NR				
Styrene	ND	0.25			NR				
tert-Butylbenzene	ND	0.25			NR				
Tetrachloroethene	ND	0.25			NR				
Toluene	ND	0.25			NR				
trans-1,2-Dichloroethene	ND	0.25			NR				
trans-1,3-Dichloropropene	ND	0.25			NR				
Trichloroethene	ND	0.25			NR				
Trichlorofluoromethane	ND	0.25			NR				
Vinyl acetate	ND	0.25			NR				
Vinyl chloride	ND	0.25			NR				
Surrogate: 4-Bromofluorobenzene	*2.9*		*2.50*		*115*	*70 - 130*			
LCS (B1K0597-BS1)				Prepared: 11/23/2011 Analyzed: 11/23/2011					
1,1-Dichloroethane	1.9	0.25	2.00		95.0	70 - 130			

Advanced Technology Laboratory-Las Vegas	Project Number : -
3151 W Post Rd.	Report To : Marlon Cartin
Las Vegas , NV 89118	Reported : 12/06/2011

Volatile Organic Compounds in AIR by TO-15 - Quality Control (cont'd)

Analyte	Result (ppbv)	PQL (ppbv)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1K0597 - No_Prep_Air (continued)									
LCS (B1K0597-BS1) - Continued					Prepared: 11/23/2011 Analyzed: 11/23/2011				
Benzene	2.0	0.25	2.00		101	70 - 130			
Chloroform	1.8	0.25	2.00		92.5	70 - 130			
o-Xylene	2.0	0.25	2.00		97.5	70 - 130			
Tetrachloroethene	1.8	0.25	2.00		92.0	70 - 130			
Toluene	1.9	0.25	2.00		95.5	70 - 130			
Trichloroethene	1.8	0.25	2.00		90.0	70 - 130			
Vinyl chloride	1.7	0.25	2.00		83.5	70 - 130			
Surrogate: 4-Bromofluorobenzene	*2.9*		*2.50*		*116*	*70 - 130*			
LCS Dup (B1K0597-BSD1)					Prepared: 11/23/2011 Analyzed: 11/23/2011				
1,1-Dichloroethane	2.0	0.25	2.00		100	70 - 130	5.13	20	
Benzene	2.1	0.25	2.00		103	70 - 130	1.96	20	
Chloroform	1.9	0.25	2.00		95.0	70 - 130	2.67	20	
o-Xylene	2.0	0.25	2.00		99.0	70 - 130	1.53	20	
Tetrachloroethene	1.9	0.25	2.00		94.0	70 - 130	2.15	20	
Toluene	1.9	0.25	2.00		97.0	70 - 130	1.56	20	
Trichloroethene	1.9	0.25	2.00		93.0	70 - 130	3.28	20	
Vinyl chloride	1.7	0.25	2.00		84.5	70 - 130	1.19	20	
Surrogate: 4-Bromofluorobenzene	*2.9*		*2.50*		*114*	*70 - 130*			

Advanced Technology Laboratory-Las Vegas	Project Number : -
3151 W Post Rd.	Report To : Marlon Cartin
Las Vegas , NV 89118	Reported : 12/06/2011

Gasoline Range Organics in Air by TO-3 - Quality Control

Analyte	Result (ppbv)	PQL (ppbv)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1K0597 - No_Prep_Air									
Blank (B1K0597-BLK2)				Prepared: 11/23/2011 Analyzed: 11/23/2011					
Gasoline Range Organics	ND	20			NR				
Surrogate: 4-Bromofluorobenzene	*2.0*		*2.50*		*81.6*	*70 - 130*			
LCS (B1K0597-BS2)				Prepared: 11/23/2011 Analyzed: 11/23/2011					
Gasoline Range Organics	190	20	200		94.3	70 - 130			
Surrogate: 4-Bromofluorobenzene	*2.3*		*2.50*		*93.6*	*70 - 130*			
LCS Dup (B1K0597-BSD2)				Prepared: 11/23/2011 Analyzed: 11/24/2011					
Gasoline Range Organics	180	20	200		90.3	70 - 130	4.33	20	
Surrogate: 4-Bromofluorobenzene	*2.3*		*2.50*		*93.6*	*70 - 130*			

Advanced Technology Laboratory-Las Vegas	Project Number : -
3151 W Post Rd.	Report To : Marlon Cartin
Las Vegas , NV 89118	Reported : 12/06/2011

Notes and Definitions

ND	Analyte not detected at or above reporting limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA1	CA-NELAP (CDPH)
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Advanced Technology Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atlglobal.com
TEL: 7023072659 FAX: 7023072691

CHAIN-OF-CUSTODY RECORD

Subcontractor:

Advanced Technology Laboratories - Signal Hill
3283 Walnut Ave.
Signal Hill, California

TEL: (562) 989-4045
FAX: (562) 989-4045
Acct #:

QC Level: RTNE

Field Sampler: james Dye

1108324-01

22-Nov-11

Sample ID	Matrix	Date Collected	Bottle Type	Requested Tests	
				EPA TO15	EPA TO3
N006870-001A / VINF-11-22	Air	11/22/2011 11:58:00 AM	BAG	1	1

General Comments: Please email sample receipt acknowledgement to the PM.
Please use PO#: N006870 Please fax results by: Normal TAT

Relinquished by:	Date/Time		Date/Time
Relinquished by:	11/22/11 @ 1600	Received by:	
		Received by:	

January 04, 2012

Daniel Jablonski
CH2M HILL
155 Grand Avenue, Suite 1000
Oakland, CA 94612

TEL: (213)228-8271
FAX: (510) 622-9129

CA-ELAP No.:2676
NV Cert. No.:NV-009222007A

Workorder No.: N007068

RE: SFPP - Norwalk Site

Attention: Daniel Jablonski

Enclosed are the results for sample(s) received on December 21, 2011 by Advanced Technology Laboratories, Inc. . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

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

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

Sincerely,

for gsycomurdo

Jose Tenorio Jr.
Laboratory Director

CLIENT: CH2M HILL
Project: SFPP - Norwalk Site
Lab Order: N007068

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

Samples were received intact with proper chain of custody documentation.

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

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

Samples were analyzed within method holding time.

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

Advanced Technology Laboratories, Inc.

Date: *04-Jan-12*

CLIENT: CH2M HILL
Project: SFPP - Norwalk Site
Lab Order: N007068
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N007068-001A	INF-12-20	Waste Water	12/20/2011 1:05:00 PM	12/21/2011	1/4/2012
N007068-001B	INF-12-20	Waste Water	12/20/2011 1:05:00 PM	12/21/2011	1/4/2012
N007068-001C	INF-12-20	Waste Water	12/20/2011 1:05:00 PM	12/21/2011	1/4/2012

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL
Lab Order: N007068
Project: SFPP - Norwalk Site
Lab ID: N007068-001

Client Sample ID: INF-12-20
Collection Date: 12/20/2011 1:05:00 PM
Matrix: WASTE WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: **MS1_111230A** QC Batch: **D11VW197** PrepDate: Analyst: **QBM**

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.061	1.0		µg/L	1	12/30/2011 11:38 AM
1,1,1-Trichloroethane	ND	0.068	1.0		µg/L	1	12/30/2011 11:38 AM
1,1,2,2-Tetrachloroethane	ND	0.054	1.0		µg/L	1	12/30/2011 11:38 AM
1,1,2-Trichloroethane	ND	0.083	1.0		µg/L	1	12/30/2011 11:38 AM
1,1-Dichloroethane	ND	0.099	0.50		µg/L	1	12/30/2011 11:38 AM
1,1-Dichloroethene	ND	0.094	1.0		µg/L	1	12/30/2011 11:38 AM
1,1-Dichloropropene	ND	0.082	1.0		µg/L	1	12/30/2011 11:38 AM
1,2,3-Trichlorobenzene	ND	0.10	1.0		µg/L	1	12/30/2011 11:38 AM
1,2,3-Trichloropropane	ND	0.12	1.0		µg/L	1	12/30/2011 11:38 AM
1,2,4-Trichlorobenzene	ND	0.12	1.0		µg/L	1	12/30/2011 11:38 AM
1,2,4-Trimethylbenzene	13	0.095	1.0		µg/L	1	12/30/2011 11:38 AM
1,2-Dibromo-3-chloropropane	ND	0.15	2.0		µg/L	1	12/30/2011 11:38 AM
1,2-Dibromoethane	ND	0.14	1.0		µg/L	1	12/30/2011 11:38 AM
1,2-Dichlorobenzene	ND	0.070	1.0		µg/L	1	12/30/2011 11:38 AM
1,2-Dichloroethane	ND	0.17	0.50		µg/L	1	12/30/2011 11:38 AM
1,2-Dichloropropane	ND	0.085	1.0		µg/L	1	12/30/2011 11:38 AM
1,3,5-Trimethylbenzene	3.7	0.087	1.0		µg/L	1	12/30/2011 11:38 AM
1,3-Dichlorobenzene	ND	0.090	1.0		µg/L	1	12/30/2011 11:38 AM
1,3-Dichloropropane	ND	0.074	1.0		µg/L	1	12/30/2011 11:38 AM
1,4-Dichlorobenzene	ND	0.092	1.0		µg/L	1	12/30/2011 11:38 AM
2,2-Dichloropropane	ND	0.061	1.0		µg/L	1	12/30/2011 11:38 AM
2-Butanone	ND	1.0	10		µg/L	1	12/30/2011 11:38 AM
2-Chlorotoluene	ND	0.080	1.0		µg/L	1	12/30/2011 11:38 AM
4-Chlorotoluene	ND	0.10	1.0		µg/L	1	12/30/2011 11:38 AM
4-Isopropyltoluene	0.67	0.080	1.0	J	µg/L	1	12/30/2011 11:38 AM
4-Methyl-2-pentanone	ND	0.76	10		µg/L	1	12/30/2011 11:38 AM
Acetone	ND	1.6	10		µg/L	1	12/30/2011 11:38 AM
Acrolein	ND	4.3	20		µg/L	1	12/30/2011 11:38 AM
Acrylonitrile	ND	0.61	20		µg/L	1	12/30/2011 11:38 AM
Benzene	330	0.75	10		µg/L	10	12/30/2011 11:17 AM
Bromobenzene	ND	0.082	1.0		µg/L	1	12/30/2011 11:38 AM
Bromochloromethane	ND	0.15	1.0		µg/L	1	12/30/2011 11:38 AM
Bromodichloromethane	ND	0.063	1.0		µg/L	1	12/30/2011 11:38 AM
Bromoform	ND	0.086	1.0		µg/L	1	12/30/2011 11:38 AM
Bromomethane	ND	0.13	1.0		µg/L	1	12/30/2011 11:38 AM
Carbon disulfide	0.45	0.054	1.0	J	µg/L	1	12/30/2011 11:38 AM

Qualifiers:

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

CLIENT: CH2M HILL
Lab Order: N007068
Project: SFPP - Norwalk Site
Lab ID: N007068-001

Client Sample ID: INF-12-20
Collection Date: 12/20/2011 1:05:00 PM
Matrix: WASTE WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: **MS1_111230A** QC Batch: **D11VW197** PrepDate: Analyst: **QBM**

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
Carbon tetrachloride	ND	0.10	1.0		µg/L	1	12/30/2011 11:38 AM
Chlorobenzene	ND	0.092	1.0		µg/L	1	12/30/2011 11:38 AM
Chloroethane	ND	0.14	1.0		µg/L	1	12/30/2011 11:38 AM
Chloroform	ND	0.058	1.0		µg/L	1	12/30/2011 11:38 AM
Chloromethane	ND	0.054	1.0		µg/L	1	12/30/2011 11:38 AM
cis-1,2-Dichloroethene	ND	0.11	1.0		µg/L	1	12/30/2011 11:38 AM
cis-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	12/30/2011 11:38 AM
Di-isopropyl ether	18	0.072	1.0		µg/L	1	12/30/2011 11:38 AM
Dibromochloromethane	ND	0.061	1.0		µg/L	1	12/30/2011 11:38 AM
Dibromomethane	ND	0.15	1.0		µg/L	1	12/30/2011 11:38 AM
Dichlorodifluoromethane	ND	0.12	1.0		µg/L	1	12/30/2011 11:38 AM
Ethyl tert-butyl ether	ND	0.070	1.0		µg/L	1	12/30/2011 11:38 AM
Ethylbenzene	8.1	0.051	1.0		µg/L	1	12/30/2011 11:38 AM
Freon-113	ND	0.080	1.0		µg/L	1	12/30/2011 11:38 AM
Hexachlorobutadiene	ND	0.17	1.0		µg/L	1	12/30/2011 11:38 AM
Isopropylbenzene	2.0	0.057	1.0		µg/L	1	12/30/2011 11:38 AM
m,p-Xylene	33	0.17	1.0		µg/L	1	12/30/2011 11:38 AM
Methylene chloride	ND	0.10	2.0		µg/L	1	12/30/2011 11:38 AM
MTBE	160	0.89	10		µg/L	10	12/30/2011 11:17 AM
n-Butylbenzene	ND	0.082	1.0		µg/L	1	12/30/2011 11:38 AM
n-Propylbenzene	2.8	0.087	1.0		µg/L	1	12/30/2011 11:38 AM
Naphthalene	24	0.056	1.0		µg/L	1	12/30/2011 11:38 AM
o-Xylene	10	0.077	1.0		µg/L	1	12/30/2011 11:38 AM
sec-Butylbenzene	ND	0.098	1.0		µg/L	1	12/30/2011 11:38 AM
Styrene	ND	0.072	1.0		µg/L	1	12/30/2011 11:38 AM
Tert-amyl methyl ether	ND	0.10	1.0		µg/L	1	12/30/2011 11:38 AM
Tert-Butanol	1000	12	50		µg/L	10	12/30/2011 11:17 AM
tert-Butylbenzene	ND	0.062	1.0		µg/L	1	12/30/2011 11:38 AM
Tetrachloroethene	ND	0.13	1.0		µg/L	1	12/30/2011 11:38 AM
Toluene	14	0.12	2.0		µg/L	1	12/30/2011 11:38 AM
trans-1,2-Dichloroethene	ND	0.094	1.0		µg/L	1	12/30/2011 11:38 AM
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	12/30/2011 11:38 AM
Trichloroethene	ND	0.060	1.0		µg/L	1	12/30/2011 11:38 AM
Trichlorofluoromethane	ND	0.097	1.0		µg/L	1	12/30/2011 11:38 AM
Vinyl chloride	ND	0.12	1.0		µg/L	1	12/30/2011 11:38 AM
Xylenes, Total	43	1.5	2.0		µg/L	1	12/30/2011 11:38 AM

Qualifiers:

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

CLIENT: CH2M HILL
Lab Order: N007068
Project: SFPP - Norwalk Site
Lab ID: N007068-001

Client Sample ID: INF-12-20
Collection Date: 12/20/2011 1:05:00 PM
Matrix: WASTE WATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS1_111230A**	QC Batch: **D11VW197**			PrepDate:			Analyst: **QBM**
Surr: 1,2-Dichloroethane-d4	86.4	0	72-119		%REC	1	12/30/2011 11:38 AM
Surr: 1,2-Dichloroethane-d4	98.1	0	72-119		%REC	10	12/30/2011 11:17 AM
Surr: 4-Bromofluorobenzene	95.4	0	76-119		%REC	1	12/30/2011 11:38 AM
Surr: 4-Bromofluorobenzene	95.3	0	76-119		%REC	10	12/30/2011 11:17 AM
Surr: Dibromofluoromethane	107	0	85-115		%REC	1	12/30/2011 11:38 AM
Surr: Dibromofluoromethane	114	0	85-115		%REC	10	12/30/2011 11:17 AM
Surr: Toluene-d8	97.2	0	81-120		%REC	1	12/30/2011 11:38 AM
Surr: Toluene-d8	97.4	0	81-120		%REC	10	12/30/2011 11:17 AM
TPH-FUEL PRODUCT BY GC/FID							
	EPA 3510C		**EPA 8015B**				
RunID: **GC3_111228B**	QC Batch: **38695**			PrepDate:	**12/23/2011**		Analyst: **PYW**
TPH-Fuel Product	2000	13	50		ug/L	1	12/28/2011 05:45 PM
Surr: Octacosane	81.9	0	26-152		%REC	1	12/28/2011 05:45 PM
Surr: p-Terphenyl	86.5	0	57-132		%REC	1	12/28/2011 05:45 PM
GASOLINE RANGE ORGANICS BY GC/FID							
			EPA 8015B				
RunID: **GC4_111222C**	QC Batch: **E11VW068**			PrepDate:			Analyst: **MCS**
TPH-Gasoline (C4-C12)	780	6.0	100		µg/L	1	12/22/2011
Surr: Chlorobenzene - d5	102	0	74-138		%REC	1	12/22/2011

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N007068
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_FP_SFPP

Sample ID: **MB-38695**	SampType: **MBLK**	TestCode: **8015_W_FP_**	Units: **ug/L**	Prep Date: **12/23/2011**	RunNo: **82699**				
Client ID: **PBW**	Batch ID: **38695**	TestNo: **EPA 8015B**	**EPA 3510C**	Analysis Date: **12/28/2011**	SeqNo: **1341853**				

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Fuel Product	19.204	50									J
Surr: Octacosane	73.816		80.00		92.3	26	152				
Surr: p-Terphenyl	76.915		80.00		96.1	57	132				

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N007068
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_GSFPP

Sample ID: **E111222LCS2**	SampType: **LCS**	TestCode: **8015_W_GSF**	Units: **µg/L**	Prep Date:	RunNo: **82641**
Client ID: **LCSW**	Batch ID: **E11VW068**	TestNo: **EPA 8015B**		Analysis Date: **12/22/2011**	SeqNo: **1340405**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	758.000	100	1000	0	75.8	67	136				
Surr: Chlorobenzene - d5	57.394		50.00		115	74	138				

Sample ID: **E111222MB2**	SampType: **MBLK**	TestCode: **8015_W_GSF**	Units: **µg/L**	Prep Date:	RunNo: **82641**
Client ID: **PBW**	Batch ID: **E11VW068**	TestNo: **EPA 8015B**		Analysis Date: **12/22/2011**	SeqNo: **1340406**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	ND	100									
Surr: Chlorobenzene - d5	58.117		50.00		116	74	138				

Sample ID: **N007068-001AMS**	SampType: **MS**	TestCode: **8015_W_GSF**	Units: **µg/L**	Prep Date:	RunNo: **82641**
Client ID: **ZZZZZZ**	Batch ID: **E11VW068**	TestNo: **EPA 8015B**		Analysis Date: **12/22/2011**	SeqNo: **1340407**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	1576.000	100	1000	776.0	80.0	67	136				
Surr: Chlorobenzene - d5	54.480		50.00		109	74	138				

Sample ID: **N007068-001AMSD**	SampType: **MSD**	TestCode: **8015_W_GSF**	Units: **µg/L**	Prep Date:	RunNo: **82641**
Client ID: **ZZZZZZ**	Batch ID: **E11VW068**	TestNo: **EPA 8015B**		Analysis Date: **12/22/2011**	SeqNo: **1340408**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	1587.000	100	1000	776.0	81.1	67	136	1576	0.696	30	
Surr: Chlorobenzene - d5	55.942		50.00		112	74	138		0	0	

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N007068
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111230LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82750**
Client ID: **LCSW** Batch ID: **D11VW197** TestNo: **EPA 8260B** Analysis Date: **12/30/2011** SeqNo: **1342907**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	18.510	1.0	20.00	0	92.6	81	129				
1,1,1-Trichloroethane	19.720	1.0	20.00	0	98.6	67	132				
1,1,2,2-Tetrachloroethane	20.600	1.0	20.00	0	103	63	128				
1,1,2-Trichloroethane	20.190	1.0	20.00	0	101	75	125				
1,1-Dichloroethane	21.980	0.50	20.00	0	110	69	133				
1,1-Dichloroethene	23.440	1.0	20.00	0	117	68	130				
1,1-Dichloropropene	20.860	1.0	20.00	0	104	73	132				
1,2,3-Trichlorobenzene	20.460	1.0	20.00	0	102	67	137				
1,2,3-Trichloropropane	20.900	1.0	20.00	0	104	73	124				
1,2,4-Trichlorobenzene	21.650	1.0	20.00	0	108	66	134				
1,2,4-Trimethylbenzene	20.760	1.0	20.00	0	104	74	132				
1,2-Dibromo-3-chloropropane	19.320	2.0	20.00	0	96.6	50	132				
1,2-Dibromoethane	21.120	1.0	20.00	0	106	80	121				
1,2-Dichlorobenzene	19.120	1.0	20.00	0	95.6	71	122				
1,2-Dichloroethane	22.180	0.50	20.00	0	111	69	132				
1,2-Dichloropropane	19.300	1.0	20.00	0	96.5	75	125				
1,3,5-Trimethylbenzene	20.470	1.0	20.00	0	102	74	131				
1,3-Dichlorobenzene	19.370	1.0	20.00	0	96.9	75	124				
1,3-Dichloropropane	20.530	1.0	20.00	0	103	73	126				
1,4-Dichlorobenzene	19.150	1.0	20.00	0	95.8	74	123				
2,2-Dichloropropane	20.090	1.0	20.00	0	100	69	137				
2-Butanone	228.140	10	200.0	0	114	49	136				
2-Chlorotoluene	19.500	1.0	20.00	0	97.5	73	126				
4-Chlorotoluene	19.510	1.0	20.00	0	97.6	74	128				
4-Isopropyltoluene	20.540	1.0	20.00	0	103	73	130				
4-Methyl-2-pentanone	193.370	10	200.0	0	96.7	58	134				
Acetone	244.550	10	200.0	0	122	40	135				
Acrolein	173.030	20	200.0	0	86.5	75	125				
Acrylonitrile	233.680	20	200.0	0	117	75	125				
Benzene	19.390	1.0	20.00	0	97.0	81	122				

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N007068
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111230LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82750**
Client ID: **LCSW** Batch ID: **D11VW197** TestNo: **EPA 8260B** Analysis Date: **12/30/2011** SeqNo: **1342907**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	19.110	1.0	20.00	0	95.6	76	124				
Bromochloromethane	22.310	1.0	20.00	0	112	65	129				
Bromodichloromethane	18.590	1.0	20.00	0	93.0	76	121				
Bromoform	17.180	1.0	20.00	0	85.9	69	128				
Bromomethane	17.840	1.0	20.00	0	89.2	53	141				
Carbon disulfide	23.130	1.0	20.00	0	116	75	125				
Carbon tetrachloride	24.280	1.0	20.00	0	121	66	138				
Chlorobenzene	18.710	1.0	20.00	0	93.6	81	122				
Chloroethane	21.770	1.0	20.00	0	109	58	133				
Chloroform	22.280	1.0	20.00	0	111	69	128				
Chloromethane	17.260	1.0	20.00	0	86.3	56	131				
cis-1,2-Dichloroethene	22.790	1.0	20.00	0	114	72	126				
cis-1,3-Dichloropropene	21.300	1.0	20.00	0	106	69	131				
Di-isopropyl ether	18.810	1.0	20.00	0	94.1	70	130				
Dibromochloromethane	18.110	1.0	20.00	0	90.6	66	133				
Dibromomethane	22.030	1.0	20.00	0	110	76	125				
Dichlorodifluoromethane	21.240	1.0	20.00	0	106	53	153				
Ethyl tert-butyl ether	20.570	1.0	20.00	0	103	70	130				
Ethylbenzene	18.820	1.0	20.00	0	94.1	73	127				
Freon-113	21.070	1.0	20.00	0	105	75	125				
Hexachlorobutadiene	21.760	1.0	20.00	0	109	67	131				
Isopropylbenzene	19.640	1.0	20.00	0	98.2	75	127				
m,p-Xylene	38.550	1.0	40.00	0	96.4	76	128				
Methylene chloride	21.260	2.0	20.00	0	106	63	137				
MTBE	22.010	1.0	20.00	0	110	65	123				
n-Butylbenzene	21.560	1.0	20.00	0	108	69	137				
n-Propylbenzene	19.630	1.0	20.00	0	98.2	72	129				
Naphthalene	22.300	1.0	20.00	0	112	54	138				
o-Xylene	19.340	1.0	20.00	0	96.7	80	121				
sec-Butylbenzene	19.740	1.0	20.00	0	98.7	72	127				

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N007068
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111230LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82750**
Client ID: **LCSW** Batch ID: **D11VW197** TestNo: **EPA 8260B** Analysis Date: **12/30/2011** SeqNo: **1342907**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	19.860	1.0	20.00	0	99.3	65	134				
Tert-amyl methyl ether	19.630	1.0	20.00	0	98.2	70	130				
Tert-Butanol	106.410	5.0	100.0	0	106	70	130				
tert-Butylbenzene	19.590	1.0	20.00	0	98.0	70	129				
Tetrachloroethene	20.760	1.0	20.00	0	104	66	128				
Toluene	18.190	2.0	20.00	0	91.0	77	122				
trans-1,2-Dichloroethene	23.060	1.0	20.00	0	115	63	137				
trans-1,3-Dichloropropene	21.800	1.0	20.00	0	109	59	135				
Trichloroethene	20.680	1.0	20.00	0	103	70	127				
Trichlorofluoromethane	24.560	1.0	20.00	0	123	57	129				
Vinyl chloride	21.280	1.0	20.00	0	106	50	134				
Xylenes, Total	57.890	2.0	60.00	0	96.5	75	125				
Surr: 1,2-Dichloroethane-d4	27.950		25.00		112	72	119				
Surr: 4-Bromofluorobenzene	22.450		25.00		89.8	76	119				
Surr: Dibromofluoromethane	28.870		25.00		115	85	115				
Surr: Toluene-d8	22.260		25.00		89.0	81	120				

Sample ID: **N007086-012AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82750**
Client ID: **ZZZZZZ** Batch ID: **D11VW197** TestNo: **EPA 8260B** Analysis Date: **12/30/2011** SeqNo: **1342908**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	18.500	1.0	20.00	0	92.5	81	129				
1,1,1-Trichloroethane	19.410	1.0	20.00	0	97.0	67	132				
1,1,2,2-Tetrachloroethane	16.980	1.0	20.00	0	84.9	63	128				
1,1,2-Trichloroethane	16.900	1.0	20.00	0	84.5	75	125				
1,1-Dichloroethane	21.300	0.50	20.00	0	106	69	133				
1,1-Dichloroethene	23.310	1.0	20.00	0	117	68	130				
1,1-Dichloropropene	20.940	1.0	20.00	0	105	73	132				
1,2,3-Trichlorobenzene	19.560	1.0	20.00	0	97.8	67	137				
1,2,3-Trichloropropane	14.680	1.0	20.00	0	73.4	73	124				

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL
Work Order: N007068
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N007086-012AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82750**
Client ID: **ZZZZZZ** Batch ID: **D11VW197** TestNo: **EPA 8260B** Analysis Date: **12/30/2011** SeqNo: **1342908**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	21.560	1.0	20.00	0	108	66	134				
1,2,4-Trimethylbenzene	23.430	1.0	20.00	1.110	112	74	132				
1,2-Dibromo-3-chloropropane	15.260	2.0	20.00	0	76.3	50	132				
1,2-Dibromoethane	17.100	1.0	20.00	0	85.5	80	121				
1,2-Dichlorobenzene	19.040	1.0	20.00	0	95.2	71	122				
1,2-Dichloroethane	19.330	0.50	20.00	0	96.7	69	132				
1,2-Dichloropropane	18.440	1.0	20.00	0	92.2	75	125				
1,3,5-Trimethylbenzene	22.130	1.0	20.00	0	111	74	131				
1,3-Dichlorobenzene	20.010	1.0	20.00	0	100	75	124				
1,3-Dichloropropane	18.130	1.0	20.00	0	90.7	73	126				
1,4-Dichlorobenzene	19.750	1.0	20.00	0	98.8	74	123				
2,2-Dichloropropane	19.850	1.0	20.00	0	99.2	69	137				
2-Butanone	84.120	10	200.0	0	42.1	49	136				S
2-Chlorotoluene	20.730	1.0	20.00	0	104	73	126				
4-Chlorotoluene	20.430	1.0	20.00	0	102	74	128				
4-Isopropyltoluene	21.870	1.0	20.00	0	109	73	130				
4-Methyl-2-pentanone	128.970	10	200.0	0	64.5	58	134				
Acetone	63.170	10	200.0	2.250	30.5	40	135				S
Acrolein	123.680	20	200.0	0	61.8	75	125				S
Acrylonitrile	159.030	20	200.0	0	79.5	75	125				
Benzene	20.530	1.0	20.00	1.220	96.6	81	122				
Bromobenzene	19.290	1.0	20.00	0	96.5	76	124				
Bromochloromethane	19.510	1.0	20.00	0	97.6	65	129				
Bromodichloromethane	17.860	1.0	20.00	0	89.3	76	121				
Bromoform	14.490	1.0	20.00	0	72.4	69	128				
Bromomethane	18.030	1.0	20.00	0	90.2	53	141				
Carbon disulfide	22.160	1.0	20.00	0	111	75	125				
Carbon tetrachloride	24.730	1.0	20.00	0	124	66	138				
Chlorobenzene	19.000	1.0	20.00	0	95.0	81	122				
Chloroethane	21.870	1.0	20.00	0	109	58	133				

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N007068
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N007086-012AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82750**
Client ID: **ZZZZZZ** Batch ID: **D11VW197** TestNo: **EPA 8260B** Analysis Date: **12/30/2011** SeqNo: **1342908**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	22.570	1.0	20.00	0.7300	109	69	128				
Chloromethane	17.020	1.0	20.00	0	85.1	56	131				
cis-1,2-Dichloroethene	22.080	1.0	20.00	0	110	72	126				
cis-1,3-Dichloropropene	19.380	1.0	20.00	0	96.9	69	131				
Di-isopropyl ether	17.890	1.0	20.00	0	89.4	70	130				
Dibromochloromethane	16.990	1.0	20.00	0	85.0	66	133				
Dibromomethane	18.560	1.0	20.00	0	92.8	76	125				
Dichlorodifluoromethane	20.570	1.0	20.00	0	103	53	153				
Ethyl tert-butyl ether	18.680	1.0	20.00	0	93.4	70	130				
Ethylbenzene	20.870	1.0	20.00	1.070	99.0	73	127				
Freon-113	21.000	1.0	20.00	0	105	75	125				
Hexachlorobutadiene	22.840	1.0	20.00	0	114	67	131				
Isopropylbenzene	21.270	1.0	20.00	0	106	75	127				
m,p-Xylene	44.010	1.0	40.00	3.680	101	76	128				
Methylene chloride	19.740	2.0	20.00	0.5100	96.2	63	137				
MTBE	18.570	1.0	20.00	0	92.8	65	123				
n-Butylbenzene	23.140	1.0	20.00	0	116	69	137				
n-Propylbenzene	21.220	1.0	20.00	0	106	72	129				
Naphthalene	19.200	1.0	20.00	0.6400	92.8	54	138				
o-Xylene	21.980	1.0	20.00	1.830	101	80	121				
sec-Butylbenzene	20.970	1.0	20.00	0	105	72	127				
Styrene	18.870	1.0	20.00	0	94.4	65	134				
Tert-amyl methyl ether	17.140	1.0	20.00	0	85.7	70	130				
Tert-Butanol	69.100	5.0	100.0	0	69.1	70	130				S
tert-Butylbenzene	20.980	1.0	20.00	0	105	70	129				
Tetrachloroethene	21.650	1.0	20.00	0	108	66	128				
Toluene	22.760	2.0	20.00	4.380	91.9	77	122				
trans-1,2-Dichloroethene	22.740	1.0	20.00	0	114	63	137				
trans-1,3-Dichloropropene	19.020	1.0	20.00	0	95.1	59	135				
Trichloroethene	20.460	1.0	20.00	0	102	70	127				

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL
Work Order: N007068
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N007086-012AMS** SampType: **MS** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82750**
Client ID: **ZZZZZZ** Batch ID: **D11VW197** TestNo: **EPA 8260B** Analysis Date: **12/30/2011** SeqNo: **1342908**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichlorofluoromethane	25.330	1.0	20.00	0	127	57	129				
Vinyl chloride	20.660	1.0	20.00	0	103	50	134				
Xylenes, Total	65.990	2.0	60.00	5.510	101	75	125				
Surr: 1,2-Dichloroethane-d4	24.600		25.00		98.4	72	119				
Surr: 4-Bromofluorobenzene	23.400		25.00		93.6	76	119				
Surr: Dibromofluoromethane	28.920		25.00		116	85	115				S
Surr: Toluene-d8	23.290		25.00		93.2	81	120				

Sample ID: **N007086-012AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82750**
Client ID: **ZZZZZZ** Batch ID: **D11VW197** TestNo: **EPA 8260B** Analysis Date: **12/30/2011** SeqNo: **1342909**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	18.580	1.0	20.00	0	92.9	81	129	18.50	0.431	20	
1,1,1-Trichloroethane	19.420	1.0	20.00	0	97.1	67	132	19.41	0.0515	20	
1,1,2,2-Tetrachloroethane	17.880	1.0	20.00	0	89.4	63	128	16.98	5.16	20	
1,1,2-Trichloroethane	17.830	1.0	20.00	0	89.2	75	125	16.90	5.36	20	
1,1-Dichloroethane	21.770	0.50	20.00	0	109	69	133	21.30	2.18	20	
1,1-Dichloroethene	22.420	1.0	20.00	0	112	68	130	23.31	3.89	20	
1,1-Dichloropropene	20.770	1.0	20.00	0	104	73	132	20.94	0.815	20	
1,2,3-Trichlorobenzene	19.370	1.0	20.00	0	96.9	67	137	19.56	0.976	20	
1,2,3-Trichloropropane	15.210	1.0	20.00	0	76.1	73	124	14.68	3.55	20	
1,2,4-Trichlorobenzene	21.410	1.0	20.00	0	107	66	134	21.56	0.698	20	
1,2,4-Trimethylbenzene	21.860	1.0	20.00	1.110	104	74	132	23.43	6.93	20	
1,2-Dibromo-3-chloropropane	15.880	2.0	20.00	0	79.4	50	132	15.26	3.98	20	
1,2-Dibromoethane	18.170	1.0	20.00	0	90.9	80	121	17.10	6.07	20	
1,2-Dichlorobenzene	19.220	1.0	20.00	0	96.1	71	122	19.04	0.941	20	
1,2-Dichloroethane	20.010	0.50	20.00	0	100	69	132	19.33	3.46	20	
1,2-Dichloropropane	18.530	1.0	20.00	0	92.6	75	125	18.44	0.487	20	
1,3,5-Trimethylbenzene	21.100	1.0	20.00	0	106	74	131	22.13	4.77	20	
1,3-Dichlorobenzene	19.820	1.0	20.00	0	99.1	75	124	20.01	0.954	20	

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N007068
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N007086-012AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82750**
Client ID: **ZZZZZZ** Batch ID: **D11VW197** TestNo: **EPA 8260B** Analysis Date: **12/30/2011** SeqNo: **1342909**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichloropropane	18.470	1.0	20.00	0	92.4	73	126	18.13	1.86	20	
1,4-Dichlorobenzene	19.510	1.0	20.00	0	97.6	74	123	19.75	1.22	20	
2,2-Dichloropropane	19.740	1.0	20.00	0	98.7	69	137	19.85	0.556	20	
2-Butanone	97.810	10	200.0	0	48.9	49	136	84.12	15.0	20	S
2-Chlorotoluene	20.070	1.0	20.00	0	100	73	126	20.73	3.24	20	
4-Chlorotoluene	20.010	1.0	20.00	0	100	74	128	20.43	2.08	20	
4-Isopropyltoluene	21.300	1.0	20.00	0	106	73	130	21.87	2.64	20	
4-Methyl-2-pentanone	146.150	10	200.0	0	73.1	58	134	129.0	12.5	20	
Acetone	71.010	10	200.0	2.250	34.4	40	135	63.17	11.7	20	S
Acrolein	137.990	20	200.0	0	69.0	75	125	123.7	10.9	20	S
Acrylonitrile	183.390	20	200.0	0	91.7	75	125	159.0	14.2	20	
Benzene	20.440	1.0	20.00	1.220	96.1	81	122	20.53	0.439	20	
Bromobenzene	19.250	1.0	20.00	0	96.2	76	124	19.29	0.208	20	
Bromochloromethane	20.290	1.0	20.00	0	101	65	129	19.51	3.92	20	
Bromodichloromethane	18.380	1.0	20.00	0	91.9	76	121	17.86	2.87	20	
Bromoform	15.110	1.0	20.00	0	75.6	69	128	14.49	4.19	20	
Bromomethane	17.190	1.0	20.00	0	86.0	53	141	18.03	4.77	20	
Carbon disulfide	22.910	1.0	20.00	0	115	75	125	22.16	3.33	20	
Carbon tetrachloride	23.840	1.0	20.00	0	119	66	138	24.73	3.66	20	
Chlorobenzene	18.800	1.0	20.00	0	94.0	81	122	19.00	1.06	20	
Chloroethane	21.180	1.0	20.00	0	106	58	133	21.87	3.21	20	
Chloroform	22.740	1.0	20.00	0.7300	110	69	128	22.57	0.750	20	
Chloromethane	16.810	1.0	20.00	0	84.0	56	131	17.02	1.24	20	
cis-1,2-Dichloroethene	22.590	1.0	20.00	0	113	72	126	22.08	2.28	20	
cis-1,3-Dichloropropene	20.110	1.0	20.00	0	101	69	131	19.38	3.70	20	
Di-isopropyl ether	18.230	1.0	20.00	0	91.2	70	130	17.89	1.88	20	
Dibromochloromethane	17.570	1.0	20.00	0	87.9	66	133	16.99	3.36	20	
Dibromomethane	19.390	1.0	20.00	0	97.0	76	125	18.56	4.37	20	
Dichlorodifluoromethane	20.310	1.0	20.00	0	102	53	153	20.57	1.27	20	
Ethyl tert-butyl ether	19.540	1.0	20.00	0	97.7	70	130	18.68	4.50	20	

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: CH2M HILL
Work Order: N007068
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N007086-012AMSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82750**
Client ID: **ZZZZZZ** Batch ID: **D11VW197** TestNo: **EPA 8260B** Analysis Date: **12/30/2011** SeqNo: **1342909**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	20.190	1.0	20.00	1.070	95.6	73	127	20.87	3.31	20	
Freon-113	21.200	1.0	20.00	0	106	75	125	21.00	0.948	20	
Hexachlorobutadiene	22.180	1.0	20.00	0	111	67	131	22.84	2.93	20	
Isopropylbenzene	20.590	1.0	20.00	0	103	75	127	21.27	3.25	20	
m,p-Xylene	42.450	1.0	40.00	3.680	96.9	76	128	44.01	3.61	20	
Methylene chloride	20.130	2.0	20.00	0.5100	98.1	63	137	19.74	1.96	20	
MTBE	20.030	1.0	20.00	0	100	65	123	18.57	7.56	20	
n-Butylbenzene	22.430	1.0	20.00	0	112	69	137	23.14	3.12	20	
n-Propylbenzene	20.600	1.0	20.00	0	103	72	129	21.22	2.97	20	
Naphthalene	19.820	1.0	20.00	0.6400	95.9	54	138	19.20	3.18	20	
o-Xylene	21.310	1.0	20.00	1.830	97.4	80	121	21.98	3.10	20	
sec-Butylbenzene	20.560	1.0	20.00	0	103	72	127	20.97	1.97	20	
Styrene	17.240	1.0	20.00	0	86.2	65	134	18.87	9.03	20	
Tert-amyl methyl ether	17.990	1.0	20.00	0	90.0	70	130	17.14	4.84	20	
Tert-Butanol	83.060	5.0	100.0	0	83.1	70	130	69.10	18.3	20	
tert-Butylbenzene	20.450	1.0	20.00	0	102	70	129	20.98	2.56	20	
Tetrachloroethene	21.000	1.0	20.00	0	105	66	128	21.65	3.05	20	
Toluene	22.340	2.0	20.00	4.380	89.8	77	122	22.76	1.86	20	
trans-1,2-Dichloroethene	22.620	1.0	20.00	0	113	63	137	22.74	0.529	20	
trans-1,3-Dichloropropene	19.210	1.0	20.00	0	96.0	59	135	19.02	0.994	20	
Trichloroethene	20.390	1.0	20.00	0	102	70	127	20.46	0.343	20	
Trichlorofluoromethane	24.920	1.0	20.00	0	125	57	129	25.33	1.63	20	
Vinyl chloride	20.780	1.0	20.00	0	104	50	134	20.66	0.579	20	
Xylenes, Total	63.760	2.0	60.00	5.510	97.1	75	125	65.99	3.44	20	
Surr: 1,2-Dichloroethane-d4	26.100		25.00		104	72	119		0		
Surr: 4-Bromofluorobenzene	23.620		25.00		94.5	76	119		0		
Surr: Dibromofluoromethane	29.970		25.00		120	85	115		0		S
Surr: Toluene-d8	23.480		25.00		93.9	81	120		0		

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N007068
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111230MB2** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82750**
Client ID: **PBW** Batch ID: **D11VW197** TestNo: **EPA 8260B** Analysis Date: **12/30/2011** SeqNo: **1342910**

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

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N007068
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111230MB2** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82750**
Client ID: **PBW** Batch ID: **D11VW197** TestNo: **EPA 8260B** Analysis Date: **12/30/2011** SeqNo: **1342910**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	ND	1.0									
Bromochloromethane	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	1.0									
Carbon disulfide	ND	1.0									
Carbon tetrachloride	ND	1.0									
Chlorobenzene	ND	1.0									
Chloroethane	ND	1.0									
Chloroform	ND	1.0									
Chloromethane	ND	1.0									
cis-1,2-Dichloroethene	ND	1.0									
cis-1,3-Dichloropropene	ND	1.0									
Di-isopropyl ether	ND	1.0									
Dibromochloromethane	ND	1.0									
Dibromomethane	ND	1.0									
Dichlorodifluoromethane	ND	1.0									
Ethyl tert-butyl ether	ND	1.0									
Ethylbenzene	ND	1.0									
Freon-113	ND	1.0									
Hexachlorobutadiene	ND	1.0									
Isopropylbenzene	ND	1.0									
m,p-Xylene	ND	1.0									
Methylene chloride	0.660	2.0									J
MTBE	ND	1.0									
n-Butylbenzene	ND	1.0									
n-Propylbenzene	ND	1.0									
Naphthalene	ND	1.0									
o-Xylene	ND	1.0									
sec-Butylbenzene	ND	1.0									

Qualifiers:

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

CLIENT: CH2M HILL
Work Order: N007068
Project: SFPP - Norwalk Site

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **D111230MB2** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **µg/L** Prep Date: RunNo: **82750**
Client ID: **PBW** Batch ID: **D11VW197** TestNo: **EPA 8260B** Analysis Date: **12/30/2011** SeqNo: **1342910**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	ND	1.0									
Tert-amyl methyl ether	ND	1.0									
Tert-Butanol	ND	5.0									
tert-Butylbenzene	ND	1.0									
Tetrachloroethene	ND	1.0									
Toluene	ND	2.0									
trans-1,2-Dichloroethene	ND	1.0									
trans-1,3-Dichloropropene	ND	1.0									
Trichloroethene	ND	1.0									
Trichlorofluoromethane	ND	1.0									
Vinyl chloride	ND	1.0									
Xylenes, Total	ND	2.0									
Surr: 1,2-Dichloroethane-d4	24.370		25.00		97.5	72	119				
Surr: 4-Bromofluorobenzene	24.080		25.00		96.3	76	119				
Surr: Dibromofluoromethane	25.360		25.00		101	85	115				
Surr: Toluene-d8	25.060		25.00		100	81	120				

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

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

CHAIN OF CUSTODY RECORD

DATE: 12/20/11

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

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 + Oxygenates (8260B)	Comments
	INF-12-20	Influent	12/20/11	1305	WW	8	X	X	X	N007068-1

Relinquished by: (Signature)	Received by: (Signature)	Date: 12/20/11	Time: 1330
Relinquished by: (Signature)	Received by: (Signature) FEDEX	Date: 12/21/11	Time: 1400
Relinquished by: (Signature)	Received by: (Signature) MBCARTIN	Date: 12/21/11	Time: 0900

2.4°C ICE IR#2

Revised: 07/25/2011

Advanced Technology Laboratories, Inc.

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

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

Sample Receipt Checklist

Cooler Received/Opened On: 12/21/2011 Workorder: N007068

Rep sample Temp (Deg C): 2.4 IR Gun ID: 2

Temp Blank: ☐ Yes ☑ No

Carrier name: OnTrac

Last 4 digits of Tracking No.: 0904 Packing Material Used: Bubble Wrap

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

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

Comments:

Checklist Completed B MBC 12/21/11 Reviewed By: 12/21/11

OnTrac
On Time. Delivery. For Less.

800-334-5000
Call For A Pickup!

Account Number [redacted] B1024180904

Date M M D D Y Y

B1024180904

FROM (Company)

ENVIRO ENVIRONMENTAL TECHNOLOGY

Street Address

Suite

City

State Zip Code (Required) Phone Number

PLEASE PRINT IN BLOCK LETTERS with Blue / Black Ink

TO (Company) WE CANNOT DELIVER TO A P.O. BOX

Street Address

Suite # City

State Zip Code (Required) Phone Number

Recipient's Name

Shipper's Ref. #

Service Options

*If no box is checked, Sunrise Service will be applied.
**Minimum charge weight is 100 lbs. Delivery by 5:00 P.M. Note: delivery times for all services may be later in some areas. Check service guide or visit our website for details.

- [ ] SUNRISE - BY 10:30 AM*
- [x] SUNRISE GOLD - BY 8:00 AM*
- [ ] HEAVYWEIGHT**
- [ ] Saturday Delivery - Extra Charge (see Service Guide for details)
- [ ] HOLD FOR PICKUP
- [ ] This shipment requires a delivery signature
- [ ] Declared Value $ (maximum $25,000)

[redacted]

- [ ] C.O.D. Amount $, Limit $10,000 (affix C.O.D. tag to package)

Billing Information

If none is selected, shipper will be invoiced

- [ ] Bill Shipper's Account
- [ ] Bill Other Ac

[redacted]

Dim weight charge if greater than actual weight

L in. X W in. X H in. ÷225 =

- [ ] Secured Paymer (Money Order or check)
- [ ] Unsecured Paym (Company Check or check)

Weigh

- [ ] 8 oz. Lett or
- [ ] Weight lbs. (Subject to verification)

Driver #	Pick-up Time	Shipper's Signature

Driver's Initials	Shipper's Name
	F L A S T

January 05, 2012

Daniel Jablonski
CH2M HILL
155 Grand Avenue, Suite 1000
Oakland, CA 94612

TEL: (213)228-8271
FAX: (510) 622-9129

CA-ELAP No.:2676
NV Cert. No.:NV-009222007A

Workorder No.: N007062

RE: SFPP - Norwalk Site

Attention: Daniel Jablonski

Enclosed are the results for sample(s) received on December 20, 2011 by Advanced Technology Laboratories, Inc. . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

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

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

Sincerely,

for gsyesmundt

Jose Tenorio Jr.
Laboratory Director

CLIENT: CH2M HILL
Project: SFPP - Norwalk Site
Lab Order: N007062

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

Samples were received intact with proper chain of custody documentation.

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

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

Subcontracted Analyses:

EPA TO15 and EPA TO3 were subcontracted to Advanced Technology Laboratories-Signal Hill, CA .

ASTM D1946 was subcontracted to Air Technology Laboratories-City of Industry, CA .

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

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

CHAIN OF CUSTODY RECORD

DATE: 12/20/11

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

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
	VINF-12/20	Influent Vapor (from header)	12/20/11	1305	Air	4	X	X	X	Monthly sample

Relinquished by: (Signature)	Received by: (Signature)	Date: 12/20/11	Time: 1316
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Revised: 04/27/2011

ADVANCED TECHNOLOGY LABORATORIES

December 30, 2011

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

Marlon Cartin
Advanced Technology Laboratory-Las Vegas
3151 W Post Rd.
Las Vegas, NV 89118
Tel: (702) 307-2659
Fax:(702) 307-2691

Re: ATL Work Order Number : 1100747

Client Reference : [none]

Enclosed are the results for sample(s) received on December 20, 2011 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez

Laboratory Director

Advanced Technology Laboratory-Las Vegas	Project Number : -
3151 W Post Rd.	Report To : Marlon Cartin
Las Vegas , NV 89118	Reported : 12/30/2011

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
N007062-001A / VINF-12-20	1100747-01	Air	12/20/11 13:05	12/20/11 15:42

Advanced Technology Laboratory-Las Vegas	Project Number : -
3151 W Post Rd.	Report To : Marlon Cartin
Las Vegas , NV 89118	Reported : 12/30/2011

Client Sample ID N007062-001A / VINF-12-20

Lab ID: 1100747-01

Volatile Organic Compounds in AIR by TO-15 **Analyst: BB**

Analyte	Result (ppbv)	PQL (ppbv)	MDL (ppbv)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
1,1,1-Trichloroethane	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
1,1,2,2-Tetrachloroethane	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
1,1,2-Trichloroethane	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
1,1-Dichloroethane	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
1,1-Dichloroethene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
1,1-Dichloropropene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
1,2,3-Trichloropropane	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
1,2,4-Trichlorobenzene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
1,2,4-Trimethylbenzene	**26**	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
1,2-Dibromo-3-chloropropane	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
1,2-Dibromoethane	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
1,2-Dichlorobenzene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
1,2-Dichloroethane	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
1,2-Dichloropropane	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
1,3,5-Trimethylbenzene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
1,3-Butadiene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
1,3-Dichlorobenzene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
1,4-Dichlorobenzene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
1,4-Dioxane	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
2,2,4-Trimethylpentane	**480**	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
2-Butanone	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
2-Chloroethyl vinyl ether	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
2-Chlorotoluene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
2-Hexanone	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
2-Propanol	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
4-Chlorotoluene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
4-Ethyl Toluene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
4-Methyl-2-pentanone	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Acetone	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Acetonitrile	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Acrolein	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Acrylonitrile	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Benzene	**110**	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	

Advanced Technology Laboratory-Las Vegas	Project Number : -
3151 W Post Rd.	Report To : Marlon Cartin
Las Vegas , NV 89118	Reported : 12/30/2011

Client Sample ID N007062-001A / VINF-12-20

Lab ID: 1100747-01

Volatile Organic Compounds in AIR by TO-15 **Analyst: BB**

Analyte	Result (ppbv)	PQL (ppbv)	MDL (ppbv)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl chloride	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Bromobenzene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Bromodichloromethane	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Bromoform	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Bromomethane	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Carbon disulfide	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Carbon tetrachloride	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Chlorobenzene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Chloroethane	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Chloroform	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Chloromethane	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
cis-1,2-Dichloroethene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
cis-1,3-Dichloropropene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Cyclohexane	**110**	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Dibromochloromethane	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Dibromomethane	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Dichlorodifluoromethane	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Dichlorotetrafluoroethane	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Ethanol	**170**	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Ethylbenzene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Freon-113	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Hexachlorobutadiene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Isopropylbenzene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
m,p-Xylene	**150**	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Methylene chloride	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
MTBE	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
n-Butylbenzene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
n-Propylbenzene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Naphthalene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
o-Xylene	**66**	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
p-Isopropyltoluene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
sec-Butylbenzene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Styrene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
tert-Butylbenzene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	

Advanced Technology Laboratory-Las Vegas	Project Number : -
3151 W Post Rd.	Report To : Marlon Cartin
Las Vegas , NV 89118	Reported : 12/30/2011

Client Sample ID N007062-001A / VINF-12-20

Lab ID: 1100747-01

Volatile Organic Compounds in AIR by TO-15 **Analyst: BB**

Analyte	Result (ppbv)	PQL (ppbv)	MDL (ppbv)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Tetrachloroethene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Toluene	**260**	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
trans-1,2-Dichloroethene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
trans-1,3-Dichloropropene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Trichloroethene	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Trichlorofluoromethane	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Vinyl acetate	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Vinyl chloride	ND	25	NA	100	B1L0798	12/23/2011	12/23/11 01:46	
Surrogate: 4-Bromofluorobenzene	*121 %*		*70 - 130*		B1L0798	12/23/2011	*12/23/11 01:46*	

Gasoline Range Organics in Air by TO-3 **Analyst: BB**

Analyte	Result (ppbv)	PQL (ppbv)	MDL (ppbv)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**130**	20	NA	1	B1L0798	12/23/2011	12/23/11 01:46	
Surrogate: 4-Bromofluorobenzene	*98.0 %*		*70 - 130*		B1L0798	12/23/2011	*12/23/11 01:46*	

Advanced Technology Laboratory-Las Vegas
3151 W Post Rd.
Las Vegas , NV 89118

Project Number : -
Report To : Marlon Cartin
Reported : 12/30/2011

QUALITY CONTROL SECTION

Volatile Organic Compounds in AIR by TO-15 - Quality Control

Analyte	Result (ppbv)	PQL (ppbv)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1L0798 - No_Prep_Air									
Blank (B1L0798-BLK1)				Prepared: 12/23/2011 Analyzed: 12/23/2011					
1,1,1,2-Tetrachloroethane	ND	0.25			NR				
1,1,1-Trichloroethane	ND	0.25			NR				
1,1,2,2-Tetrachloroethane	ND	0.25			NR				
1,1,2-Trichloroethane	ND	0.25			NR				
1,1-Dichloroethane	ND	0.25			NR				
1,1-Dichloroethene	ND	0.25			NR				
1,1-Dichloropropene	ND	0.25			NR				
1,2,3-Trichloropropane	ND	0.25			NR				
1,2,4-Trichlorobenzene	ND	0.25			NR				
1,2,4-Trimethylbenzene	ND	0.25			NR				
1,2-Dibromo-3-chloropropane	ND	0.25			NR				
1,2-Dibromoethane	ND	0.25			NR				
1,2-Dichlorobenzene	ND	0.25			NR				
1,2-Dichloroethane	ND	0.25			NR				
1,2-Dichloropropane	ND	0.25			NR				
1,3,5-Trimethylbenzene	ND	0.25			NR				
1,3-Butadiene	ND	0.25			NR				
1,3-Dichlorobenzene	ND	0.25			NR				
1,4-Dichlorobenzene	ND	0.25			NR				
1,4-Dioxane	ND	0.25			NR				
2,2,4-Trimethylpentane	ND	0.25			NR				
2-Butanone	ND	0.25			NR				
2-Chloroethyl vinyl ether	ND	0.25			NR				
2-Chlorotoluene	ND	0.25			NR				
2-Hexanone	ND	0.25			NR				
2-Propanol	ND	0.25			NR				
4-Chlorotoluene	ND	0.25			NR				
4-Ethyl Toluene	ND	0.25			NR				
4-Methyl-2-pentanone	ND	0.25			NR				
Acetone	ND	0.25			NR				
Acetonitrile	ND	0.25			NR				
Acrolein	ND	0.25			NR				
Acrylonitrile	ND	0.25			NR				
Benzene	ND	0.25			NR				
Benzyl chloride	ND	0.25			NR				
Bromobenzene	ND	0.25			NR				
Bromodichloromethane	ND	0.25			NR				
Bromoform	ND	0.25			NR				
Bromomethane	ND	0.25			NR				

Advanced Technology Laboratory-Las Vegas
3151 W Post Rd.
Las Vegas , NV 89118

Project Number : -
Report To : Marlon Cartin
Reported : 12/30/2011

Volatile Organic Compounds in AIR by TO-15 - Quality Control (cont'd)

Analyte	Result (ppbv)	PQL (ppbv)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1L0798 - No_Prep_Air (continued)									
Blank (B1L0798-BLK1) - Continued				Prepared: 12/23/2011 Analyzed: 12/23/2011					
Carbon disulfide	ND	0.25			NR				
Carbon tetrachloride	ND	0.25			NR				
Chlorobenzene	ND	0.25			NR				
Chloroethane	ND	0.25			NR				
Chloroform	ND	0.25			NR				
Chloromethane	ND	0.25			NR				
cis-1,2-Dichloroethene	ND	0.25			NR				
cis-1,3-Dichloropropene	ND	0.25			NR				
Cyclohexane	ND	0.25			NR				
Dibromochloromethane	ND	0.25			NR				
Dibromomethane	ND	0.25			NR				
Dichlorodifluoromethane	ND	0.25			NR				
Dichlorotetrafluoroethane	ND	0.25			NR				
Ethanol	ND	0.25			NR				
Ethylbenzene	ND	0.25			NR				
Freon-113	ND	0.25			NR				
Hexachlorobutadiene	ND	0.25			NR				
Isopropylbenzene	ND	0.25			NR				
m,p-Xylene	ND	0.25			NR				
Methylene chloride	ND	0.25			NR				
MTBE	ND	0.25			NR				
n-Butylbenzene	ND	0.25			NR				
n-Propylbenzene	ND	0.25			NR				
Naphthalene	ND	0.25			NR				
o-Xylene	ND	0.25			NR				
p-Isopropyltoluene	ND	0.25			NR				
sec-Butylbenzene	ND	0.25			NR				
Styrene	ND	0.25			NR				
tert-Butylbenzene	ND	0.25			NR				
Tetrachloroethene	ND	0.25			NR				
Toluene	ND	0.25			NR				
trans-1,2-Dichloroethene	ND	0.25			NR				
trans-1,3-Dichloropropene	ND	0.25			NR				
Trichloroethene	ND	0.25			NR				
Trichlorofluoromethane	ND	0.25			NR				
Vinyl acetate	ND	0.25			NR				
Vinyl chloride	ND	0.25			NR				
Surrogate: 4-Bromofluorobenzene	*2.9*		*2.50*		*116*	*70 - 130*			
LCS (B1L0798-BS1)				Prepared: 12/22/2011 Analyzed: 12/22/2011					
1,1-Dichloroethane	1.8	0.25	2.00		89.0	70 - 130			

Advanced Technology Laboratory-Las Vegas	Project Number : -
3151 W Post Rd.	Report To : Marlon Cartin
Las Vegas , NV 89118	Reported : 12/30/2011

Volatile Organic Compounds in AIR by TO-15 - Quality Control (cont'd)

Analyte	Result (ppbv)	PQL (ppbv)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1L0798 - No_Prep_Air (continued)									
LCS (B1L0798-BS1) - Continued					Prepared: 12/22/2011 Analyzed: 12/22/2011				
Benzene	1.9	0.25	2.00		94.5	70 - 130			
Chloroform	2.0	0.25	2.00		97.5	70 - 130			
o-Xylene	1.8	0.25	2.00		88.5	70 - 130			
Tetrachloroethene	1.8	0.25	2.00		91.5	70 - 130			
Toluene	1.8	0.25	2.00		91.5	70 - 130			
Trichloroethene	2.1	0.25	2.00		103	70 - 130			
Vinyl chloride	2.0	0.25	2.00		98.5	70 - 130			
Surrogate: 4-Bromofluorobenzene	*2.8*		*2.50*		*114*	*70 - 130*			
LCS Dup (B1L0798-BSD1)					Prepared: 12/23/2011 Analyzed: 12/23/2011				
1,1-Dichloroethane	1.9	0.25	2.00		95.5	70 - 130	7.05	20	
Benzene	1.8	0.25	2.00		92.0	70 - 130	2.68	20	
Chloroform	2.0	0.25	2.00		102	70 - 130	5.00	20	
o-Xylene	1.8	0.25	2.00		91.0	70 - 130	2.79	20	
Tetrachloroethene	1.9	0.25	2.00		94.0	70 - 130	2.70	20	
Toluene	1.8	0.25	2.00		89.0	70 - 130	2.77	20	
Trichloroethene	1.9	0.25	2.00		97.0	70 - 130	6.00	20	
Vinyl chloride	2.1	0.25	2.00		107	70 - 130	8.27	20	
Surrogate: 4-Bromofluorobenzene	*2.9*		*2.50*		*116*	*70 - 130*			

Advanced Technology Laboratory-Las Vegas	Project Number : -
3151 W Post Rd.	Report To : Marlon Cartin
Las Vegas , NV 89118	Reported : 12/30/2011

Gasoline Range Organics in Air by TO-3 - Quality Control

Analyte	Result (ppbv)	PQL (ppbv)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1L0798 - No_Prep_Air									
Blank (B1L0798-BLK2)					Prepared: 12/23/2011 Analyzed: 12/23/2011				
Gasoline Range Organics	ND	20			NR				
Surrogate: 4-Bromofluorobenzene	*2.2*		*2.50*		*89.6*	*70 - 130*			
LCS (B1L0798-BS2)					Prepared: 12/23/2011 Analyzed: 12/23/2011				
Gasoline Range Organics	190	20	200		96.8	70 - 130			
Surrogate: 4-Bromofluorobenzene	*2.5*		*2.50*		*99.6*	*70 - 130*			
LCS Dup (B1L0798-BSD2)					Prepared: 12/23/2011 Analyzed: 12/23/2011				
Gasoline Range Organics	200	20	200		97.5	70 - 130	0.710	20	
Surrogate: 4-Bromofluorobenzene	*2.5*		*2.50*		*101*	*70 - 130*			

Advanced Technology Laboratory-Las Vegas	Project Number : -
3151 W Post Rd.	Report To : Marlon Cartin
Las Vegas , NV 89118	Reported : 12/30/2011

Notes and Definitions

ND	Analyte not detected at or above reporting limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA1	CA-NELAP (CDPH)
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Advanced Technology Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atlglobal.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: RTNE

Subcontractor:

Advanced Technology Laboratories - Signal Hill
3283 Walnut Ave.
Signal Hill, California

TEL: (562) 989-4045
FAX: (562) 989-4045
Acct #:

Field Sampler: JAMES DYE

20-Dec-11

Sample ID	Matrix	Date Collected	Bottle Type	Requested Tests		
				EPA TO15	EPA TO3	
il00747-01 N007062-001A / VINF-12-20	Air	12/20/2011 1:05:00 PM	BAG	1	1	

General Comments: Please email sample receipt acknowledgement to the PM.
Please use PO#: N007062 Please fax results by: Normal TAT

	Date/Time		Date/Time
Relinquished by:	12/20/11 @ 1348	**Received by:**	
Relinquished by:		**Received by:**	

Air TECHNOLOGY
Laboratories, Inc.

January 6, 2012

DoD ELAP
ADE-1461
EPA Methods TO-3, TO14A,TO15 SIM & Scan, ASTM D1946

nelac
FL Cert E8784/LA Cert 04140
EPA Methods TO3, TO14A, TO15, 25C/3C, RSK-175
TX Cert T104704450-09-TX
EPA Methods TO14A, TO15

Advanced Technology Labs, Inc.
ATTN: Marlon Cartin
3151-3153 W. Post Rd.
Las Vegas, NV 89118

LABORATORY TEST RESULTS

Project Reference: N007062
Lab Number: C122101-01

Enclosed are **revised** results for sample(s) received 12/21/11 by Air Technology Laboratories. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

- Report revised to include correct result for Methane, as discussed with client.
- Unless otherwise noted in the report, sample analyses were performed within method performance criteria and meet all requirements of the NELAC Standards.
- The enclosed results relate only to the sample(s).

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

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

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

C122101-01

Advanced Technology Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atlglobal.com
TEL. 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: RTNE

Subcontractor:
ATL-Industry

City of Industry, CA

TEL:
FAX:
Acct #:

Field Sampler: James Dyt

20-Dec-11

	Sample ID	Matrix	Date Collected	Bottle Type	ASTM D1946	Requested Tests
01	N007062-001B / VINF-12-20	Air	12/20/2011 1:05:00 PM	BAG	1	

General Comments: Please email sample receipt acknowledgement to the PM.
Please use PO#: N007062 Please fax results by: Normal TAT
Please analyze for O2, Argon, CO2, CH4 by ASTM 1946.

		Date/Time		Date/Time
Relinquished by:		12/20/11 1548	**Received by:**	12/20/11
Relinquished by:		12/21/11 916	**Received by:**	12/21/11 916

Client: Advanced Technology Laboratories
Attn: Marlon Cartin
Project Name: N007062
Project No.: NA
Date Received: 12/21/11
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	C122101-01							
Client Sample I.D.:	N007062-001B / VINF-12-20							
Date Sampled:	12/20/11							
Date Analyzed:	12/21/11							
QC Batch No.:	111220GC8A1							
Analyst Initials:	MJ							
Dilution Factor:	1.0							
ANALYTE	**Result % v/v**	**RL % v/v**						
Carbon Dioxide	0.34	0.010						
Oxygen/Argon	22	0.50						
Methane	0.020	0.0010						

ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: _____ Date 1/6/12
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

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

QC Batch No.: 111220GC8A1
Matrix: Air
Units: % v/v

QC for ASTM D1946

Lab No.:	Method Blank		LCS		LCSD			
Date Analyzed:	12/20/11		12/20/11		12/20/11			
Analyst Initials:	MJ		MJ		MJ			
Datafile:	20dec010		20dec008		20dec009			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Oxygen/Argon	0.50	ND	104	70-130%	105	70-130%	1.0	<30
Methane	0.0010	ND	117	70-130%	112	70-130%	4.7	<30
Carbon Dioxide	0.010	ND	96	70-130%	93	70-130%	2.6	<30

PQL = Practical Quantitation Limit
ND = Not Detected (Below RL).
RL = PQL X Dilution Factor

Reviewed/Approved By: _____ **Date:** 1/6/12
Mark J. Johnson
Operations Manager

The cover letter is an integral part of this analytical report