

---

# First Quarter 2011 Remediation Progress Report Defense Fuel Support Point Norwalk, California

Prepared for  
**Kinder Morgan Energy Partners, L.P.**

1100 Town & Country Road  
Orange, California 92868

April 15, 2011

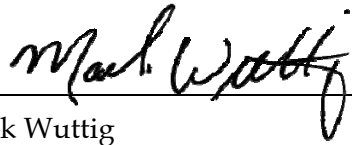


6 Hutton Centre Drive, Suite 700  
Santa Ana, California 92707

# Signature Page

---

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



---

Mark Wuttig  
CH2M HILL  
California Professional Geologist, No. 6820

---

April/15/2011

Date

# Contents

---

Section	Page
<b>Acronyms and Abbreviations .....</b>	<b>III</b>
<b>1. Introduction.....</b>	<b>1-1</b>
<b>2. Remediation Systems .....</b>	<b>2-1</b>
<b>3. Operations and Maintenance.....</b>	<b>3-1</b>
<b>4. Summary of Remediation Progress .....</b>	<b>4-1</b>
<b>5. System Evaluation and Optimization .....</b>	<b>5-1</b>
<b>6. Planned Second Quarter 2011 Activities.....</b>	<b>6-1</b>
<b>7. References.....</b>	<b>7-1</b>

## Appendixes

A Laboratory Analytical Reports

## Tables

1	Remediation Well Construction and Status
2	Vapor Remediation System Operation Summary
3	Groundwater Remediation System Operation Summary
4	Extracted Vapor Analytical Results
5	Extracted Groundwater Analytical Results
6	Remediation Well Vapor Concentrations
7	Groundwater and Product Measurements and Elevations for Total Fluids, Groundwater, and Soil Vapor Extraction Wells

## Figures

1	Site Location Map
2	Remediation System Layout

# 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
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 characterized 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 at the Defense Fuel Support Point (DFSP) located at 15306 Norwalk Boulevard, Norwalk, California (the site; Figure 1) during the first quarter 2011 reporting period.

This progress report is submitted pursuant to a request from the California Regional Water Quality Control Board, Los Angeles Region (RWQCB) in its letter dated October 25, 2006 (RWQCB, 2006), and in accordance with the Second Addendum to the Remedial Action Plan (Second Addendum) dated November 30, 2006 (Geomatrix Consultants, Inc. [Geomatrix], 2006). Implementation of the Second Addendum was approved by the RWQCB on April 2, 2007. Additional background information can be found in the Second Addendum and in previously submitted semiannual groundwater monitoring reports for the site.

This report summarizes the remediation systems present at the site and describes implementation of the Second Addendum for the period January through March 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 January through March 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) groundwater extraction system (WSB system) for remediation of the western offsite area was discontinued in August 2008. During the second quarter 2010, two WSB wells were temporarily operated to control the selenium concentration in extracted groundwater as discussed in the Selenium Management Evaluation Update submitted to the RWQCB on June 10, 2010 (AMEC, 2010a). Blending of extracted groundwater from the WSB system with groundwater from the south-central and southeastern areas was discontinued on June 22, 2010.

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

The main groundwater treatment system handles free product and groundwater recovered from the south-central and southeastern parts of the site. Free product and groundwater recovered by pneumatically operated top-loading total fluids pumps and bottom-loading groundwater pumps are piped to an oil-water separator. Free product, if any, from the oil-water separator is collected in a storage tank and recycled at an offsite location. Water from the oil-water separator is treated using liquid-phase granular activated carbon (LGAC). A six-tray air stripper is present onsite, but is not currently in use. Treated water is routed through an onsite 8,000-gallon effluent storage tank prior to discharge in accordance with a National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA0063509, CI No. 7497). Two temporary fluidized bed bioreactors (FBBRs) are being installed downstream of the LGAC units to treat tertiary butyl alcohol (TBA), a new discharge parameter in the Revised Tentative Waste Discharge Requirements (WDRs) issued by the RWQCB on March 11, 2011.

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 first 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
- Measurements of individual well vapor concentrations
- Collection and analysis of system influent vapor and groundwater samples
- Gauging of selected remediation wells
- Troubleshooting of the SVE and TFE/GWE systems

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 first 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 first quarter 2011 are summarized in Tables 2 and 3. The remediation systems operated during the first quarter 2011 with the following exceptions.

- The SVE and TFE/GWE systems were shut down on January 4, 2011, to clean the oil-water separator. 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.

As stated in the January and February 2011 Remediation System Operational Status reports, no flow occurred from the southeastern area wells to the TFE/GWE system during the first week of February 2011 due to a break in the 1-inch-diameter water line near well GMW-36. The 1-inch-diameter water line to this well is encased by a 4-inch-diameter vapor line; therefore, the extracted groundwater that leaked from the 1-inch-diameter line was contained in the outer 4-inch-diameter line. The line was repaired on February 10, 2011, immediately after the break was discovered, and normal groundwater extraction from this area subsequently resumed.

Overall, during the first quarter 2011, the SVE system operated approximately 61 percent of the time, while the TFE/GWE system operated approximately 74 percent of the time.

Vapor samples from the SVE system influent and water samples from TFE/GWE system influent were collected during the first quarter 2011 when the systems were in operation. During the first quarter 2011, influent vapor samples were collected on January 14, February 8, and March 29, 2011, when the SVE system was operating. Influent water samples were collected on January 14, February 8, and March 25, 2011, when the TFE/GWE systems were operating. The vapor and water samples were delivered to Advanced Technology Laboratories (ATL), which is a laboratory certified by the California Department of Public Health Environmental Laboratory Accreditation Program, for analysis. 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 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 characterized 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 A.

VOC concentrations in vapors extracted from individual SVE wells were measured in the field using a photoionization detector (PID) calibrated using 50 parts per million by volume (ppmv) of hexane. The individual well vapor readings are summarized in Table 6. VOC concentrations in vapors extracted from individual SVE wells were not measured in March, because the system was off most of the month. Depths to product and groundwater were measured to the nearest 0.01 foot from the top of the well casing using an interface probe in selected wells. The gauging results are summarized in Table 7.

## 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 6,561 pounds during the first quarter 2011, for a cumulative mass removal of approximately 27,069 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 3,135,028 gallons of groundwater was extracted during the first quarter 2011. This total includes approximately 2,820,685 gallons of water from the south-central area and 314,343 gallons of water from the southeastern area (Table 3). No water was extracted from the WSB area.

Groundwater extraction was discontinued in the WSB region during the third quarter 2008 based on the reduced lateral extent and low concentrations of methyl tertiary butyl ether (MTBE) and 1,2-dichloroethane (1,2-DCA) west of the site. Detected concentrations of MTBE and 1,2-DCA in wells west of the site have been below the conservative, site-specific, Risk-Based Corrective Action (RBCA) goals (Geomatrix, 1999) since August 2005. The lower (more conservative) RBCA goals for MTBE and 1,2-DCA are 40 micrograms per liter ( $\mu\text{g}/\text{L}$ ) and 70  $\mu\text{g}/\text{L}$ , respectively. 1,2-DCA, MTBE, 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 first 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 142 pounds during the first quarter 2011, for a cumulative mass removed from these areas of approximately 1,343 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

---

For the SVE treatment system, during the first quarter 2011, vapor-phase VOC concentrations were measured in individual wells using a PID on January 19 and February 8, 2011, as shown in Table 6. The operation status of the SVE wells at the end of the first quarter 2011 is also shown in Table 6. PID readings recorded on January 19 and February 8, 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. VOC concentrations in vapors extracted from individual SVE wells were not measured in March, because the system was off most of the month.

Groundwater monitoring in the WSB region during the first quarter 2011 supports the continued shutdown of GWE in the region. 1,2-DCA, MTBE, 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. During the first quarter 2011, free product was detected in four remediation wells (GMW-36, GMW-O-12, GMW-O-20, and MW-SF-2). TFE will continue to be performed in areas with remaining free product. Selected remediation wells will continue to be monitored quarterly to assess remediation performance; remediation pump settings will be adjusted accordingly to optimize free product recovery and enhance hydraulic control of dissolved plumes.

The systems currently consist of 20 wells operated for product recovery and hydraulic control in the south-central part of the site (including 18 wells operated for TFE and two wells operated for GWE), and 3 wells equipped with TFE pumps operated for product recovery and hydraulic control in the southeastern part of the site (Table 1). At the end of the first quarter 2011, there were four TFE/GWE wells online from the south-central area (MW-SF-13, MW-SF-14, MW-SF-15, and MW-SF-16) and three wells from the southeastern area (GMW-O-15, GMW-O-18, and GMW-36). During the first quarter 2011, the GAC was changed out three times. Frequent change-outs of the carbon may be a result of higher flow to the system and fouling of the lead carbon vessel. More frequent backwashing of the lead carbon vessels and bag filters, and possible reduction of the bag filter size, will be implemented to resolve the fouling issue. Additional extraction wells will be brought online during the second quarter 2011, as needed.

The installation of a temporary FBBR and associated appurtenances (e.g., piping and electrical) began during the first quarter 2011. The FBBR will be used in conjunction with the existing groundwater treatment system to treat TBA. A second (temporary) FBBR is anticipated to be installed by the fourth quarter 2011 to increase treatment capacity.

## 6. Planned Second Quarter 2011 Activities

---

During the second quarter 2011, SFPP plans to continue to focus remedial efforts on the south-central and southeastern areas. Installation of the initial FBBR will continue, and a second FBBR unit is planned to be installed by the fourth quarter 2011. Concentrations of 1,2-DCA, MTBE, 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 second quarter 2011 will be described in the second quarter 2011 remediation progress report to be submitted by July 15, 2011.

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

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

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

## Tables

---

**TABLE 1**  
**Remediation Well Construction and Status**

SFPP, L.P.

Defense Fuel Support Point Norwalk

Norwalk, California

Remediation Area	Remediation Well ID	Installation Date	Top of Well Casing Elevation (ft msl)	Well Screen Interval (ft bgs)	Remediation Well Function	Well Operation Status at End of First Quarter 2011 <sup>1</sup>
South-Central	MW-SF-1	6/18/1990	78.93	25 - 40	SVE	OFF
	MW-SF-2	6/18/1990	78.53	25 - 40	SVE; TFE	OFF; OFF
	MW-SF-3	6/18/1990	78.12	25 - 40	SVE; TFE	OFF; OFF
	MW-SF-4	6/19/1990	79.38	25 - 40	SVE	OFF
	MW-SF-5	9/19/1990	79.74	23 - 38	SVE	OFF
	MW-SF-6	9/19/1990	76.80	25 - 40	SVE; TFE	OFF; OFF
	MW-SF-9	6/15/1995	74.10	--	SVE	OFF
	MW-SF-10	9/23/2003	76.53	10 - 30	SVE	OFF
	MW-SF-11	6/19/2007	78.56	20 - 40	SVE; TFE	OFF; OFF
	MW-SF-12	6/18/2007	78.07	20 - 40	SVE; TFE	OFF; OFF
	MW-SF-13	6/19/2007	73.40	20 - 40	SVE; TFE	OFF; <b>ON</b>
	MW-SF-14	6/21/2007	78.16	20 - 40	SVE; TFE	OFF; <b>ON</b>
	MW-SF-15	6/21/2007	78.27	20 - 40	SVE; TFE	<b>ON; ON</b>
	MW-SF-16	6/20/2007	78.21	20 - 40	SVE; TFE	<b>ON; ON</b>
	GMW-9	7/8/1991	74.44	20 - 50	SVE; TFE	OFF; OFF
	GMW-10	7/8/1991	74.67	25 - 50	SVE	<b>ON</b>
	GMW-22	8/2/1991	74.17	25 - 60	SVE; TFE	OFF; OFF
	GMW-24	8/5/1991	74.04	25 - 60	SVE; TFE	OFF; OFF
	GMW-25	1/10/1992	74.29	20 - 50	SVE; GWE	OFF; OFF
	GWR-3	1/10/1992	74.93	20 - 50	SVE; GWE	<b>ON; OFF</b>
	VEW-1	--	--	--	SVE	OFF
	VEW-2	--	--	--	SVE	OFF
	MW-O-1	1/22/1991	75.48	25 - 40	SVE; TFE	<b>ON; OFF</b>
	MW-O-2	1/23/1991	71.90	25 - 40	SVE; TFE	<b>ON; OFF</b>
	GMW-O-11	5/20/1992	74.17	20 - 50	SVE; TFE	<b>ON; OFF</b>
	GMW-O-12	5/21/1992	73.49	20 - 50	SVE	<b>ON</b>
	GMW-O-20	6/15/1995	73.32	--	SVE; TFE	<b>ON; OFF</b>
	GMW-O-21	10/1/1997	71.43	26 - 46	TFE	OFF
	GMW-O-23	6/25/2007	73.63	20 - 40	SVE; TFE	<b>ON; OFF</b>
	MW-18 (MID)	6/10/1991	75.67	50 - 60	SVE	OFF
HW-2	--	--	--	SVE	OFF	
Southeastern	GMW-O-15	4/19/1994	74.23	20 - 50	SVE; TFE	<b>ON; ON</b>
	GMW-O-18	7/25/1994	74.36	21 - 40	SVE; TFE	<b>ON; ON</b>
	GMW-36	4/11/1994	74.53	20 - 50	TFE	<b>ON</b>
	GMW-SF-9	4/1/2003	73.00	37 - 46	GWE	OFF
	GMW-SF-10	4/2/2003	75.77	37 - 46	GWE	OFF
West Side Barrier	BW-2	5/20/1996	73.57	27 - 47	GWE	OFF
	BW-3	5/17/1996	74.16	31 - 50	GWE	OFF
	BW-4	5/20/1996	74.61	28 - 47	GWE	OFF
	BW-5	5/23/1996	73.59	27 - 46	GWE	OFF
	BW-6	5/22/1996	73.48	28 - 47	GWE	OFF
	BW-7	5/22/1996	74.65	27 - 46	GWE	OFF
	BW-8	5/21/1996	75.08	27 - 46	GWE	OFF
	BW-9	5/21/1996	76.19	27 - 46	GWE	OFF

Notes

1. The well operations listed correspond to the well functions indicated in the previous column. Based on information provided by SFPP, L.P.

Abbreviations

-- = information not available

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

ft bgs = feet below ground surface

GWE = groundwater extraction

SVE = soil vapor extraction

TFE = total fluids extraction



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

System Inspection Date	Cumulative Hours of Operation (hours)	Incremental Hours of Operation (hours)	Influent TPH-g Concentration (ppmv) <sup>1</sup>	Influent FID or PID Reading (ppmv as hexane)	System Flow (scfm)	Header Vacuum ("H <sub>2</sub> O)	Mass Removed (pounds) <sup>2</sup>
<b>2007 Totals<sup>3</sup></b>	<b>58,319</b>	<b>2,058</b>	--	--	--	--	<b>3,742</b>
<b>2008 Totals</b>	<b>64,233</b>	<b>5,915</b>	--	--	--	--	<b>5,878</b>
<b>2009 Totals</b>	<b>68,858</b>	<b>4,625</b>	--	--	--	--	<b>9,387</b>
<b>2010 Totals</b>	<b>72,369</b>	<b>3,511</b>	--	--	--	--	<b>1,501</b>
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
<b>First Quarter 2011 Totals</b>	<b>73,734</b>	<b>1,293</b>	--	--	--	--	<b>6,561</b>
<b>Cumulative Mass Removed Since Implementation of RAP Upgrades<sup>4</sup></b>							<b>27,069</b>

Notes

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

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

Abbreviations

TPH-g = total petroleum hydrocarbons as gasoline (C4-C12)  
ppmv = parts per million by volume  
FID = flame ionization detector  
PID = photoionization detector  
scfm = standard cubic feet per minute  
H<sub>2</sub>O = inches of water  
-- = not applicable or not available

**TABLE 3**  
**Groundwater Remediation System Operation Summary**

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

System Inspection Date	Groundwater Removed from the South-Central Area (gallons)	Groundwater Removed from the Southeastern Area (gallons)	Groundwater Removed from the West Side Barrier Area (gallons)	Influent TPH-g Concentration (µg/L) <sup>1</sup>	TPH-g Removed from the South-Central, Southeastern, and West Side Barrier Areas (pounds) <sup>2</sup>
<b>2007 Totals<sup>3</sup></b>	<b>2,080,762</b>	<b>529,411</b>	<b>630,877</b>	--	<b>395</b>
<b>2008 Totals</b>	<b>5,391,860</b>	<b>700,882</b>	<b>405,954<sup>4</sup></b>	--	<b>311</b>
<b>2009 Totals</b>	<b>8,044,836</b>	<b>770,869</b>	<b>0</b>	--	<b>161</b>
<b>2010 Totals</b>	<b>3,699,058</b>	<b>2,025,777</b>	<b>2,244</b>	--	<b>334</b>
1/4/11	257,320	0	0	7,100	15.22
1/7/11	103,344	0	0	7,100	6.11
1/11/11	134,053	0	0	7,100	7.93
1/14/11	104,826	0	0	7,400	6.46
1/19/11	192,290	0	0	7,400	11.85
1/21/11	71,291	16	0	7,400	4.40
1/25/11	142,737	0	0	7,400	8.80
1/26/11	30,137	0	0	7,400	1.86
1/28/11	65,959	7	0	7,400	4.07
2/1/11	133,382	0	0	7,400	8.22
2/4/11	118,102	0	0	7,400	7.28
2/8/11	149,246	2	0	5,600	6.96
2/10/11	87,042	24	0	5,600	4.06
2/15/11	274,300	87	0	5,600	12.80
2/18/11	152,885	44,233	0	5,600	7.13
2/22/11	58,548	14,271	0	5,600	2.73
2/25/11	139,991	47,022	0	5,600	6.53
3/18/11	84,161	35,815	0	5,600	3.93
3/22/11	111,110	52,406	0	5,600	5.18
3/25/11	139,011	37,344	0	3,100	3.59
4/1/11	270,950	83,116	0	3,100	7.00
<b>First Quarter 2011 Totals</b>	<b>2,820,685</b>	<b>314,343</b>	<b>0</b>	--	<b>142</b>
<b>Cumulative TPH-g Removed Since Implementation of RAP Upgrades<sup>5</sup></b>					<b>1,343</b>

Notes

1. The TPH-g concentration reflects analytical results for samples collected from the influent of the Total Fluids Extractions (TFE) system that extracts groundwater from the south-central, southeastern, and West Side Barrier areas. Refer to Table 5 for a summary of analytical results for the groundwater samples. For a given period, the most recent analytical result available is used to calculate TPH-g removed.
2. The mass of TPH-g removed (pounds) is based on concentrations of dissolved TPH-g in the most recent TFE system influent samples and the volume of groundwater extracted by TFE. Total petroleum hydrocarbons characterized as fuel products (TPH-fp) also were detected in the TFE system influent samples (see Table 5) but were not used in estimating the mass of petroleum hydrocarbons removed from groundwater.
3. The 2007 total includes only operation after upgrades were made to the south-central system.
4. Groundwater removal in the West Side Barrier Area was discontinued in August, 2008. Groundwater extraction from West Side Barrier Area wells BW-3 and BW-6 was resumed on May 14, 2010 to evaluate the efficacy of blending water with lower-selenium-concentrations from these wells with groundwater extracted from the south-central and southeastern areas. Groundwater removal from the West Side Barrier area was discontinued again on June 22, 2010.
5. Upgrades to the south-central remediation system are described in the Second Addendum to Remedial Action Plan.

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

Abbreviations

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

**TABLE 4**  
**Extracted Vapor Analytical Results<sup>1</sup>**

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

Date Sampled	Total Fluids Extraction System Status	ASTM D-1946			EPA TO-3	EPA TO-15 (VOCs) <sup>2</sup>				
		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	<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	110.0
3/29/2011	ON	0.013	0.13	20.0	5,000	170	15	18	41.5	<2.5

**Notes**

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

**Abbreviations**

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

**TABLE 5**  
**Extracted Groundwater Analytical Results<sup>1</sup>**

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

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

**Notes**

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

**Abbreviations**

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

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

Remediation Area	Remediation Well ID	Remediation Well Function <sup>1</sup>	Well Operation Status at End of First Quarter 2011 <sup>1</sup>	1/19/2011 (ppmv as Hexane)	2/8/2011 (ppmv as Hexane) <sup>2</sup>
South-Central	MW-SF-1	SVE	OFF	90.6	0.7
	MW-SF-2	SVE; TFE	OFF; OFF	2.2	0.0
	MW-SF-3	SVE; TFE	OFF; OFF	5.5	2.6
	MW-SF-4	SVE	OFF	68.4	0.0
	MW-SF-5	SVE	OFF	6.2	0.0
	MW-SF-6	SVE; TFE	OFF; OFF	12.6	15.5
	MW-SF-9	SVE	OFF	0.0	0.0
	MW-SF-10	SVE	OFF	6.5	4.2
	MW-SF-11	SVE; TFE	OFF; OFF	16.3	--
	MW-SF-12	SVE; TFE	OFF; OFF	36.2	44.2
	MW-SF-13	SVE; TFE	OFF; <b>ON</b>	3.1	5.3
	MW-SF-14	SVE; TFE	OFF; <b>ON</b>	8.4	3.4
	MW-SF-15	SVE; TFE	<b>ON; ON</b>	56.5	133.8
	MW-SF-16	SVE; TFE	<b>ON; ON</b>	188.6	378.4
	GMW-9	SVE; TFE	OFF; OFF	23.5	5.6
	GMW-10	SVE	<b>ON</b>	120.6	56.6
	GMW-22	SVE; TFE	OFF; OFF	23.5	5.6
	GMW-24	SVE; TFE	OFF; OFF	1.6	0.1
	GMW-25	SVE; GWE	OFF; OFF	1.6	0.1
	GWR-3	SVE; GWE	<b>ON; OFF</b>	23.1	240.4
	VEW-1	SVE	OFF	2.7	0.1
	VEW-2	SVE	OFF	4.3	3.9
	MW-O-1	SVE; TFE	<b>ON; OFF</b>	5.0	2.9
	MW-O-2	SVE; TFE	<b>ON; OFF</b>	-- <sup>3</sup>	--
	GMW-O-11	SVE; TFE	<b>ON; OFF</b>	5.8	3.5
	GMW-O-12	SVE	<b>ON</b>	8.7	15.1
	GMW-O-20	SVE; TFE	<b>ON; OFF</b>	3.7	1.4
	GMW-O-23	SVE; TFE	<b>ON; OFF</b>	5.5	3.1
MW-18 (MID)	SVE	OFF	3.7	0.9	
HW-2	SVE	OFF	5,000	12.1	
Southeastern	GMW-O-15	SVE; TFE	<b>ON; ON</b>	32.9	20.0
	GMW-O-18	SVE; TFE	<b>ON; ON</b>	32.9	20.0

**Notes**

1. The well operations listed correspond to the well functions indicated in the previous column.
2. Vapor readings measured in the field with a photoionization detector (PID) calibrated using 50 ppmv of hexane.
3. -- = Vapor readings could not be measured due to water from the sample port.

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

**Abbreviations**

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

**TABLE 7**  
**Groundwater and Product Measurements and Elevations for**  
**Total Fluids, Groundwater, and Soil Vapor Extraction Wells**  
SFPP, L.P.  
Defense Fuel Support Point Norwalk  
Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft btoc)	Measured Depth to Product (ft btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
GMW-9	8/8/2008	74.44	28.01	27.96	0.05	---	Envent
	10/16/2008	74.44	28.36	28.35	0.01	---	Envent
	12/17/2008	74.44	27.61	---	---	46.83	Envent
	1/15/2009	74.44	28.91	---	---	45.53	Envent
	3/27/2009	74.44	29.04	---	---	45.40	Envent
	4/21/2009	74.44	28.16	---	---	46.28	Envent
	7/21/2009	74.44	28.31	---	---	46.13	Envent
	5/24/2010	74.44	30.47	---	---	43.97	Blaine Tech
	5/28/2010	74.44	30.35	---	---	44.09	Blaine Tech
	10/4/2010	74.44	30.30	---	---	44.14	Blaine Tech
1/10/2011	74.44	32.02	---	---	42.42	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	
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
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	
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	
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

**TABLE 7**  
**Groundwater and Product Measurements and Elevations for**  
**Total Fluids, Groundwater, and Soil Vapor Extraction Wells**  
SFPP, L.P.  
Defense Fuel Support Point Norwalk  
Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft btoc)	Measured Depth to Product (ft btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
GMW-36	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	
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
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	
GMW-O-15	11/12/2007	74.23	23.95	23.85	0.10	---	Stantec
	4/14/2008	74.23	23.64	---	---	50.59	Stantec
	8/8/2008	74.23	24.60	---	---	50.59	Envent
	8/11/2008	74.23	24.40	24.34	0.06	---	Stantec
	10/16/2008	74.23	24.53	---	---	49.70	Envent
	12/18/2008	74.23	24.86	---	---	49.37	Envent
	1/2/2009	74.23	24.82	---	---	49.41	Envent
	1/15/2009	74.23	26.01	---	---	48.22	Envent
	2/20/2009	74.23	24.80	---	---	49.43	Envent
	2/23/2009	74.23	24.76	24.74	0.02	---	Blaine Tech
	3/24/2009	74.23	25.55	---	---	48.68	Envent
	4/20/2009	74.23	24.66	24.61	0.05	---	Blaine Tech
	7/17/2009	74.23	25.01	---	---	49.22	Envent
	7/22/2009	74.23	24.99	24.94	0.05	---	Blaine Tech
	10/19/2009	74.23	25.55	25.43	0.12	---	Blaine Tech
	2/4/2010	74.23	25.50	25.48	0.02	---	Kinder Morgan
	4/16/2010	74.23	23.10	---	---	51.13	Blaine Tech
5/24/2010	74.23	25.67	---	---	48.56	Blaine Tech	
5/28/2010	74.23	25.35	---	---	48.88	Blaine Tech	
6/22/2010	74.23	25.81	---	---	48.42	Blaine Tech	
10/4/2010	74.23	25.85	25.80	0.05	---	Blaine Tech	
11/23/2010	74.23	53.17	---	---	21.06	Blaine Tech	

**TABLE 7**  
**Groundwater and Product Measurements and Elevations for**  
**Total Fluids, Groundwater, and Soil Vapor Extraction Wells**  
 SFPP, L.P.  
 Defense Fuel Support Point Norwalk  
 Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft btoc)	Measured Depth to Product (ft btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
GMW-O-15	12/22/2010	74.23	26.31	---	---	47.92	Blaine Tech
	1/10/2011	74.23	25.97	--	--	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
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
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
GMW-O-23	8/14/2007	73.63	23.33	---	---	50.30	Geomatrix
	8/21/2007	73.63	23.31	---	---	50.32	Geomatrix
	8/28/2007	73.63	23.00	---	---	50.63	Stantec
	9/11/2007	73.63	23.42	---	---	50.21	Geomatrix
	10/5/2007	73.63	27.79	---	---	45.84	Geomatrix
	11/2/2007	73.63	25.15	---	---	48.48	Geomatrix
	11/13/2007	73.63	23.90	---	---	49.73	Stantec
	12/28/2007	73.63	24.91	---	---	48.72	Geomatrix
	8/15/2008	73.63	26.28	---	---	47.35	Envent
	10/17/2008	73.63	27.16	---	---	46.47	Envent
	12/19/2008	73.63	27.60	---	---	46.03	Envent
	1/15/2009	73.63	27.54	---	---	46.09	Envent
	2/24/2009	73.63	26.19	---	---	47.44	Envent
	3/27/2009	73.63	23.74	---	---	49.89	Envent
	4/21/2009	73.63	27.30	---	---	46.33	Envent
	11/9/2009	73.63	27.50	---	---	46.13	Kinder Morgan
6/22/2010	73.63	32.10	---	---	41.53	Blaine Tech	
10/4/2010	73.63	25.92	---	---	47.71	Blaine Tech	
1/10/2011	73.63	27.45	---	---	46.18	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
GMW-SF-10	4/21/2009	75.77	27.1	---	---	48.67	Envent
	10/4/2010	75.77	28.03	---	---	47.74	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



**TABLE 7**  
**Groundwater and Product Measurements and Elevations for**  
**Total Fluids, Groundwater, and Soil Vapor Extraction Wells**  
SFPP, L.P.  
Defense Fuel Support Point Norwalk  
Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft btoc)	Measured Depth to Product (ft btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
GWR-3	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
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
	10/4/2010	75.67	32.17	---	---	43.5	Blaine Tech
MW-O-1	8/14/2007	75.48	25.31	23.78	1.53	---	Geomatrix
	8/21/2007	75.48	23.84	23.58	0.26	---	Geomatrix
	8/28/2007	75.48	23.07	23.06	0.01	---	Stantec
	9/11/2007	75.48	23.86	23.48	0.38	---	Geomatrix
	10/5/2007	75.48	24.67	---	---	50.81	Geomatrix
	11/2/2007	75.48	24.25	---	---	51.23	Geomatrix
	11/12/2007	75.48	24.27	24.25	0.02	---	Stantec
	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
	MW-O-2	11/12/2007	71.90	23.10	---	---	48.80
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
MW-SF-1	8/28/2007	78.93	27.94	---	---	50.99	Stantec
	11/12/2007	78.93	28.76	---	---	50.17	Stantec
	2/19/2008	78.93	29.50	---	---	49.43	Stantec
	4/14/2008	78.93	29.16	---	---	49.77	Stantec
	8/11/2008	78.93	29.75	---	---	49.18	Stantec
	10/13/2008	78.93	29.86	---	---	49.07	Stantec
	2/23/2009	78.93	30.00	---	---	48.93	Blaine Tech
	4/20/2009	78.93	29.97	---	---	48.96	Blaine Tech
	7/22/2009	78.93	30.98	---	---	47.95	Blaine Tech
	10/19/2009	78.93	31.11	---	---	47.82	Blaine Tech
	3/15/2010	78.93	31.74	---	---	47.19	Blaine Tech
	5/24/2010	78.93	30.79	---	---	48.14	Blaine Tech
	5/28/2010	78.93	30.57	---	---	48.36	Blaine Tech
	6/22/2010	78.93	30.84	---	---	48.09	Blaine Tech
7/12/2010	78.93	30.51	---	---	48.42	Blaine Tech	
10/4/2010	78.93	30.88	---	---	48.05	Blaine Tech	
1/10/2011	78.93	32.51	---	---	46.42	Blaine Tech	
MW-SF-2	11/12/2007	78.53	29.18	28.71	0.47	---	Stantec
	8/12/2008	78.53	31.11	---	---	47.42	Envent
	10/17/2008	78.53	31.55	31.50	0.05	---	Envent
	12/18/2008	78.53	32.75	32.55	0.20	---	Envent
	1/15/2009	78.53	30.84	30.57	0.27	---	Envent
	3/24/2009	78.53	28.85	---	---	49.68	Envent
	4/21/2009	78.53	29.98	---	---	48.55	Envent
	7/21/2009	78.53	29.85	---	---	48.68	Envent
	12/9/2009	78.53	31.45	---	---	47.08	Kinder Morgan
	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	
MW-SF-3	11/12/2007	78.12	29.34	28.28	1.06	---	Stantec

**TABLE 7**  
**Groundwater and Product Measurements and Elevations for**  
**Total Fluids, Groundwater, and Soil Vapor Extraction Wells**  
 SFPP, L.P.  
 Defense Fuel Support Point Norwalk  
 Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft btoc)	Measured Depth to Product (ft btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
MW-SF-3	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	
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
	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	
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	
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

**TABLE 7**  
**Groundwater and Product Measurements and Elevations for**  
**Total Fluids, Groundwater, and Soil Vapor Extraction Wells**  
SFPP, L.P.  
Defense Fuel Support Point Norwalk  
Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft btoc)	Measured Depth to Product (ft btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
MW-SF-6	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
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	
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
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	
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	
MW-SF-13	8/14/2007	73.40	22.98	---	---	50.42	Geomatrix

**TABLE 7**  
**Groundwater and Product Measurements and Elevations for**  
**Total Fluids, Groundwater, and Soil Vapor Extraction Wells**  
SFPP, L.P.  
Defense Fuel Support Point Norwalk  
Norwalk, California

Well ID	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft btoc)	Measured Depth to Product (ft btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
MW-SF-13	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	
MW-SF-14	8/14/2007	78.16	27.68	---	---	50.48	Geomatrix
	8/21/2007	78.16	27.60	---	---	50.56	Geomatrix
	8/28/2007	78.16	27.53	---	---	50.63	Stantec
	9/11/2007	78.16	27.66	---	---	50.50	Geomatrix
	10/5/2007	78.16	27.75	---	---	50.41	Geomatrix
	11/2/2007	78.16	29.83	---	---	48.33	Geomatrix
	8/15/2008	78.16	29.77	29.24	0.53	---	Envent
	10/17/2008	78.16	29.52	29.50	0.02	---	Envent
	12/18/2008	78.16	30.62	---	---	47.54	Envent
	1/15/2009	78.16	30.08	---	---	48.08	Envent
	3/24/2009	78.16	29.73	---	---	48.43	Envent
	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
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	
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

**TABLE 7**  
**Groundwater and Product Measurements and Elevations for**  
**Total Fluids, Groundwater, and Soil Vapor Extraction Wells**  
 SFPP, L.P.  
 Defense Fuel Support Point Norwalk  
 Norwalk, California

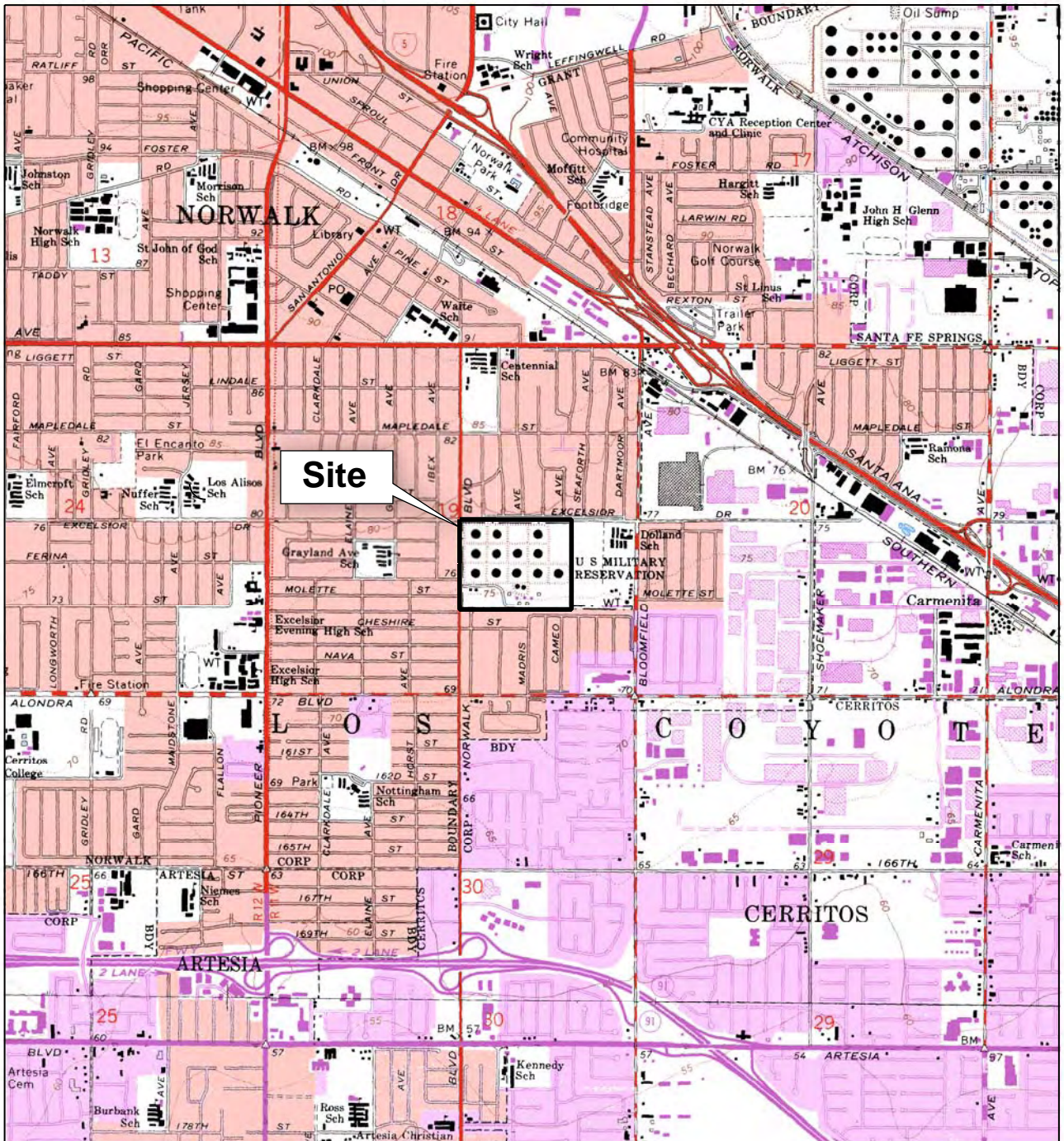
Well ID	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft btoc)	Measured Depth to Product (ft btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
MW-SF-16	12/18/2008	78.21	30.94	---	---	47.27	Envent
	1/15/2009	78.21	30.01	30.00	0.01	---	Envent
	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

**Abbreviations**

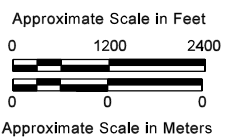
ft msl = feet above mean sea level based on the National Geodetic Vertical Datum of 1929  
 ft btoc = feet below top of casing  
 --- = not detected or not applicable

## Figures

---



Site



SITE LOCATION MAP

DFSP NORWALK  
Norwalk, California

By: Andy Vollmar

Date: July 21, 2010

Project No: 407609

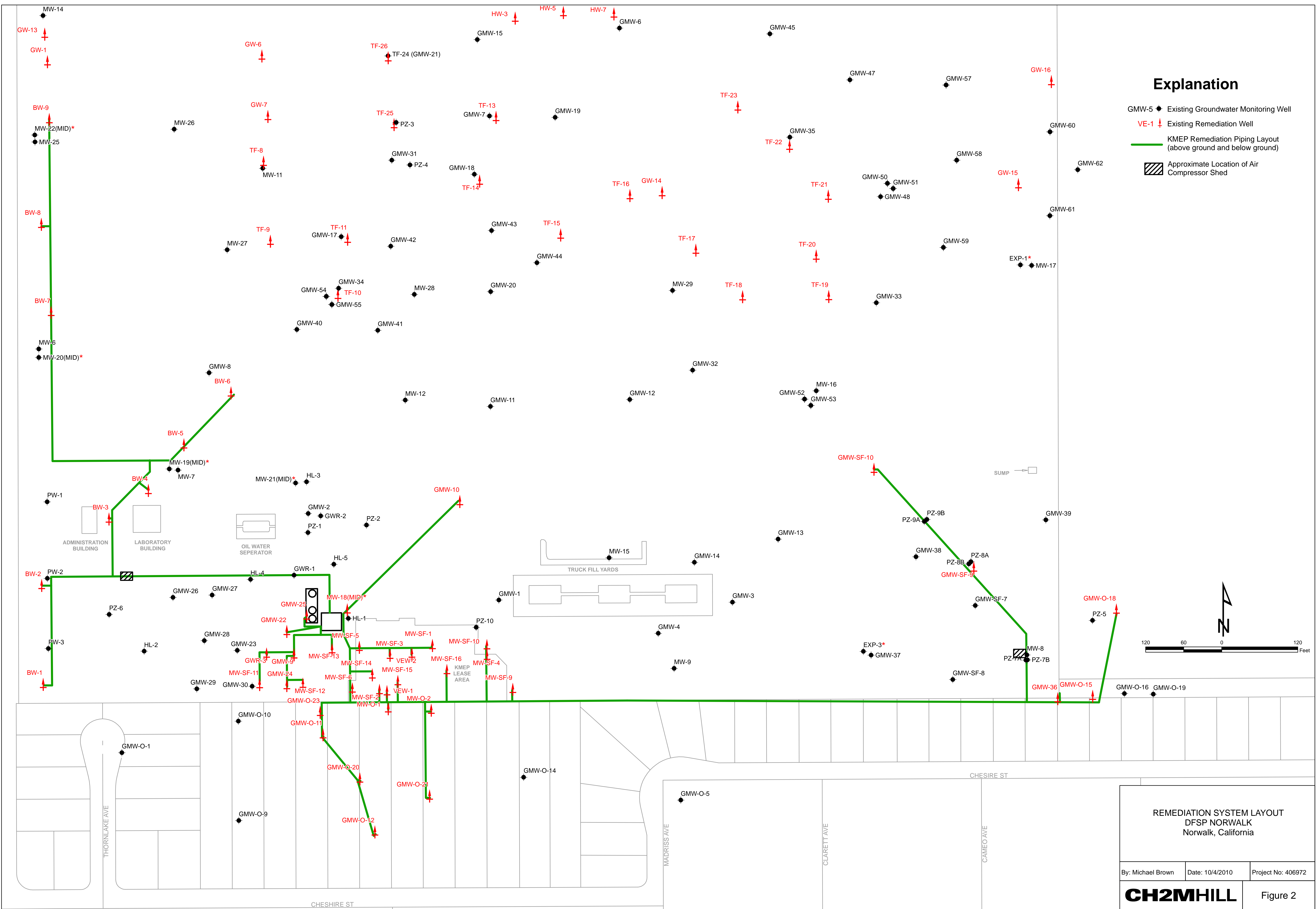
**CH2MHILL**

Figure 1

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.

# 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



<b>REMEDIATION SYSTEM LAYOUT</b> <b>DFSP NORWALK</b> Norwalk, California		
By: Michael Brown	Date: 10/4/2010	Project No: 406972
		Figure 2



# Appendix A

## Laboratory Analytical Reports

---

January 27, 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.: N005196

RE: SFPP - Norwalk Site

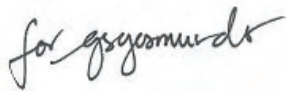
Attention: Daniel Jablonski

Enclosed are the results for sample(s) received on January 15, 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,



Jose Tenorio Jr.  
Laboratory Director

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



*Advanced Technology  
Laboratories*

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

---

**CLIENT:** CH2M HILL  
**Project:** SFPP - Norwalk Site  
**Lab Order:** N005196

**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.



**CLIENT:** CH2M HILL  
**Lab Order:** N005196  
**Project:** SFPP - Norwalk Site  
**Lab ID:** N005196-001

**Client Sample ID:** INF-01-14  
**Collection Date:** 1/14/2011 2:00:00 PM  
**Matrix:** WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
----------	--------	-----	-----	------	-------	----	---------------

**TPH-FUEL PRODUCT BY GC/FID**

**EPA 3510C**

**EPA 8015B**

RunID: <b>GC3_110121A</b>	QC Batch: <b>36053</b>				PrepDate: <b>1/21/2011</b>	Analyst: <b>MDM</b>
TPH-Fuel Product	3500	13	50	ug/L	1	1/21/2011 06:12 PM
Surr: Octacosane	135	0	26-152	%REC	1	1/21/2011 06:12 PM
Surr: p-Terphenyl	103	0	57-132	%REC	1	1/21/2011 06:12 PM

**GASOLINE RANGE ORGANICS BY GC/FID**

**EPA 8015B**

RunID: <b>GC4_110119B</b>	QC Batch: <b>E11VW002</b>				PrepDate:	Analyst: <b>QBM</b>
TPH-Gasoline	7400	6.0	100	µg/L	1	1/19/2011
Surr: Chlorobenzene - d5	98.7	0	74-138	%REC	1	1/19/2011

**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

**EPA 8260B**

RunID: <b>MS1_110120B</b>	QC Batch: <b>D11VW007</b>				PrepDate:	Analyst: <b>QBM</b>
1,1,1,2-Tetrachloroethane	ND	0.061	1.0	µg/L	1	1/20/2011 02:44 PM
1,1,1-Trichloroethane	ND	0.068	1.0	µg/L	1	1/20/2011 02:44 PM
1,1,2,2-Tetrachloroethane	ND	0.054	1.0	µg/L	1	1/20/2011 02:44 PM
1,1,2-Trichloroethane	ND	0.083	1.0	µg/L	1	1/20/2011 02:44 PM
1,1-Dichloroethane	ND	0.099	1.0	µg/L	1	1/20/2011 02:44 PM
1,1-Dichloroethene	ND	0.094	1.0	µg/L	1	1/20/2011 02:44 PM
1,1-Dichloropropene	ND	0.082	1.0	µg/L	1	1/20/2011 02:44 PM
1,2,3-Trichlorobenzene	ND	0.10	1.0	µg/L	1	1/20/2011 02:44 PM
1,2,3-Trichloropropane	ND	0.12	1.0	µg/L	1	1/20/2011 02:44 PM
1,2,4-Trichlorobenzene	ND	0.12	1.0	µg/L	1	1/20/2011 02:44 PM
1,2,4-Trimethylbenzene	47	0.095	1.0	µg/L	1	1/20/2011 02:44 PM
1,2-Dibromo-3-chloropropane	ND	0.15	2.0	µg/L	1	1/20/2011 02:44 PM
1,2-Dibromoethane	ND	0.14	1.0	µg/L	1	1/20/2011 02:44 PM
1,2-Dichlorobenzene	ND	0.070	1.0	µg/L	1	1/20/2011 02:44 PM
1,2-Dichloroethane	ND	0.17	1.0	µg/L	1	1/20/2011 02:44 PM
1,2-Dichloropropane	ND	0.085	1.0	µg/L	1	1/20/2011 02:44 PM
1,3,5-Trimethylbenzene	14	0.087	1.0	µg/L	1	1/20/2011 02:44 PM
1,3-Dichlorobenzene	ND	0.090	1.0	µg/L	1	1/20/2011 02:44 PM
1,3-Dichloropropane	ND	0.074	1.0	µg/L	1	1/20/2011 02:44 PM
1,4-Dichlorobenzene	ND	0.092	1.0	µg/L	1	1/20/2011 02:44 PM
2,2-Dichloropropane	ND	0.061	1.0	µg/L	1	1/20/2011 02:44 PM
2-Butanone	ND	1.0	10	µg/L	1	1/20/2011 02:44 PM
2-Chlorotoluene	ND	0.080	1.0	µg/L	1	1/20/2011 02:44 PM

<b>Qualifiers:</b>	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 interferenc
		Results are wet unless otherwise specified	DO	Surrogate Diluted Out



**Advanced Technology Laboratories, Inc.**

**ANALYTICAL RESULTS**

Print Date: 27-Jan-11

**CLIENT:** CH2M HILL  
**Lab Order:** N005196  
**Project:** SFPP - Norwalk Site  
**Lab ID:** N005196-001

**Client Sample ID:** INF-01-14  
**Collection Date:** 1/14/2011 2:00:00 PM  
**Matrix:** WASTEWATER

**Analyses** **Result** **MDL** **PQL** **Qual** **Units** **DF** **Date Analyzed**

**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

**EPA 8260B**

RunID: <b>MS1_110120B</b>	QC Batch: <b>D11VW007</b>	PrepDate:	Analyst: <b>QBM</b>			
4-Chlorotoluene	ND	0.10	1.0	µg/L	1	1/20/2011 02:44 PM
4-Isopropyltoluene	ND	0.080	1.0	µg/L	1	1/20/2011 02:44 PM
4-Methyl-2-pentanone	ND	0.76	10	µg/L	1	1/20/2011 02:44 PM
Acetone	ND	1.6	10	µg/L	1	1/20/2011 02:44 PM
Acrolein	ND	4.3	20	µg/L	1	1/25/2011 11:52 PM
Acrylonitrile	ND	0.61	20	µg/L	1	1/25/2011 11:52 PM
Benzene	3700	7.5	100	µg/L	100	1/20/2011 01:34 PM
Bromobenzene	ND	0.082	1.0	µg/L	1	1/20/2011 02:44 PM
Bromochloromethane	ND	0.15	1.0	µg/L	1	1/20/2011 02:44 PM
Bromodichloromethane	ND	0.063	1.0	µg/L	1	1/20/2011 02:44 PM
Bromoform	ND	0.086	1.0	µg/L	1	1/20/2011 02:44 PM
Bromomethane	ND	0.13	1.0	µg/L	1	1/20/2011 02:44 PM
Carbon disulfide	ND	0.054	1.0	µg/L	1	1/20/2011 02:44 PM
Carbon tetrachloride	ND	0.10	1.0	µg/L	1	1/20/2011 02:44 PM
Chlorobenzene	ND	0.092	1.0	µg/L	1	1/20/2011 02:44 PM
Chloroethane	ND	0.14	1.0	µg/L	1	1/20/2011 02:44 PM
Chloroform	ND	0.058	1.0	µg/L	1	1/20/2011 02:44 PM
Chloromethane	ND	0.054	1.0	µg/L	1	1/20/2011 02:44 PM
cis-1,2-Dichloroethene	ND	0.11	1.0	µg/L	1	1/20/2011 02:44 PM
cis-1,3-Dichloropropene	ND	0.10	1.0	µg/L	1	1/20/2011 02:44 PM
Dibromochloromethane	ND	0.061	1.0	µg/L	1	1/20/2011 02:44 PM
Dibromomethane	ND	0.15	1.0	µg/L	1	1/20/2011 02:44 PM
Dichlorodifluoromethane	ND	0.12	1.0	µg/L	1	1/20/2011 02:44 PM
Ethylbenzene	56	0.051	1.0	µg/L	1	1/20/2011 02:44 PM
Freon-113	ND	0.080	1.0	µg/L	1	1/20/2011 02:44 PM
Hexachlorobutadiene	ND	0.17	1.0	µg/L	1	1/20/2011 02:44 PM
Isopropylbenzene	17	0.057	1.0	µg/L	1	1/20/2011 02:44 PM
m,p-Xylene	180	0.17	1.0	µg/L	1	1/20/2011 02:44 PM
Methylene chloride	ND	0.10	5.0	µg/L	1	1/20/2011 02:44 PM
MTBE	280	0.89	10	µg/L	10	1/20/2011 01:58 PM
n-Butylbenzene	2.3	0.082	1.0	µg/L	1	1/20/2011 02:44 PM
n-Propylbenzene	33	0.087	1.0	µg/L	1	1/20/2011 02:44 PM
Naphthalene	94	0.056	1.0	µg/L	1	1/20/2011 02:44 PM
o-Xylene	43	0.077	1.0	µg/L	1	1/20/2011 02:44 PM
sec-Butylbenzene	3.1	0.098	1.0	µg/L	1	1/20/2011 02:44 PM
Styrene	ND	0.072	1.0	µg/L	1	1/20/2011 02:44 PM

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



*Advanced Technology  
Laboratories*

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

**Advanced Technology Laboratories, Inc.**

**ANALYTICAL RESULTS**

Print Date: 27-Jan-11

**CLIENT:** CH2M HILL  
**Lab Order:** N005196  
**Project:** SFPP - Norwalk Site  
**Lab ID:** N005196-001

**Client Sample ID:** INF-01-14  
**Collection Date:** 1/14/2011 2:00:00 PM  
**Matrix:** WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
----------	--------	-----	-----	------	-------	----	---------------

**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

**EPA 8260B**

RunID: MS1_110120B	QC Batch: D11VW007	PrepDate:	Analyst: QBM			
tert-Butylbenzene	ND	0.062	1.0	µg/L	1	1/20/2011 02:44 PM
Tetrachloroethene	ND	0.13	1.0	µg/L	1	1/20/2011 02:44 PM
Toluene	110	0.12	2.5	µg/L	1	1/20/2011 02:44 PM
trans-1,2-Dichloroethene	ND	0.094	1.0	µg/L	1	1/20/2011 02:44 PM
trans-1,3-Dichloropropene	ND	0.10	1.0	µg/L	1	1/20/2011 02:44 PM
Trichloroethene	ND	0.060	1.0	µg/L	1	1/20/2011 02:44 PM
Trichlorofluoromethane	ND	0.097	1.0	µg/L	1	1/20/2011 02:44 PM
Vinyl chloride	ND	0.12	1.0	µg/L	1	1/20/2011 02:44 PM
Xylenes, Total	220	1.5	2.0	µg/L	1	1/20/2011 02:44 PM
Surr: 1,2-Dichloroethane-d4	108	0	72-119	%REC	1	1/20/2011 02:44 PM
Surr: 1,2-Dichloroethane-d4	104	0	72-119	%REC	10	1/20/2011 01:58 PM
Surr: 1,2-Dichloroethane-d4	92.1	0	72-119	%REC	100	1/20/2011 01:34 PM
Surr: 4-Bromofluorobenzene	111	0	76-119	%REC	100	1/20/2011 01:34 PM
Surr: 4-Bromofluorobenzene	108	0	76-119	%REC	1	1/20/2011 02:44 PM
Surr: 4-Bromofluorobenzene	111	0	76-119	%REC	10	1/20/2011 01:58 PM
Surr: Dibromofluoromethane	104	0	85-115	%REC	1	1/20/2011 02:44 PM
Surr: Dibromofluoromethane	99.5	0	85-115	%REC	100	1/20/2011 01:34 PM
Surr: Dibromofluoromethane	107	0	85-115	%REC	10	1/20/2011 01:58 PM
Surr: Toluene-d8	110	0	81-120	%REC	100	1/20/2011 01:34 PM
Surr: Toluene-d8	110	0	81-120	%REC	10	1/20/2011 01:58 PM
Surr: Toluene-d8	109	0	81-120	%REC	1	1/20/2011 02:44 PM

<b>Qualifiers:</b>	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 interferenc
		Results are wet unless otherwise specified	DO	Surrogate Diluted Out



*Advanced Technology  
Laboratories*

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

**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

**ANALYTICAL QC SUMMARY REPORT**

**TestCode: 8015\_W\_FP\_SFPP**

Sample ID: <b>MB-36053</b>	SampType: <b>MBLK</b>	TestCode: <b>8015_W_FP_</b>	Units: <b>ug/L</b>	Prep Date: <b>1/21/2011</b>	RunNo: <b>78871</b>						
Client ID: <b>PBW</b>	Batch ID: <b>36053</b>	TestNo: <b>EPA 8015B</b>	<b>EPA 3510C</b>	Analysis Date: <b>1/21/2011</b>	SeqNo: <b>1238685</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Fuel Product	33.841	50									J
Surr: Octacosane	68.142		80.00		85.2	26	152				
Surr: p-Terphenyl	45.986		80.00		57.5	57	132				

**Qualifiers:**

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

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

**TestCode: 8015\_W\_GPLLPGE**

Sample ID: <b>E110119LCS</b>	SampType: <b>LCS</b>	TestCode: <b>8015_W_GPL</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>78899</b>						
Client ID: <b>LCSW</b>	Batch ID: <b>E111VW002</b>	TestNo: <b>EPA 8015B</b>		Analysis Date: <b>1/19/2011</b>	SeqNo: <b>1239125</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline	934.000	100	1000	0	93.4	67	136				
Surr: Chlorobenzene - d5	49370.000		50000		98.7	74	138				

Sample ID: <b>E110119MB2</b>	SampType: <b>MBLK</b>	TestCode: <b>8015_W_GPL</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>78899</b>						
Client ID: <b>PBW</b>	Batch ID: <b>E111VW002</b>	TestNo: <b>EPA 8015B</b>		Analysis Date: <b>1/19/2011</b>	SeqNo: <b>1239126</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline	ND	100									
Surr: Chlorobenzene - d5	51589.000		50000		103	74	138				

Sample ID: <b>N005171-001EMS</b>	SampType: <b>MS</b>	TestCode: <b>8015_W_GPL</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>78899</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>E111VW002</b>	TestNo: <b>EPA 8015B</b>		Analysis Date: <b>1/19/2011</b>	SeqNo: <b>1239128</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline	963.000	100	1000	0	96.3	67	136				
Surr: Chlorobenzene - d5	48490.000		50000		97.0	74	138				

Sample ID: <b>N005171-001EMSD</b>	SampType: <b>MSD</b>	TestCode: <b>8015_W_GPL</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>78899</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>E111VW002</b>	TestNo: <b>EPA 8015B</b>		Analysis Date: <b>1/19/2011</b>	SeqNo: <b>1239129</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline	1007.000	100	1000	0	101	67	136	963.0	4.47	30	
Surr: Chlorobenzene - d5	50603.000		50000		101	74	138		0	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





**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8260\_WP\_LLPG

Sample ID: <b>D110120LCS</b>	SampType: <b>LCS</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>
Client ID: <b>LCSW</b>	Batch ID: <b>D11VW007</b>	TestNo: <b>EPA 8260B</b>	
Prep Date:		RunNo: <b>78900</b>	
Analysis Date: <b>1/20/2011</b>		SeqNo: <b>1239133</b>	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	28.480	1.0	25.00	0	114	81	129				
1,1,1-Trichloroethane	21.580	1.0	25.00	0	86.3	67	132				
1,1,2,2-Tetrachloroethane	27.010	1.0	25.00	0	108	63	128				
1,1,2-Trichloroethane	25.800	1.0	25.00	0	103	75	125				
1,1-Dichloroethane	25.800	1.0	25.00	0	103	69	133				
1,1-Dichloroethene	25.500	1.0	25.00	0	102	68	130				
1,1-Dichloropropene	24.750	1.0	25.00	0	99.0	73	132				
1,2,3-Trichlorobenzene	26.680	1.0	25.00	0	107	67	137				
1,2,3-Trichloropropane	26.350	1.0	25.00	0	105	73	124				
1,2,4-Trichlorobenzene	27.330	1.0	25.00	0	109	66	134				
1,2,4-Trimethylbenzene	26.830	1.0	25.00	0	107	74	132				
1,2-Dibromo-3-chloropropane	25.560	2.0	25.00	0	102	50	132				
1,2-Dibromoethane	26.400	1.0	25.00	0	106	80	121				
1,2-Dichlorobenzene	26.340	1.0	25.00	0	105	71	122				
1,2-Dichloroethane	26.410	1.0	25.00	0	106	69	132				
1,2-Dichloropropane	24.350	1.0	25.00	0	97.4	75	125				
1,3,5-Trimethylbenzene	26.880	1.0	25.00	0	108	74	131				
1,3-Dichlorobenzene	26.600	1.0	25.00	0	106	75	124				
1,3-Dichloropropane	26.070	1.0	25.00	0	104	73	126				
1,4-Dichlorobenzene	26.530	1.0	25.00	0	106	74	123				
2,2-Dichloropropane	22.780	1.0	25.00	0	91.1	69	137				
2-Butanone	321.090	10	250.0	0	128	49	136				
2-Chlorotoluene	26.580	1.0	25.00	0	106	73	126				
4-Chlorotoluene	26.700	1.0	25.00	0	107	74	128				
4-Isopropyltoluene	27.090	1.0	25.00	0	108	73	130				
4-Methyl-2-pentanone	284.140	10	250.0	0	114	58	134				S
Acetone	345.640	10	250.0	0	138	40	135				
Benzene	25.290	1.0	25.00	0	101	81	122				
Bromobenzene	26.600	1.0	25.00	0	106	76	124				
Bromochloromethane	25.520	1.0	25.00	0	102	65	129				

**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



**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPGE**

Sample ID: <b>D110120LCS</b>	SampType: <b>LCS</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>
Client ID: <b>LCSW</b>	Batch ID: <b>D111VW007</b>	TestNo: <b>EPA 8260B</b>	
Analyte	Result	PQL	SPK value
		SPK Ref Val	%REC
		LowLimit	HighLimit
		RPD Ref Val	RPD Limit
		%RPD	RPDLimit
		Qual	
		RunNo: <b>78900</b>	
		SeqNo: <b>1239133</b>	
		Prep Date:	
		Analysis Date: <b>1/20/2011</b>	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromodichloromethane	22.790	1.0	25.00	0	91.2	76	121				
Bromoform	24.630	1.0	25.00	0	98.5	69	128				
Bromomethane	25.090	1.0	25.00	0	100	53	141				
Carbon disulfide	24.040	1.0	25.00	0	96.2	75	125				
Carbon tetrachloride	21.710	1.0	25.00	0	86.8	66	138				
Chlorobenzene	25.890	1.0	25.00	0	104	81	122				
Chloroethane	27.940	1.0	25.00	0	112	58	133				
Chloroform	26.350	1.0	25.00	0	105	69	128				
Chloromethane	25.350	1.0	25.00	0	101	56	131				
cis-1,2-Dichloroethene	26.180	1.0	25.00	0	105	72	126				
cis-1,3-Dichloropropene	25.610	1.0	25.00	0	102	69	131				
Dibromochloromethane	25.020	1.0	25.00	0	100	66	133				
Dibromomethane	26.720	1.0	25.00	0	107	76	125				
Dichlorodifluoromethane	25.670	1.0	25.00	0	103	53	153				
Ethylbenzene	26.040	1.0	25.00	0	104	73	127				
Freon-113	22.940	1.0	25.00	0	91.8	75	125				
Hexachlorobutadiene	26.680	1.0	25.00	0	107	67	131				
Isopropylbenzene	26.910	1.0	25.00	0	108	75	127				
m,p-Xylene	52.850	1.0	50.00	0	106	76	128				
Methylene chloride	24.140	5.0	25.00	0	96.6	63	137				
MTBE	24.200	1.0	25.00	0	96.8	65	123				
n-Butylbenzene	27.450	1.0	25.00	0	110	69	137				
n-Propylbenzene	27.080	1.0	25.00	0	108	72	129				
Naphthalene	27.040	1.0	25.00	0	108	54	138				
o-Xylene	25.610	1.0	25.00	0	102	80	121				
sec-Butylbenzene	26.870	1.0	25.00	0	107	72	127				
Styrene	26.290	1.0	25.00	0	105	65	134				
tert-Butylbenzene	26.470	1.0	25.00	0	106	70	129				
Tetrachloroethene	26.570	1.0	25.00	0	106	66	128				
Toluene	24.880	2.5	25.00	0	99.5	77	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



**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8260\_WP\_LLPGE

Sample ID: <b>D110120LCS</b>	SampType: <b>LCS</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>	RunNo: <b>78900</b>
Client ID: <b>LCSW</b>	Batch ID: <b>D11VW007</b>	TestNo: <b>EPA 8260B</b>		SeqNo: <b>1239133</b>
Prep Date:		Analysis Date: <b>1/20/2011</b>		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	24.550	1.0	25.00	0	98.2	63	137				
trans-1,3-Dichloropropene	26.570	1.0	25.00	0	106	59	135				
Trichloroethene	24.830	1.0	25.00	0	99.3	70	127				
Trichlorofluoromethane	26.930	1.0	25.00	0	108	57	129				
Vinyl chloride	24.960	1.0	25.00	0	99.8	50	134				
Xylenes, Total	78.460	2.0	75.00	0	105	75	125				
Surr: 1,2-Dichloroethane-d4	25.450		25.00		102	72	119				
Surr: 4-Bromofluorobenzene	25.180		25.00		101	76	119				
Surr: Dibromofluoromethane	25.980		25.00		104	85	115				
Surr: Toluene-d8	25.180		25.00		101	81	120				

Sample ID: <b>N005171-001FMS</b>	SampType: <b>MS</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>	RunNo: <b>78900</b>
Client ID: <b>ZZZZZ</b>	Batch ID: <b>D11VW007</b>	TestNo: <b>EPA 8260B</b>		SeqNo: <b>1239134</b>
Prep Date:		Analysis Date: <b>1/20/2011</b>		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	27.530	1.0	25.00	0	110	81	129				
1,1,1-Trichloroethane	21.010	1.0	25.00	0	84.0	67	132				
1,1,2,2-Tetrachloroethane	21.750	1.0	25.00	0	87.0	63	128				
1,1,2-Trichloroethane	21.240	1.0	25.00	0	85.0	75	125				
1,1-Dichloroethane	24.450	1.0	25.00	0	97.8	69	133				
1,1-Dichloroethene	25.170	1.0	25.00	0	101	68	130				
1,1-Dichloropropene	24.600	1.0	25.00	0	98.4	73	132				
1,2,3-Trichlorobenzene	26.350	1.0	25.00	0	105	67	137				
1,2,3-Trichloropropane	21.390	1.0	25.00	0	85.6	73	124				
1,2,4-Trichlorobenzene	28.240	1.0	25.00	0	113	66	134				
1,2,4-Trimethylbenzene	28.140	1.0	25.00	0	113	74	132				
1,2-Dibromo-3-chloropropane	19.790	2.0	25.00	0	79.2	50	132				
1,2-Dibromoethane	21.300	1.0	25.00	0	85.2	80	121				
1,2-Dichlorobenzene	25.800	1.0	25.00	0	103	71	122				
1,2-Dichloroethane	22.030	1.0	25.00	0	88.1	69	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:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8260\_WP\_LLPGE

Sample ID: <b>N005171-001FMS</b>	SampType: <b>MS</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>
Client ID: <b>ZZZZZ</b>	Batch ID: <b>D111VW007</b>	TestNo: <b>EPA 8260B</b>	
Prep Date:		RunNo: <b>78900</b>	
Analysis Date: <b>1/20/2011</b>		SeqNo: <b>1239134</b>	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloropropane	22.880	1.0	25.00	0	91.5	75	125				
1,3,5-Trimethylbenzene	28.110	1.0	25.00	0	112	74	131				
1,3-Dichlorobenzene	27.290	1.0	25.00	0	109	75	124				
1,3-Dichloropropane	22.850	1.0	25.00	0	91.4	73	126				
1,4-Dichlorobenzene	27.080	1.0	25.00	0	108	74	123				
2,2-Dichloropropane	21.840	1.0	25.00	0	87.4	69	137				
2-Butanone	105.490	10	250.0	0	42.2	49	136				S
2-Chlorotoluene	27.500	1.0	25.00	0	110	73	126				
4-Chlorotoluene	27.670	1.0	25.00	0	111	74	128				
4-Isopropyltoluene	28.970	1.0	25.00	0	116	73	130				
4-Methyl-2-pentanone	187.410	10	250.0	0	75.0	58	134				S
Acetone	59.250	10	250.0	0	23.7	40	135				
Benzene	24.820	1.0	25.00	0	99.3	81	122				
Bromobenzene	26.190	1.0	25.00	0	105	76	124				
Bromochloromethane	21.270	1.0	25.00	0	85.1	65	129				
Bromodichloromethane	21.290	1.0	25.00	0	85.2	76	121				
Bromoform	20.750	1.0	25.00	0	83.0	69	128				
Bromomethane	24.580	1.0	25.00	0	98.3	53	141				
Carbon disulfide	23.590	1.0	25.00	0	94.4	75	125				
Carbon tetrachloride	21.650	1.0	25.00	0	86.6	66	138				
Chlorobenzene	26.200	1.0	25.00	0	105	81	122				
Chloroethane	27.670	1.0	25.00	0	111	58	133				
Chloroform	24.270	1.0	25.00	0	97.1	69	128				
Chloromethane	25.230	1.0	25.00	0	101	56	131				
cis-1,2-Dichloroethene	24.530	1.0	25.00	0	98.1	72	126				
cis-1,3-Dichloropropene	23.300	1.0	25.00	0	93.2	69	131				
Dibromochloromethane	22.480	1.0	25.00	0	89.9	66	133				
Dibromomethane	22.090	1.0	25.00	0	88.4	76	125				
Dichlorodifluoromethane	26.040	1.0	25.00	0	104	53	153				
Ethylbenzene	27.220	1.0	25.00	0	109	73	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



**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8260\_WP\_LLPGE

Sample ID: <b>N005171-001FMS</b>	SampType: <b>MS</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>78900</b>						
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>D111VW007</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>1/20/2011</b>	SeqNo: <b>1239134</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Freon-113	22.100	1.0	25.00	0	88.4	75	125				
Hexachlorobutadiene	29.430	1.0	25.00	0	118	67	131				
Isopropylbenzene	30.530	1.0	25.00	0.4400	120	75	127				
m,p-Xylene	55.350	1.0	50.00	0	111	76	128				
Methylene chloride	22.170	5.0	25.00	0	88.7	63	137				
MTBE	33.880	1.0	25.00	14.30	78.3	65	123				
n-Butylbenzene	29.630	1.0	25.00	0	119	69	137				
n-Propylbenzene	28.790	1.0	25.00	0	115	72	129				
Naphthalene	23.690	1.0	25.00	0	94.8	54	138				
o-Xylene	26.540	1.0	25.00	0	106	80	121				
sec-Butylbenzene	28.370	1.0	25.00	0	113	72	127				
Styrene	26.260	1.0	25.00	0	105	65	134				
tert-Butylbenzene	28.110	1.0	25.00	0	112	70	129				
Tetrachloroethene	28.120	1.0	25.00	0	112	66	128				
Toluene	24.650	2.5	25.00	0	98.6	77	122				
trans-1,2-Dichloroethene	23.460	1.0	25.00	0	93.8	63	137				
trans-1,3-Dichloropropene	22.760	1.0	25.00	0	91.0	59	135				
Trichloroethene	25.180	1.0	25.00	0	101	70	127				
Trichlorofluoromethane	26.280	1.0	25.00	0	105	57	129				
Vinyl chloride	24.820	1.0	25.00	0	99.3	50	134				
Xylenes, Total	81.890	2.0	75.00	0	109	75	125				
Surr: 1,2-Dichloroethane-d4	21.500		25.00		86.0	72	119				
Surr: 4-Bromofluorobenzene	25.920		25.00		104	76	119				
Surr: Dibromofluoromethane	23.740		25.00		95.0	85	115				
Surr: Toluene-d8	25.770		25.00		103	81	120				

Sample ID: <b>N005171-001FMSD</b>	SampType: <b>MSD</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>78900</b>						
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>D111VW007</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>1/20/2011</b>	SeqNo: <b>1239135</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

**Qualifiers:**

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

**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPGE**

Analyte	Result	PQL	SPK value	SPK Ref Val	Units: µg/L	%REC	Prep Date:		RunNo: 78900	RPDLimit	Qual
							LowLimit	HighLimit			
Sample ID: N005171-001FMSD						TestCode: 8260_WP_LL		Analysis Date: 1/20/2011		SeqNo: 1239135	
Client ID: ZZZZZZ						Batch ID: D11VW007		TestNo: EPA 8260B			
1,1,1,2-Tetrachloroethane	27.040	1.0	25.00	0		108	81	129	27.53	1.80	20
1,1,1-Trichloroethane	20.530	1.0	25.00	0		82.1	67	132	21.01	2.31	20
1,1,2,2-Tetrachloroethane	21.560	1.0	25.00	0		86.2	63	128	21.75	0.877	20
1,1,2-Trichloroethane	20.960	1.0	25.00	0		83.8	75	125	21.24	1.33	20
1,1-Dichloroethane	24.210	1.0	25.00	0		96.8	69	133	24.45	0.986	20
1,1-Dichloroethene	24.770	1.0	25.00	0		99.1	68	130	25.17	1.60	20
1,1-Dichloropropene	24.630	1.0	25.00	0		98.5	73	132	24.60	0.122	20
1,2,3-Trichlorobenzene	25.620	1.0	25.00	0		102	67	137	26.35	2.81	20
1,2,3-Trichloropropane	20.800	1.0	25.00	0		83.2	73	124	21.39	2.80	20
1,2,4-Trichlorobenzene	27.900	1.0	25.00	0		112	66	134	28.24	1.21	20
1,2,4-Trimethylbenzene	27.570	1.0	25.00	0		110	74	132	28.14	2.05	20
1,2-Dibromo-3-chloropropane	19.110	2.0	25.00	0		76.4	50	132	19.79	3.50	20
1,2-Dibromoethane	21.570	1.0	25.00	0		86.3	80	121	21.30	1.26	20
1,2-Dichlorobenzene	25.820	1.0	25.00	0		103	71	122	25.80	0.0775	20
1,2-Dichloroethane	22.300	1.0	25.00	0		89.2	69	132	22.03	1.22	20
1,2-Dichloropropane	22.680	1.0	25.00	0		90.7	75	125	22.88	0.878	20
1,3,5-Trimethylbenzene	27.680	1.0	25.00	0		111	74	131	28.11	1.54	20
1,3-Dichlorobenzene	27.080	1.0	25.00	0		108	75	124	27.29	0.772	20
1,3-Dichloropropane	22.280	1.0	25.00	0		89.1	73	126	22.85	2.53	20
1,4-Dichlorobenzene	26.740	1.0	25.00	0		107	74	123	27.08	1.26	20
2,2-Dichloropropane	21.590	1.0	25.00	0		86.4	69	137	21.84	1.15	20
2-Butanone	102.380	10	250.0	0		41.0	49	136	105.5	2.99	20
2-Chlorotoluene	27.080	1.0	25.00	0		108	73	126	27.50	1.54	20
4-Chlorotoluene	27.260	1.0	25.00	0		109	74	128	27.67	1.49	20
4-Isopropyltoluene	28.550	1.0	25.00	0		114	73	130	28.97	1.46	20
4-Methyl-2-pentanone	184.130	10	250.0	0		73.7	58	134	187.4	1.77	20
Acetone	58.000	10	250.0	0		23.2	40	135	59.25	2.13	20
Benzene	24.990	1.0	25.00	0		100	81	122	24.82	0.683	20
Bromobenzene	25.800	1.0	25.00	0		103	76	124	26.19	1.50	20
Bromochloromethane	21.290	1.0	25.00	0		85.2	65	129	21.27	0.0940	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

**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8260\_WP\_LLPGE

Sample ID: N005171-001FMSD	SampType: MSD	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 78900						
Client ID: ZZZZZZ	Batch ID: D111VW007	TestNo: EPA 8260B		Analysis Date: 1/20/2011	SeqNo: 1239135						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromodichloromethane	21.010	1.0	25.00	0	84.0	76	121	21.29	1.32	20	
Bromoform	20.280	1.0	25.00	0	81.1	69	128	20.75	2.29	20	
Bromomethane	24.420	1.0	25.00	0	97.7	53	141	24.58	0.653	20	
Carbon disulfide	23.250	1.0	25.00	0	93.0	75	125	23.59	1.45	20	
Carbon tetrachloride	21.830	1.0	25.00	0	87.3	66	138	21.65	0.828	20	
Chlorobenzene	25.960	1.0	25.00	0	104	81	122	26.20	0.920	20	
Chloroethane	27.690	1.0	25.00	0	111	58	133	27.67	0.0723	20	
Chloroform	24.070	1.0	25.00	0	96.3	69	128	24.27	0.827	20	
Chloromethane	25.010	1.0	25.00	0	100	56	131	25.23	0.876	20	
cis-1,2-Dichloroethene	24.160	1.0	25.00	0	96.6	72	126	24.53	1.52	20	
cis-1,3-Dichloropropene	23.200	1.0	25.00	0	92.8	69	131	23.30	0.430	20	
Dibromochloromethane	21.730	1.0	25.00	0	86.9	66	133	22.48	3.39	20	
Dibromomethane	21.760	1.0	25.00	0	87.0	76	125	22.09	1.51	20	
Dichlorodifluoromethane	25.640	1.0	25.00	0	103	53	153	26.04	1.55	20	
Ethylbenzene	26.820	1.0	25.00	0	107	73	127	27.22	1.48	20	
Freon-113	21.890	1.0	25.00	0	87.6	75	125	22.10	0.955	20	
Hexachlorobutadiene	29.030	1.0	25.00	0	116	67	131	29.43	1.37	20	
Isopropylbenzene	28.150	1.0	25.00	0.4400	111	75	127	30.53	8.11	20	
m,p-Xylene	54.790	1.0	50.00	0	110	76	128	55.35	1.02	20	
Methylene chloride	22.030	5.0	25.00	0	88.1	63	137	22.17	0.633	20	
MTBE	32.720	1.0	25.00	14.30	73.7	65	123	33.88	3.48	20	
n-Butylbenzene	29.220	1.0	25.00	0	117	69	137	29.63	1.39	20	
n-Propylbenzene	28.410	1.0	25.00	0	114	72	129	28.79	1.33	20	
Naphthalene	22.630	1.0	25.00	0	90.5	54	138	23.69	4.58	20	
o-Xylene	26.020	1.0	25.00	0	104	80	121	26.54	1.98	20	
sec-Butylbenzene	28.190	1.0	25.00	0	113	72	127	28.37	0.636	20	
Styrene	25.270	1.0	25.00	0	101	65	134	26.26	3.84	20	
tert-Butylbenzene	27.670	1.0	25.00	0	111	70	129	28.11	1.58	20	
Tetrachloroethene	27.400	1.0	25.00	0	110	66	128	28.12	2.59	20	
Toluene	24.870	2.5	25.00	0	99.5	77	122	24.65	0.889	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



**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPGE**

Sample ID: N005171-001FMSD	SampType: MSD	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 78900						
Client ID: ZZZZZZ	Batch ID: D11VW007	TestNo: EPA 8260B		Analysis Date: 1/20/2011	SeqNo: 1239135						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	23.060	1.0	25.00	0	92.2	63	137	23.46	1.72	20	
trans-1,3-Dichloropropene	22.690	1.0	25.00	0	90.8	59	135	22.76	0.308	20	
Trichloroethene	24.620	1.0	25.00	0	98.5	70	127	25.18	2.25	20	
Trichlorofluoromethane	25.520	1.0	25.00	0	102	57	129	26.28	2.93	20	
Vinyl chloride	24.510	1.0	25.00	0	98.0	50	134	24.82	1.26	20	
Xylenes, Total	80.810	2.0	75.00	0	108	75	125	81.89	1.33	20	
Surr: 1,2-Dichloroethane-d4	21.200		25.00		84.8	72	119		0		
Surr: 4-Bromofluorobenzene	25.590		25.00		102	76	119		0		
Surr: Dibromofluoromethane	23.820		25.00		95.3	85	115		0		
Surr: Toluene-d8	26.200		25.00		105	81	120		0		

Sample ID: D110120MB3	SampType: MBLK	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 78900						
Client ID: PBW	Batch ID: D11VW007	TestNo: EPA 8260B		Analysis Date: 1/20/2011	SeqNo: 1239136						
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	1.0									
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	1.0									

**Qualifiers:**

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



**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8260\_WP\_LLPGE

Sample ID: <b>D110120MB3</b>	SampType: <b>MBLK</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>78900</b>						
Client ID: <b>PBW</b>	Batch ID: <b>D11VW007</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>1/20/2011</b>	SeqNo: <b>1239136</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

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	1.0									
2-Chlorotoluene	ND	1.0									
4-Chlorotoluene	ND	1.0									
4-Isopropyltoluene	ND	1.0									
4-Methyl-2-pentanone	ND	1.0									
Acetone	ND	1.0									
Benzene	ND	1.0									
Bromobenzene	ND	1.0									
Bromochloromethane	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	1.0									
Carbon disulfide	ND	1.0									
Carbon tetrachloride	ND	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									
Dibromochloromethane	ND	1.0									
Dibromomethane	ND	1.0									
Dichlorodifluoromethane	ND	1.0									
Ethylbenzene	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
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out



**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPGE**

Sample ID: <b>D110120MB3</b>	SampType: <b>MBLK</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>78900</b>						
Client ID: <b>PBW</b>	Batch ID: <b>D11VW007</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>1/20/2011</b>	SeqNo: <b>1239136</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Freon-113	ND	1.0									
Hexachlorobutadiene	ND	1.0									
Isopropylbenzene	ND	1.0									
m,p-Xylene	ND	1.0									
Methylene chloride	ND	5.0									
MTBE	ND	1.0									
n-Butylbenzene	ND	1.0									
n-Propylbenzene	ND	1.0									
Naphthalene	ND	1.0									
o-Xylene	ND	1.0									
sec-Butylbenzene	ND	1.0									
Styrene	ND	1.0									
tert-Butylbenzene	ND	1.0									
Tetrachloroethene	ND	1.0									
Toluene	ND	2.5									
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	21.610		25.00		86.4	72		119			
Surr: 4-Bromofluorobenzene	27.200		25.00		109	76		119			
Surr: Dibromofluoromethane	21.940		25.00		87.8	85		115			
Surr: Toluene-d8	26.920		25.00		108	81		120			

**Qualifiers:**

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

**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPGE**

Sample ID: <b>D110125LCS</b>	SampType: <b>LCS</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>78901</b>						
Client ID: <b>LCSW</b>	Batch ID: <b>D111VW009</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>1/25/2011</b>	SeqNo: <b>1239155</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acrolein	231.570	20	250.0	0	92.6	75	125				
Acrylonitrile	246.790	20	250.0	0	98.7	75	125				

Sample ID: <b>N005171-002BMS</b>	SampType: <b>MS</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>78901</b>						
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>D111VW009</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>1/25/2011</b>	SeqNo: <b>1239156</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acrolein	184.970	20	250.0	0	74.0	75	125				S
Acrylonitrile	189.360	20	250.0	0	75.7	75	125				

Sample ID: <b>N005171-002BMSD</b>	SampType: <b>MSD</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>78901</b>						
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>D111VW009</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>1/25/2011</b>	SeqNo: <b>1239157</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acrolein	183.960	20	250.0	0	73.6	75	125	185.0	0.548	20	S
Acrylonitrile	189.940	20	250.0	0	76.0	75	125	189.4	0.306	20	

Sample ID: <b>D110125MB3</b>	SampType: <b>MBLK</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>78901</b>						
Client ID: <b>PBW</b>	Batch ID: <b>D111VW009</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>1/25/2011</b>	SeqNo: <b>1239158</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acrolein	ND	20									
Acrylonitrile	ND	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

**CHAIN OF CUSTODY RECORD**

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

DATE: 01-14-11  
 PAGE: 1 OF 1

LABORATORY CLIENT: <b>Kinder Morgan Energy Partners, Attn: Steve Defibaugh</b>		CLIENT PROJECT NAME/NUMBER: <b>SFPP - Norwalk Site</b>								
ADDRESS: <b>1700 Town &amp; Country Road</b>		PROJECT CONTACT: <b>James Dye</b>								
CITY: <b>Orange, CA 92868</b>		SAMPLER(S) (SIGNATURE): 								
TEL: <b>714-560-4802</b>		P.O. NO.:								
FAX: <b>714-560-4601</b>		QUOTE NO.:								
E-MAIL: <a href="mailto:james.dye@kindermorgan.com">james.dye@kindermorgan.com</a>		LAB USE ONLY: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>								
<b>REQUESTED ANALYSIS</b>										
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48HR <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> 5 DAYS <input type="checkbox"/> 10 DAYS		SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY):								
SPECIAL INSTRUCTIONS: <input type="checkbox"/> RWQCB REPORTING <input type="checkbox"/> ARCHIVE SAMPLES UNTIL / /		SPECIAL INSTRUCTIONS: <b>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.</b>								
LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING DATE	TIME	MAT. RIX	NO. OF CONT.	TPH - g (8015M)	TPH - lb (8015M)	VOCs, Full List (8260B)	Comments
	INF-01-14	Influent	01-14-11	1400	WW	7	X	X	X	Temperature* = <u>3.4°C</u>  (Temp. as sampled*)  Monthly
Relinquished by (Signature):		Received by (Signature):		Date: <u>1/14/11</u>		Time: <u>2:30 PM</u>				
Relinquished by (Signature):		Received by (Signature):		Date: <u>1/14/11</u>		Time: <u>1:02</u>				
Relinquished by (Signature):		Received by (Signature):		Date: <u>1/15/11</u>		Time: <u>0900</u>				


1005196-1

Revised: 01/11/11

**CHAIN OF CUSTODY RECORD**

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]


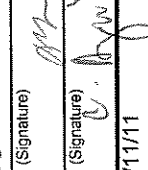

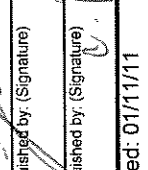

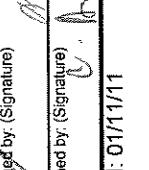
DATE: 01-14-11  
 PAGE: 1 OF 1

LABORATORY CLIENT: <b>Kinder Morgan Energy Partners, Attn: Steve Defibaugh</b> ADDRESS: <b>1100 Town &amp; Country Road</b> CITY: <b>Orange, CA 92868</b> TEL: <b>714-560-4802</b> FAX: <b>714-560-4601</b> E-MAIL: <a href="mailto:marlon.defibaugh@kemp.com">marlon.defibaugh@kemp.com</a>		P.O. NO.: QUOTE NO.: LAB USE ONLY <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
CLIENT PROJECT NAME/NUMBER: <b>SFPP - Norwalk Site</b> PROJECT CONTACT: <b>James Dye</b> SAMPLER(S): (SIGNATURE) 	TURNAROUND TIME <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48HR <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> 5 DAYS <input type="checkbox"/> 10 DAYS SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY) <input type="checkbox"/> RWQCS REPORTING <input type="checkbox"/> ARCHIVE SAMPLES UNTIL / /	

**REQUESTED ANALYSIS**

**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.

LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING		NO. OF CONT.	COMMENTS
			DATE	TIME		
	INF-01-14	Influent	01-14-11	1400	WW	7 TPH - g (8015M) X TPH - lb (8015M) X VOCs, Full List (8260B) X Temperature* = 3.4°C (Temp. as sampled*) Monthly

Relinquished by: (Signature) 	Received by: (Signature) 	Date: <u>1/14/11</u>	Time: <u>2:30 PM</u>
Relinquished by: (Signature) 	Received by: (Signature) 	Date: <u>1/14/11</u>	Time: <u>1:02</u>
Relinquished by: (Signature) 	Received by: (Signature) 	Date: <u>1/15/11</u>	Time: <u>0900</u>

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: 1/15/2011 Workorder: N005196  
 Rep sample Temp (Deg C): 3.4 IR Gun ID: 1  
 Temp Blank: Yes  No   
 Carrier name: ontrac  
 Last 4 digits of Tracking No.: 0807 Packing Material Used: Bubble Wrap  
 Cooling process:  Ice  Ice Pack  Dry Ice  Other  None

- |   |   |                             |   |
|---|---|-----------------------------|---|
| 1. Shipping container/cooler in good condition?   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present   |
| 2. Custody seals intact, signed, dated on shipping container/cooler?                      | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/>               |
| 3. Custody seals intact on sample bottles?  | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/>               |
| 4. Chain of custody present?  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 5. Sampler's name present in COC?   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 6. Chain of custody signed when relinquished and received?                                | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 7. Chain of custody agrees with sample labels?  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 8. Samples in proper container/bottle?  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 9. Sample containers intact?  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 10. Sufficient sample volume for indicated test?  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 11. All samples received within holding time?   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 12. Temperature of rep sample or Temp Blank within acceptable limit?                      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA  |
| 13. Water - VOA vials have zero headspace?  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA  |
| 14. Water - pH acceptable upon receipt?<br>Example: pH > 12 for (CN,S); pH < 2 for Metals | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/>                        |
| 15. Did the bottle labels indicate correct preservatives used?                            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> <i>as f MC 1/17/11</i> |
| 16. Were there Non-Conformance issues at login?   | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/>                        |
| Was Client notified?  | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/>                        |

Comments:

Checklist Completed By: MBC *[Signature]* 1/15/11

Reviewed By: *as* 1/17/11



800-334-5000

Call For A Pickup!

Account Number B10246440807

Number

Date

FROM (Company)

ENVIRO TREATMENT & TECHNOLOGY\*

Street Address

3020 WALNUT AVE

SUITE

City

SPRING HILL

State

CA

Phone Number

761-789-4048

Zip Code (Required)

90355

PLEASE PRINT IN BLOCK LETTERS with Blue / Black Ink

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

Street Address

ATL

Suite #

151

City

UNAS VEGAS

State

NV

Zip Code (Required)

89118

Phone Number

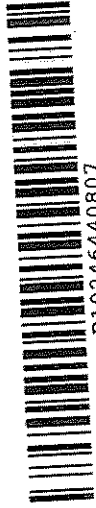
702-207-205

Recipient's Name

MAVWOOD C.

Shipper's Ref. #

CA2M HILL - NOR WALK



B10246440807

<b>Service Options</b> *To be used in conjunction with Service. Service will be applied. *Minimum charge weight is 300 lbs. *Delivery by 3:00 P.M. *Note: delivery times for all services may be later in some areas. Check service guide or visit our website for details.	<b>Billing Information</b> If none is selected, shipper will be invoiced.	<b>Weight</b>
<input type="checkbox"/> SUNRISE - BY 10:30 AM*	<input type="checkbox"/> Bill Shipper's Account	8 oz. Letter
<input type="checkbox"/> SUNRISE GOLD - BY 8:00 AM*	<input type="checkbox"/> Bill Other Acct #	or
<input type="checkbox"/> HEAVYWEIGHT**		Weight lbs.
<input type="checkbox"/> Saturday Delivery - Extra Charge (See Service Guide for details)	Dim weight	(Subject to)
<input type="checkbox"/> HOLD FOR PICKUP This shipment requires a delivery signature		
<input type="checkbox"/> Declared Value \$ (Maximum \$25,000)		



800-334-5000

WWW.CALOVER.COM



B10246440807

VEG 89118  
LOS VEGAS

February 01, 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.: N005196

RE: SFPP - Norwalk Site

Attention: Daniel Jablonski

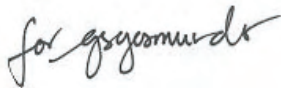
Enclosed are the results for sample(s) received on January 15, 2011 by Advanced Technology Laboratories, Inc. . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

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

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

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

Sincerely,



Jose Tenorio Jr.  
Laboratory Director

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





**Advanced Technology Laboratories, Inc.**

**ANALYTICAL RESULTS**

Print Date: 01-Feb-11

**CLIENT:** CH2M HILL  
**Lab Order:** N005196  
**Project:** SFPP - Norwalk Site  
**Lab ID:** N005196-001B

**Client Sample ID:** INF-01-14  
**Collection Date:** 1/14/2011 2:00:00 PM  
**Matrix:** WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
----------	--------	-----	-----	------	-------	----	---------------

**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

**EPA 8260B**

RunID:	MS1_110120B	QC Batch:	D11VW007	PrepDate:	Analyst:	QBM
1,1,1,2-Tetrachloroethane	ND	0.061	1.0	µg/L	1	1/20/2011 02:44 PM
1,1,1-Trichloroethane	ND	0.068	1.0	µg/L	1	1/20/2011 02:44 PM
1,1,2,2-Tetrachloroethane	ND	0.054	1.0	µg/L	1	1/20/2011 02:44 PM
1,1,2-Trichloroethane	ND	0.083	1.0	µg/L	1	1/20/2011 02:44 PM
1,1-Dichloroethane	ND	0.099	0.50	µg/L	1	1/20/2011 02:44 PM
1,1-Dichloroethene	ND	0.094	1.0	µg/L	1	1/20/2011 02:44 PM
1,1-Dichloropropene	ND	0.082	1.0	µg/L	1	1/20/2011 02:44 PM
1,2,3-Trichlorobenzene	ND	0.10	1.0	µg/L	1	1/20/2011 02:44 PM
1,2,3-Trichloropropane	ND	0.12	1.0	µg/L	1	1/20/2011 02:44 PM
1,2,4-Trichlorobenzene	ND	0.12	1.0	µg/L	1	1/20/2011 02:44 PM
1,2,4-Trimethylbenzene	47	0.095	1.0	µg/L	1	1/20/2011 02:44 PM
1,2-Dibromo-3-chloropropane	ND	0.15	2.0	µg/L	1	1/20/2011 02:44 PM
1,2-Dibromoethane	ND	0.14	1.0	µg/L	1	1/20/2011 02:44 PM
1,2-Dichlorobenzene	ND	0.070	1.0	µg/L	1	1/20/2011 02:44 PM
1,2-Dichloroethane	ND	0.17	0.50	µg/L	1	1/20/2011 02:44 PM
1,2-Dichloropropane	ND	0.085	1.0	µg/L	1	1/20/2011 02:44 PM
1,3,5-Trimethylbenzene	14	0.087	1.0	µg/L	1	1/20/2011 02:44 PM
1,3-Dichlorobenzene	ND	0.090	1.0	µg/L	1	1/20/2011 02:44 PM
1,3-Dichloropropane	ND	0.074	1.0	µg/L	1	1/20/2011 02:44 PM
1,4-Dichlorobenzene	ND	0.092	1.0	µg/L	1	1/20/2011 02:44 PM
2,2-Dichloropropane	ND	0.061	1.0	µg/L	1	1/20/2011 02:44 PM
2-Butanone	ND	1.0	10	µg/L	1	1/20/2011 02:44 PM
2-Chlorotoluene	ND	0.080	1.0	µg/L	1	1/20/2011 02:44 PM
4-Chlorotoluene	ND	0.10	1.0	µg/L	1	1/20/2011 02:44 PM
4-Isopropyltoluene	ND	0.080	1.0	µg/L	1	1/20/2011 02:44 PM
4-Methyl-2-pentanone	ND	0.76	10	µg/L	1	1/20/2011 02:44 PM
Acetone	ND	1.6	10	µg/L	1	1/20/2011 02:44 PM
Acrolein	ND	4.3	20	µg/L	1	1/25/2011 11:52 PM
Acrylonitrile	ND	0.61	20	µg/L	1	1/25/2011 11:52 PM
Benzene	3700	7.5	100	µg/L	100	1/20/2011 01:34 PM
Bromobenzene	ND	0.082	1.0	µg/L	1	1/20/2011 02:44 PM
Bromochloromethane	ND	0.15	1.0	µg/L	1	1/20/2011 02:44 PM
Bromodichloromethane	ND	0.063	1.0	µg/L	1	1/20/2011 02:44 PM
Bromoform	ND	0.086	1.0	µg/L	1	1/20/2011 02:44 PM
Bromomethane	ND	0.13	1.0	µg/L	1	1/20/2011 02:44 PM

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



**Advanced Technology Laboratories, Inc.**

**ANALYTICAL RESULTS**

Print Date: 01-Feb-11

**CLIENT:** CH2M HILL  
**Lab Order:** N005196  
**Project:** SFPP - Norwalk Site  
**Lab ID:** N005196-001B

**Client Sample ID:** INF-01-14  
**Collection Date:** 1/14/2011 2:00:00 PM  
**Matrix:** WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
----------	--------	-----	-----	------	-------	----	---------------

**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

**EPA 8260B**

RunID: <b>MS1_110120B</b>	QC Batch: <b>D11VW007</b>	PrepDate:	Analyst: <b>QBM</b>			
Carbon disulfide	ND	0.054	1.0	µg/L	1	1/20/2011 02:44 PM
Carbon tetrachloride	ND	0.10	1.0	µg/L	1	1/20/2011 02:44 PM
Chlorobenzene	ND	0.092	1.0	µg/L	1	1/20/2011 02:44 PM
Chloroethane	ND	0.14	1.0	µg/L	1	1/20/2011 02:44 PM
Chloroform	ND	0.058	1.0	µg/L	1	1/20/2011 02:44 PM
Chloromethane	ND	0.054	1.0	µg/L	1	1/20/2011 02:44 PM
cis-1,2-Dichloroethene	ND	0.11	1.0	µg/L	1	1/20/2011 02:44 PM
cis-1,3-Dichloropropene	ND	0.10	1.0	µg/L	1	1/20/2011 02:44 PM
Dibromochloromethane	ND	0.061	1.0	µg/L	1	1/20/2011 02:44 PM
Dibromomethane	ND	0.15	1.0	µg/L	1	1/20/2011 02:44 PM
Dichlorodifluoromethane	ND	0.12	1.0	µg/L	1	1/20/2011 02:44 PM
Ethylbenzene	56	0.051	1.0	µg/L	1	1/20/2011 02:44 PM
Freon-113	ND	0.080	1.0	µg/L	1	1/20/2011 02:44 PM
Hexachlorobutadiene	ND	0.17	1.0	µg/L	1	1/20/2011 02:44 PM
Isopropylbenzene	17	0.057	1.0	µg/L	1	1/20/2011 02:44 PM
m,p-Xylene	180	0.17	1.0	µg/L	1	1/20/2011 02:44 PM
Methylene chloride	ND	0.10	5.0	µg/L	1	1/20/2011 02:44 PM
MTBE	280	0.89	10	µg/L	10	1/20/2011 01:58 PM
n-Butylbenzene	2.3	0.082	1.0	µg/L	1	1/20/2011 02:44 PM
n-Propylbenzene	33	0.087	1.0	µg/L	1	1/20/2011 02:44 PM
Naphthalene	94	0.056	1.0	µg/L	1	1/20/2011 02:44 PM
o-Xylene	43	0.077	1.0	µg/L	1	1/20/2011 02:44 PM
sec-Butylbenzene	3.1	0.098	1.0	µg/L	1	1/20/2011 02:44 PM
Styrene	ND	0.072	1.0	µg/L	1	1/20/2011 02:44 PM
tert-Butylbenzene	ND	0.062	1.0	µg/L	1	1/20/2011 02:44 PM
Tetrachloroethene	ND	0.13	1.0	µg/L	1	1/20/2011 02:44 PM
Toluene	110	0.12	2.5	µg/L	1	1/20/2011 02:44 PM
trans-1,2-Dichloroethene	ND	0.094	1.0	µg/L	1	1/20/2011 02:44 PM
trans-1,3-Dichloropropene	ND	0.10	1.0	µg/L	1	1/20/2011 02:44 PM
Trichloroethene	ND	0.060	1.0	µg/L	1	1/20/2011 02:44 PM
Trichlorofluoromethane	ND	0.097	1.0	µg/L	1	1/20/2011 02:44 PM
Vinyl chloride	ND	0.12	1.0	µg/L	1	1/20/2011 02:44 PM
Xylenes, Total	220	1.5	2.0	µg/L	1	1/20/2011 02:44 PM
Surr: 1,2-Dichloroethane-d4	108	0	72-119	%REC	1	1/20/2011 02:44 PM
Surr: 1,2-Dichloroethane-d4	92.1	0	72-119	%REC	100	1/20/2011 01:34 PM

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



**CLIENT:** CH2M HILL  
**Lab Order:** N005196  
**Project:** SFPP - Norwalk Site  
**Lab ID:** N005196-001B

**Client Sample ID:** INF-01-14  
**Collection Date:** 1/14/2011 2:00:00 PM  
**Matrix:** WASTEWATER

Analyses	Result	MDL	PQL	Qual Units	DF	Date Analyzed
----------	--------	-----	-----	------------	----	---------------

**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

**EPA 8260B**

RunID: <b>MS1_110120B</b>	QC Batch: <b>D11VW007</b>	PrepDate:	Analyst: <b>QBM</b>
Surr: 1,2-Dichloroethane-d4	104 0	72-119 %REC	10 1/20/2011 01:58 PM
Surr: 4-Bromofluorobenzene	108 0	76-119 %REC	1 1/20/2011 02:44 PM
Surr: 4-Bromofluorobenzene	111 0	76-119 %REC	10 1/20/2011 01:58 PM
Surr: 4-Bromofluorobenzene	111 0	76-119 %REC	100 1/20/2011 01:34 PM
Surr: Dibromofluoromethane	104 0	85-115 %REC	1 1/20/2011 02:44 PM
Surr: Dibromofluoromethane	107 0	85-115 %REC	10 1/20/2011 01:58 PM
Surr: Dibromofluoromethane	99.5 0	85-115 %REC	100 1/20/2011 01:34 PM
Surr: Toluene-d8	109 0	81-120 %REC	1 1/20/2011 02:44 PM
Surr: Toluene-d8	110 0	81-120 %REC	10 1/20/2011 01:58 PM
Surr: Toluene-d8	110 0	81-120 %REC	100 1/20/2011 01:34 PM

<b>Qualifiers:</b>	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



**ANALYTICAL QC SUMMARY REPORT**

**CLIENT:** CH2M HILL

**Work Order:** N005196

**Project:** SFPP - Norwalk Site

**TestCode:** 8260\_WP\_LLPGE

Sample ID:	D110120LCS	SampType:	LCS	TestCode:	8260_WP_LL	Units:	µg/L	Prep Date:	RunNo:	78900	
Client ID:	LCSW	Batch ID:	D11VW007	TestNo:	EPA 8260B			Analysis Date:	SeqNo:	1239133	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	28.480	1.0	25.00	0	114	81	129				
1,1,1-Trichloroethane	21.580	1.0	25.00	0	86.3	67	132				
1,1,2,2-Tetrachloroethane	27.010	1.0	25.00	0	108	63	128				
1,1,2-Trichloroethane	25.800	1.0	25.00	0	103	75	125				
1,1-Dichloroethane	25.800	0.50	25.00	0	103	69	133				
1,1-Dichloroethene	25.500	1.0	25.00	0	102	68	130				
1,1-Dichloropropene	24.750	1.0	25.00	0	99.0	73	132				
1,2,3-Trichlorobenzene	26.680	1.0	25.00	0	107	67	137				
1,2,3-Trichloropropane	26.350	1.0	25.00	0	105	73	124				
1,2,4-Trichlorobenzene	27.330	1.0	25.00	0	109	66	134				
1,2,4-Trimethylbenzene	26.830	1.0	25.00	0	107	74	132				
1,2-Dibromo-3-chloropropane	25.560	2.0	25.00	0	102	50	132				
1,2-Dibromoethane	26.400	1.0	25.00	0	106	80	121				
1,2-Dichlorobenzene	26.340	1.0	25.00	0	105	71	122				
1,2-Dichloroethane	26.410	0.50	25.00	0	106	69	132				
1,2-Dichloropropane	24.350	1.0	25.00	0	97.4	75	125				
1,3,5-Trimethylbenzene	26.880	1.0	25.00	0	108	74	131				
1,3-Dichlorobenzene	26.600	1.0	25.00	0	106	75	124				
1,3-Dichloropropane	26.070	1.0	25.00	0	104	73	126				
1,4-Dichlorobenzene	26.530	1.0	25.00	0	106	74	123				
2,2-Dichloropropane	22.780	1.0	25.00	0	91.1	69	137				
2-Butanone	321.090	10	250.0	0	128	49	136				
2-Chlorotoluene	26.580	1.0	25.00	0	106	73	126				
4-Chlorotoluene	26.700	1.0	25.00	0	107	74	128				
4-Isopropyltoluene	27.090	1.0	25.00	0	108	73	130				
4-Methyl-2-pentanone	284.140	10	250.0	0	114	58	134				S
Acetone	345.640	10	250.0	0	138	40	135				
Benzene	25.290	1.0	25.00	0	101	81	122				
Bromobenzene	26.600	1.0	25.00	0	106	76	124				

**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



**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPGE**

Sample ID: <b>D110120LCS</b>	SampType: <b>LCS</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>
Client ID: <b>LCSW</b>	Batch ID: <b>D11VW007</b>	TestNo: <b>EPA 8260B</b>	
Analyte	Result	PQL	SPK value
		SPK Ref Val	SPK Ref Val
		%REC	LowLimit
		HighLimit	RPD Ref Val
		%RPD	RPDLimit
		Qual	
		RunNo: <b>78900</b>	
		SeqNo: <b>1239133</b>	
		Prep Date:	
		Analysis Date: <b>1/20/2011</b>	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromochloromethane	25.520	1.0	25.00	0	102	65	129				
Bromodichloromethane	22.790	1.0	25.00	0	91.2	76	121				
Bromoform	24.630	1.0	25.00	0	98.5	69	128				
Bromomethane	25.090	1.0	25.00	0	100	53	141				
Carbon disulfide	24.040	1.0	25.00	0	96.2	75	125				
Carbon tetrachloride	21.710	1.0	25.00	0	86.8	66	138				
Chlorobenzene	25.890	1.0	25.00	0	104	81	122				
Chloroethane	27.940	1.0	25.00	0	112	58	133				
Chloroform	26.350	1.0	25.00	0	105	69	128				
Chloromethane	25.350	1.0	25.00	0	101	56	131				
cis-1,2-Dichloroethene	26.180	1.0	25.00	0	105	72	126				
cis-1,3-Dichloropropene	25.610	1.0	25.00	0	102	69	131				
Dibromochloromethane	25.020	1.0	25.00	0	100	66	133				
Dibromomethane	26.720	1.0	25.00	0	107	76	125				
Dichlorodifluoromethane	25.670	1.0	25.00	0	103	53	153				
Ethylbenzene	26.040	1.0	25.00	0	104	73	127				
Freon-113	22.940	1.0	25.00	0	91.8	75	125				
Hexachlorobutadiene	26.680	1.0	25.00	0	107	67	131				
Isopropylbenzene	26.910	1.0	25.00	0	108	75	127				
m,p-Xylene	52.850	1.0	50.00	0	106	76	128				
Methylene chloride	24.140	5.0	25.00	0	96.6	63	137				
MTBE	24.200	1.0	25.00	0	96.8	65	123				
n-Butylbenzene	27.450	1.0	25.00	0	110	69	137				
n-Propylbenzene	27.080	1.0	25.00	0	108	72	129				
Naphthalene	27.040	1.0	25.00	0	108	54	138				
o-Xylene	25.610	1.0	25.00	0	102	80	121				
sec-Butylbenzene	26.870	1.0	25.00	0	107	72	127				
Styrene	26.290	1.0	25.00	0	105	65	134				
tert-Butylbenzene	26.470	1.0	25.00	0	106	70	129				
Tetrachloroethene	26.570	1.0	25.00	0	106	66	128				

**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

**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPGE**

Sample ID: <b>D110120LCS</b>	SampType: <b>LCS</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>78900</b>						
Client ID: <b>LCSW</b>	Batch ID: <b>D111VW007</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>1/20/2011</b>	SeqNo: <b>1239133</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	24.880	2.5	25.00	0	99.5	77	122				
trans-1,2-Dichloroethene	24.550	1.0	25.00	0	98.2	63	137				
trans-1,3-Dichloropropene	26.570	1.0	25.00	0	106	59	135				
Trichloroethene	24.830	1.0	25.00	0	99.3	70	127				
Trichlorofluoromethane	26.930	1.0	25.00	0	108	57	129				
Vinyl chloride	24.960	1.0	25.00	0	99.8	50	134				
Xylenes, Total	78.460	2.0	75.00	0	105	75	125				
Surr: 1,2-Dichloroethane-d4	25.450		25.00		102	72	119				
Surr: 4-Bromofluorobenzene	25.180		25.00		101	76	119				
Surr: Dibromofluoromethane	25.980		25.00		104	85	115				
Surr: Toluene-d8	25.180		25.00		101	81	120				

Sample ID: <b>N005171-001FMS</b>	SampType: <b>MS</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>78900</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>D111VW007</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>1/20/2011</b>	SeqNo: <b>1239134</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	27.530	1.0	25.00	0	110	81	129				
1,1,1-Trichloroethane	21.010	1.0	25.00	0	84.0	67	132				
1,1,2,2-Tetrachloroethane	21.750	1.0	25.00	0	87.0	63	128				
1,1,2-Trichloroethane	21.240	1.0	25.00	0	85.0	75	125				
1,1-Dichloroethane	24.450	0.50	25.00	0	97.8	69	133				
1,1-Dichloroethene	25.170	1.0	25.00	0	101	68	130				
1,1-Dichloropropene	24.600	1.0	25.00	0	98.4	73	132				
1,2,3-Trichlorobenzene	26.350	1.0	25.00	0	105	67	137				
1,2,3-Trichloropropane	21.390	1.0	25.00	0	85.6	73	124				
1,2,4-Trichlorobenzene	28.240	1.0	25.00	0	113	66	134				
1,2,4-Trimethylbenzene	28.140	1.0	25.00	0	113	74	132				
1,2-Dibromo-3-chloropropane	19.790	2.0	25.00	0	79.2	50	132				
1,2-Dibromoethane	21.300	1.0	25.00	0	85.2	80	121				
1,2-Dichlorobenzene	25.800	1.0	25.00	0	103	71	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
- H RPD outside accepted recovery limits
- R Calculations are based on raw values



**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8260\_WP\_LLPG

Sample ID: <b>N005171-001FMS</b>	SampType: <b>MS</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>
Client ID: <b>ZZZZZ</b>	Batch ID: <b>D111VW007</b>	TestNo: <b>EPA 8260B</b>	
Prep Date:		RunNo: <b>78900</b>	
Analysis Date: <b>1/20/2011</b>		SeqNo: <b>1239134</b>	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloroethane	22.030	0.50	25.00	0	88.1	69	132				
1,2-Dichloropropane	22.880	1.0	25.00	0	91.5	75	125				
1,3,5-Trimethylbenzene	28.110	1.0	25.00	0	112	74	131				
1,3-Dichlorobenzene	27.290	1.0	25.00	0	109	75	124				
1,3-Dichloropropane	22.850	1.0	25.00	0	91.4	73	126				
1,4-Dichlorobenzene	27.080	1.0	25.00	0	108	74	123				
2,2-Dichloropropane	21.840	1.0	25.00	0	87.4	69	137				
2-Butanone	105.490	10	250.0	0	42.2	49	136				S
2-Chlorotoluene	27.500	1.0	25.00	0	110	73	126				
4-Chlorotoluene	27.670	1.0	25.00	0	111	74	128				
4-Isopropyltoluene	28.970	1.0	25.00	0	116	73	130				
4-Methyl-2-pentanone	187.410	10	250.0	0	75.0	58	134				S
Acetone	59.250	10	250.0	0	23.7	40	135				
Benzene	24.820	1.0	25.00	0	99.3	81	122				
Bromobenzene	26.190	1.0	25.00	0	105	76	124				
Bromochloromethane	21.270	1.0	25.00	0	85.1	65	129				
Bromodichloromethane	21.290	1.0	25.00	0	85.2	76	121				
Bromoform	20.750	1.0	25.00	0	83.0	69	128				
Bromomethane	24.580	1.0	25.00	0	98.3	53	141				
Carbon disulfide	23.590	1.0	25.00	0	94.4	75	125				
Carbon tetrachloride	21.650	1.0	25.00	0	86.6	66	138				
Chlorobenzene	26.200	1.0	25.00	0	105	81	122				
Chloroethane	27.670	1.0	25.00	0	111	58	133				
Chloroform	24.270	1.0	25.00	0	97.1	69	128				
Chloromethane	25.230	1.0	25.00	0	101	56	131				
cis-1,2-Dichloroethene	24.530	1.0	25.00	0	98.1	72	126				
cis-1,3-Dichloropropene	23.300	1.0	25.00	0	93.2	69	131				
Dibromochloromethane	22.480	1.0	25.00	0	89.9	66	133				
Dibromomethane	22.090	1.0	25.00	0	88.4	76	125				
Dichlorodifluoromethane	26.040	1.0	25.00	0	104	53	153				

**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

**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8260\_WP\_LLPGE

Sample ID: <b>N005171-001FMS</b>	SampType: <b>MS</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>D111VW007</b>	TestNo: <b>EPA 8260B</b>	
Prep Date:		RunNo: <b>78900</b>	
Analysis Date: <b>1/20/2011</b>		SeqNo: <b>1239134</b>	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	27.220	1.0	25.00	0	109	73	127				
Freon-113	22.100	1.0	25.00	0	88.4	75	125				
Hexachlorobutadiene	29.430	1.0	25.00	0	118	67	131				
Isopropylbenzene	30.530	1.0	25.00	0.4400	120	75	127				
m,p-Xylene	55.350	1.0	50.00	0	111	76	128				
Methylene chloride	22.170	5.0	25.00	0	88.7	63	137				
MTBE	33.880	1.0	25.00	14.30	78.3	65	123				
n-Butylbenzene	29.630	1.0	25.00	0	119	69	137				
n-Propylbenzene	28.790	1.0	25.00	0	115	72	129				
Naphthalene	23.690	1.0	25.00	0	94.8	54	138				
o-Xylene	26.540	1.0	25.00	0	106	80	121				
sec-Butylbenzene	28.370	1.0	25.00	0	113	72	127				
Styrene	26.260	1.0	25.00	0	105	65	134				
tert-Butylbenzene	28.110	1.0	25.00	0	112	70	129				
Tetrachloroethene	28.120	1.0	25.00	0	112	66	128				
Toluene	24.650	2.5	25.00	0	98.6	77	122				
trans-1,2-Dichloroethene	23.460	1.0	25.00	0	93.8	63	137				
trans-1,3-Dichloropropene	22.760	1.0	25.00	0	91.0	59	135				
Trichloroethene	25.180	1.0	25.00	0	101	70	127				
Trichlorofluoromethane	26.280	1.0	25.00	0	105	57	129				
Vinyl chloride	24.820	1.0	25.00	0	99.3	50	134				
Xylenes, Total	81.890	2.0	75.00	0	109	75	125				
Surr: 1,2-Dichloroethane-d4	21.500		25.00		86.0	72	119				
Surr: 4-Bromofluorobenzene	25.920		25.00		104	76	119				
Surr: Dibromofluoromethane	23.740		25.00		95.0	85	115				
Surr: Toluene-d8	25.770		25.00		103	81	120				

**Qualifiers:**

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



**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPGE**

Analyte	Result	PQL	SPK value	SPK Ref Val	Units: µg/L	%REC	Prep Date:		HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
							LowLimit	HighLimit					
1,1,1,2-Tetrachloroethane	27.040	1.0	25.00	0		108	81	129	27.53	1.80	20		
1,1,1-Trichloroethane	20.530	1.0	25.00	0		82.1	67	132	21.01	2.31	20		
1,1,2,2-Tetrachloroethane	21.560	1.0	25.00	0		86.2	63	128	21.75	0.877	20		
1,1,2-Trichloroethane	20.960	1.0	25.00	0		83.8	75	125	21.24	1.33	20		
1,1-Dichloroethane	24.210	0.50	25.00	0		96.8	69	133	24.45	0.986	20		
1,1-Dichloroethene	24.770	1.0	25.00	0		99.1	68	130	25.17	1.60	20		
1,1-Dichloropropene	24.630	1.0	25.00	0		98.5	73	132	24.60	0.122	20		
1,2,3-Trichlorobenzene	25.620	1.0	25.00	0		102	67	137	26.35	2.81	20		
1,2,3-Trichloropropane	20.800	1.0	25.00	0		83.2	73	124	21.39	2.80	20		
1,2,4-Trichlorobenzene	27.900	1.0	25.00	0		112	66	134	28.24	1.21	20		
1,2,4-Trimethylbenzene	27.570	1.0	25.00	0		110	74	132	28.14	2.05	20		
1,2-Dibromo-3-chloropropane	19.110	2.0	25.00	0		76.4	50	132	19.79	3.50	20		
1,2-Dibromoethane	21.570	1.0	25.00	0		86.3	80	121	21.30	1.26	20		
1,2-Dichlorobenzene	25.820	1.0	25.00	0		103	71	122	25.80	0.0775	20		
1,2-Dichloroethane	22.300	0.50	25.00	0		89.2	69	132	22.03	1.22	20		
1,2-Dichloropropane	22.680	1.0	25.00	0		90.7	75	125	22.88	0.878	20		
1,3,5-Trimethylbenzene	27.680	1.0	25.00	0		111	74	131	28.11	1.54	20		
1,3-Dichlorobenzene	27.080	1.0	25.00	0		108	75	124	27.29	0.772	20		
1,3-Dichloropropane	22.280	1.0	25.00	0		89.1	73	126	22.85	2.53	20		
1,4-Dichlorobenzene	26.740	1.0	25.00	0		107	74	123	27.08	1.26	20		
2,2-Dichloropropane	21.590	1.0	25.00	0		86.4	69	137	21.84	1.15	20		
2-Butanone	102.380	10	250.0	0		41.0	49	136	105.5	2.99	20	S	
2-Chlorotoluene	27.080	1.0	25.00	0		108	73	126	27.50	1.54	20		
4-Chlorotoluene	27.260	1.0	25.00	0		109	74	128	27.67	1.49	20		
4-Isopropyltoluene	28.550	1.0	25.00	0		114	73	130	28.97	1.46	20		
4-Methyl-2-pentanone	184.130	10	250.0	0		73.7	58	134	187.4	1.77	20		
Acetone	58.000	10	250.0	0		23.2	40	135	59.25	2.13	20	S	
Benzene	24.990	1.0	25.00	0		100	81	122	24.82	0.683	20		
Bromobenzene	25.800	1.0	25.00	0		103	76	124	26.19	1.50	20		
Bromochloromethane	21.290	1.0	25.00	0		85.2	65	129	21.27	0.0940	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

**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPGE**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	Prep Date:	
												TestCode: 8260_WP_LL	Units: µg/L
Client ID: ZZZZZZ	Batch ID: D11VW007											RunNo: 78900	SeqNo: 1239135
Bromodichloromethane	21.010	1.0	25.00	0	84.0	76	121	21.29	1.32	20			
Bromoform	20.280	1.0	25.00	0	81.1	69	128	20.75	2.29	20			
Bromomethane	24.420	1.0	25.00	0	97.7	53	141	24.58	0.653	20			
Carbon disulfide	23.250	1.0	25.00	0	93.0	75	125	23.59	1.45	20			
Carbon tetrachloride	21.830	1.0	25.00	0	87.3	66	138	21.65	0.828	20			
Chlorobenzene	25.960	1.0	25.00	0	104	81	122	26.20	0.920	20			
Chloroethane	27.690	1.0	25.00	0	111	58	133	27.67	0.0723	20			
Chloroform	24.070	1.0	25.00	0	96.3	69	128	24.27	0.827	20			
Chloromethane	25.010	1.0	25.00	0	100	56	131	25.23	0.876	20			
cis-1,2-Dichloroethene	24.160	1.0	25.00	0	96.6	72	126	24.53	1.52	20			
cis-1,3-Dichloropropene	23.200	1.0	25.00	0	92.8	69	131	23.30	0.430	20			
Dibromochloromethane	21.730	1.0	25.00	0	86.9	66	133	22.48	3.39	20			
Dibromomethane	21.760	1.0	25.00	0	87.0	76	125	22.09	1.51	20			
Dichlorodifluoromethane	25.640	1.0	25.00	0	103	53	153	26.04	1.55	20			
Ethylbenzene	26.820	1.0	25.00	0	107	73	127	27.22	1.48	20			
Freon-113	21.890	1.0	25.00	0	87.6	75	125	22.10	0.955	20			
Hexachlorobutadiene	29.030	1.0	25.00	0	116	67	131	29.43	1.37	20			
Isopropylbenzene	28.150	1.0	25.00	0.4400	111	75	127	30.53	8.11	20			
m,p-Xylene	54.790	1.0	50.00	0	110	76	128	55.35	1.02	20			
Methylene chloride	22.030	5.0	25.00	0	88.1	63	137	22.17	0.633	20			
MTBE	32.720	1.0	25.00	14.30	73.7	65	123	33.88	3.48	20			
n-Butylbenzene	29.220	1.0	25.00	0	117	69	137	29.63	1.39	20			
n-Propylbenzene	28.410	1.0	25.00	0	114	72	129	28.79	1.33	20			
Naphthalene	22.630	1.0	25.00	0	90.5	54	138	23.69	4.58	20			
o-Xylene	26.020	1.0	25.00	0	104	80	121	26.54	1.98	20			
sec-Butylbenzene	28.190	1.0	25.00	0	113	72	127	28.37	0.636	20			
Styrene	25.270	1.0	25.00	0	101	65	134	26.26	3.84	20			
tert-Butylbenzene	27.670	1.0	25.00	0	111	70	129	28.11	1.58	20			
Tetrachloroethene	27.400	1.0	25.00	0	110	66	128	28.12	2.59	20			
Toluene	24.870	2.5	25.00	0	99.5	77	122	24.65	0.889	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

**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPGE**

Sample ID: N005171-001FMSD	SampType: MSD	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 78900						
Client ID: ZZZZZZ	Batch ID: D11VW007	TestNo: EPA 8260B		Analysis Date: 1/20/2011	SeqNo: 1239135						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	23.060	1.0	25.00	0	92.2	63	137	23.46	1.72	20	
trans-1,3-Dichloropropene	22.690	1.0	25.00	0	90.8	59	135	22.76	0.308	20	
Trichloroethene	24.620	1.0	25.00	0	98.5	70	127	25.18	2.25	20	
Trichlorofluoromethane	25.520	1.0	25.00	0	102	57	129	26.28	2.93	20	
Vinyl chloride	24.510	1.0	25.00	0	98.0	50	134	24.82	1.26	20	
Xylenes, Total	80.810	2.0	75.00	0	108	75	125	81.89	1.33	20	
Surr: 1,2-Dichloroethane-d4	21.200		25.00		84.8	72	119		0		
Surr: 4-Bromofluorobenzene	25.590		25.00		102	76	119		0		
Surr: Dibromofluoromethane	23.820		25.00		95.3	85	115		0		
Surr: Toluene-d8	26.200		25.00		105	81	120		0		

Sample ID: D110120MB3	SampType: MBLK	TestCode: 8260_WP_LL	Units: µg/L	Prep Date:	RunNo: 78900						
Client ID: PBW	Batch ID: D11VW007	TestNo: EPA 8260B		Analysis Date: 1/20/2011	SeqNo: 1239136						
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									

**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



**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8260\_WP\_LLPGE

Sample ID: <b>D110120MB3</b>	SampType: <b>MBLK</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>
Client ID: <b>PBW</b>	Batch ID: <b>D111VW007</b>	TestNo: <b>EPA 8260B</b>	
Analyte	Result	PQL	SPK value
		%REC	SPK Ref Val
		LowLimit	HighLimit
		RPD	Ref Val
		%RPD	RPDLimit
		Qual	

RunNo: 78900  
 SeqNo: 1239136  
 Prep Date:  
 Analysis Date: 1/20/2011

Analyte	Result	PQL	SPK value	SPK Ref Val	Units: µg/L	%REC	LowLimit	HighLimit	RPD	Ref Val	%RPD	RPDLimit	Qual
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	1.0											
2-Chlorotoluene	ND	1.0											
4-Chlorotoluene	ND	1.0											
4-Isopropyltoluene	ND	1.0											
4-Methyl-2-pentanone	ND	1.0											
Acetone	ND	1.0											
Benzene	ND	1.0											
Bromobenzene	ND	1.0											
Bromochloromethane	ND	1.0											
Bromodichloromethane	ND	1.0											
Bromoform	ND	1.0											
Bromomethane	ND	1.0											
Carbon disulfide	ND	1.0											
Carbon tetrachloride	ND	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											
Dibromochloromethane	ND	1.0											
Dibromomethane	ND	1.0											
Dichlorodifluoromethane	ND	1.0											
Ethylbenzene	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

**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8260\_WP\_LLPGE

Sample ID: <b>D110120MB3</b>	SampType: <b>MBLK</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>
Client ID: <b>PBW</b>	Batch ID: <b>D11VW007</b>	TestNo: <b>EPA 8260B</b>	
Analyte	Result	PQL	SPK value
			SPK Ref Val
		%REC	LowLimit
			HighLimit
			RPD Ref Val
			%RPD
			RPDLimit
			Qual
			Prep Date:
			RunNo: <b>78900</b>
			Analysis Date: <b>1/20/2011</b>
			SeqNo: <b>1239136</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Freon-113	ND	1.0									
Hexachlorobutadiene	ND	1.0									
Isopropylbenzene	ND	1.0									
m,p-Xylene	ND	1.0									
Methylene chloride	ND	5.0									
MTBE	ND	1.0									
n-Butylbenzene	ND	1.0									
n-Propylbenzene	ND	1.0									
Naphthalene	ND	1.0									
o-Xylene	ND	1.0									
sec-Butylbenzene	ND	1.0									
Styrene	ND	1.0									
tert-Butylbenzene	ND	1.0									
Tetrachloroethene	ND	1.0									
Toluene	ND	2.5									
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	21.610		25.00		86.4	72		119			
Surr: 4-Bromofluorobenzene	27.200		25.00		109	76		119			
Surr: Dibromofluoromethane	21.940		25.00		87.8	85		115			
Surr: Toluene-d8	26.920		25.00		108	81		120			

**Qualifiers:**

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

**CLIENT:** CH2M HILL  
**Work Order:** N005196  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPGE**

Sample ID: <b>D110125LCS</b>	SampType: <b>LCS</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>78901</b>						
Client ID: <b>LCSW</b>	Batch ID: <b>D111VW009</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>1/25/2011</b>	SeqNo: <b>1239155</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acrolein	231.570	20	250.0	0	92.6	75	125				
Acrylonitrile	246.790	20	250.0	0	98.7	75	125				

Sample ID: <b>N005171-002BMS</b>	SampType: <b>MS</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>78901</b>						
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>D111VW009</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>1/25/2011</b>	SeqNo: <b>1239156</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acrolein	184.970	20	250.0	0	74.0	75	125				S
Acrylonitrile	189.360	20	250.0	0	75.7	75	125				

Sample ID: <b>N005171-002BMSD</b>	SampType: <b>MSD</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>78901</b>						
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>D111VW009</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>1/25/2011</b>	SeqNo: <b>1239157</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acrolein	183.960	20	250.0	0	73.6	75	125	185.0	0.548	20	S
Acrylonitrile	189.940	20	250.0	0	76.0	75	125	189.4	0.306	20	

Sample ID: <b>D110125MB3</b>	SampType: <b>MBLK</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>78901</b>						
Client ID: <b>PBW</b>	Batch ID: <b>D111VW009</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>1/25/2011</b>	SeqNo: <b>1239158</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acrolein	ND	20									
Acrylonitrile	ND	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



January 28, 2011

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



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

### LABORATORY TEST RESULTS

Project Reference: N005194  
Lab Number: C011705-01

Enclosed are results for sample(s) received 1/17/11 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,

A handwritten signature in black ink, appearing to read "Mark Johnson".

Mark Johnson  
Operations Manager  
MJohnson@AirTechLabs.com

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

# 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

15-Jan-11

Sample ID	Matrix	Date Collected	Bottle Type	ASTM D1946	Requested Tests	
					EPA TO15	EPA TO3
N005194-001A / VIN-F-01-14	Air	1/14/2011	TEDLAR BAG	1	1	1

01

General Comments: Please email sample receipt acknowledgement to the PM.  
Please use PO#: N005194 Please fax results by: Normal TAT  
Please analyze for TO3, TO15 and O2, Argon, CO2 and CH4 by ASTM 1946.

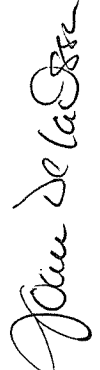
Date/Time

1/15/11

Relinquished by:



Received by:



Received by:

1/17/11 via email  
jdb@atl.com

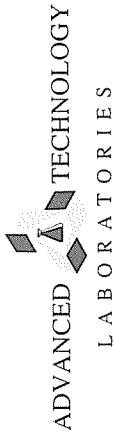
Relinquished by:

1/17/11

Date/Time



CHAIN OF CUSTODY RECORD



3275 Walnut Ave., Signal Hill, CA 90755  
Tel: (562) 989-4045 • Fax: (562) 989-4040

P.O.#: \_\_\_\_\_ Quote #: \_\_\_\_\_  
Logged By: \_\_\_\_\_ Date: \_\_\_\_\_

NOTE: Please include your Quote No. to ensure proper pricing of your project.

FOR LABORATORY USE ONLY:

Method of Transport  
 Client  ATL  
 FedEx  OnTrac  
 GSO  Other: \_\_\_\_\_

Sample Condition Upon Receipt  
1. CHILLED Y  N  4. SEALED Y  N   
2. HEADSPACE (VOA) Y  N  5. # OF SPLS MATCH COC Y  N   
3. CONTAINER INTACT Y  N  6. PRESERVED Y  N

Client: ATL - LV Address: \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_  
ATtn: \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Project #: \_\_\_\_\_ Sampler: \_\_\_\_\_ (Printed Name)  
Relinquished by: (Signature and Printed Name) [Signature] Date: 1/17/11 Time: 12:13 Received by: (Signature and Printed Name) [Signature] Date: 1/17/11 Time: 10:15

Relinquished by: (Signature and Printed Name) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Relinquished by: (Signature and Printed Name) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

I hereby authorize ATL to perform the work indicated below:  
Project Mgr /Submitter: \_\_\_\_\_  
Send Report To: \_\_\_\_\_  
Attn: \_\_\_\_\_  
Co: \_\_\_\_\_  
Addr: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Special Instructions/Comments:  
Circle or Add Analysis(es) Requested:  
8081A (Pesticides) \_\_\_\_\_  
8082 (PCB) \_\_\_\_\_  
8260B (Vials) \_\_\_\_\_  
8270C (BNA) \_\_\_\_\_  
6010B (Total Metal) \_\_\_\_\_  
8015B (GRO) / 8021 (BTEX) \_\_\_\_\_  
8015B (DRO) \_\_\_\_\_  
TITLE 22 / CAM 17 (6010 / 7000) \_\_\_\_\_  
SPECIFY APPROPRIATE MATRIX:  
SEDIMENT \_\_\_\_\_  
SOIL \_\_\_\_\_  
DRINKING WATER \_\_\_\_\_  
GROUND WATER \_\_\_\_\_  
WASTEWATER \_\_\_\_\_  
STORMWATER \_\_\_\_\_  
AQUEOUS \_\_\_\_\_  
CONTAINER(S) \_\_\_\_\_  
TAT # \_\_\_\_\_ Type \_\_\_\_\_

LAB USE ONLY: Batch #, Lab No., Sample I.D. / Location, Date, Time

Table with 4 columns: T, A, T, E, M. Contains handwritten data including 'VINCE - J1 - 14' and dates '1/14/11' and '1/15/11'.

LAB USE ONLY:  
TAT:  A= Overnight ≤ 24 hrs  B= Emergency Next workday  C= Critical 2 Workdays  D= Urgent 3 Workdays  E= Routine 7 Workdays  
Container Types: T=Tube V=VOA L=Liter P=Pin J=Jar B=Tedlar G=Glass P=Plastic M=Metal  
Preservatives: H=HCl N=HNO3 S=H2SO4 C=4°C Z=Zn(AC)2 O=NaOH T=Na2SO3

**Client:** Advanced Technology Laboratories  
**Attn:** Marlon Cartin  
**Project Name:** N005194  
**Project No.:** NA  
**Date Received:** 01/17/11  
**Matrix:** Air  
**Reporting Units:** ppbv


EPA Method TO15							
Lab No.:	C011705-01						
Client Sample I.D.:	N005194-001A / VINP-01-14						
Date Sampled:	01/14/11						
Date Analyzed:	01/17/11						
QC Batch No.:	110117MS2A1						
Analyst Initials:	DT						
Dilution Factor:	10						
ANALYTE	Result ppbv	RL ppbv					
Dichlorodifluoromethane (12)	ND	10					
Chloromethane	100	20					
1,2-CI-1,1,2,2-F ethane (114)	ND	10					
Vinyl Chloride	ND	10					
Bromomethane	ND	10					
Chloroethane	ND	10					
Trichlorofluoromethane (11)	ND	10					
1,1-Dichloroethene	ND	10					
Carbon Disulfide	ND	50					
1,1,2-CI 1,2,2-F ethane (113)	ND	10					
Acetone	72	50					
Methylene Chloride	ND	10					
t-1,2-Dichloroethene	ND	10					
1,1-Dichloroethane	ND	10					
Vinyl Acetate	ND	50					
c-1,2-Dichloroethene	ND	10					
2-Butanone	ND	10					
t-Butyl Methyl Ether (MTBE)	ND	10					
Chloroform	ND	10					
1,1,1-Trichloroethane	ND	10					
Carbon Tetrachloride	ND	10					
Benzene	340	10					
1,2-Dichloroethane	ND	10					
Trichloroethene	ND	10					
1,2-Dichloropropane	ND	10					
Bromodichloromethane	ND	10					
c-1,3-Dichloropropene	ND	10					
4-Methyl-2-Pentanone	ND	10					
Toluene	89	10					
t-1,3-Dichloropropene	ND	10					
1,1,2-Trichloroethane	ND	10					



**Client:** Advanced Technology Laboratories  
**Attn:** Marlon Cartin  
**Project Name:** N005194  
**Project No.:** NA  
**Date Received:** 01/17/11  
**Matrix:** Air  
**Reporting Units:** ppbv

EPA Method TO15							
Lab No.:	C011705-01						
Client Sample I.D.:	N005194-001A / VINP-01-14						
Date Sampled:	01/14/11						
Date Analyzed:	01/17/11						
QC Batch No.:	110117MS2A1						
Analyst Initials:	DT						
Dilution Factor:	10						
ANALYTE	Result ppbv	RL ppbv					
Tetrachloroethene	ND	10					
2-Hexanone	ND	10					
Dibromochloromethane	ND	10					
1,2-Dibromoethane	ND	10					
Chlorobenzene	ND	10					
Ethylbenzene	34	10					
p,&m-Xylene	130	10					
o-Xylene	53	10					
Styrene	ND	10					
Bromoform	ND	10					
1,1,2,2-Tetrachloroethane	ND	20					
Benzyl Chloride	ND	10					
4-Ethyl Toluene	50	10					
1,3,5-Trimethylbenzene	23	20					
1,2,4-Trimethylbenzene	58	20					
1,3-Dichlorobenzene	ND	10					
1,4-Dichlorobenzene	ND	10					
1,2-Dichlorobenzene	ND	10					
1,2,4-Trichlorobenzene	ND	20					
Hexachlorobutadiene	ND	10					

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

Reviewed/Approved By:   
 Mark Johnson  
 Operations Manager

Date 1-28-11

The cover letter is an integral part of this analytical report




QC Batch #: 110117MS2A1

Matrix: Air

EPA Method TO-14/TO-15

Lab No:	Method Blank		LCS		LCSD						
Date Analyzed:	01/17/11		01/18/11		01/18/11						
Data File ID:	17JAN019.D		17JAN039.D		17JAN040.D						
Analyst Initials:	DT		DT		DT						
Dilution Factor:	0.2		1.0		1.0		Limits				
ANALYTE	Result ppbv	Spike Amount	Result ppbv	% Rec	Result ppbv	% Rec	RPD	Low %Rec	High %Rec	Max. RPD	Pass/Fail
1,1-Dichloroethene	0.0	10.0	10.8	108	10.7	107	1.1	70	130	30	Pass
Methylene Chloride	0.0	10.0	10.3	103	9.8	98	5.4	70	130	30	Pass
Trichloroethene	0.0	10.0	10.0	100	9.8	98	2.4	70	130	30	Pass
Toluene	0.0	10.0	10.3	103	9.7	97	5.9	70	130	30	Pass
1,1,2,2-Tetrachloroethane	0.0	10.0	10.9	109	10.0	100	8.1	70	130	30	Pass

RPD = Relative Percent Difference

Reviewed/Approved By:   
 Mark Johnson  
 Operations Manager

Date: 1-28-11


The cover letter is an integral part of this analytical report



Client: Advanced Technology Laboratories  
 Attn: Marlon Cartin  
 Project Name: N005194  
 Project No.: NA  
 Date Received: 01/17/11  
 Matrix: Air  
 Reporting Units: ppmv

EPA METHOD TO3							
Lab No.:	C011705-01						
Client Sample I.D.:	N005194-001A / VINP-01-14						
Date Sampled:	01/14/11						
Date Analyzed:	01/17/11						
QC Batch No.:	110117GC11A1						
Analyst Initials:	ZK						
Dilution Factor:	1.0						
ANALYTE	Result ppmv	RL ppmv					
TPH as Gasoline	68	1.0					

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

Reviewed/Approved By:   
 Mark Johnson  
 Operations Manager

Date 1-28-11

The cover letter is an integral part of this analytical report




QC Batch No.: 110117GC11A1  
 Matrix: Air  
 Units: ppmv

QC for EPA Method TO-3

Lab No.:	Method Blank	LCS	LCSD					
Date Analyzed:	01/17/11	01/17/11	01/17/11					
Analyst Initials:	ZK	ZK	ZK					
Gasoline Datafile:	17jan003	17jan001	17jan002					
Dilution Factor:	1.0	1.0	1.0					
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
TVPH as Gasoline	ND	1.0	88	70-130%	88	70-130%	0.2	<30

ND = Not Detected (Below RL)

RL = Reporting Limit

Reviewed/Approved By:   
**Mark J. Johnson**  
 Operations Manager

Date: 1-28-11

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




Client: Advanced Technology Laboratories  
 Attn: Marlon Cartin  
 Project Name: N005194  
 Project No.: NA  
 Date Received: 01/17/11  
 Matrix: Air  
 Reporting Units: % v/v

ASTM D1946

<b>Lab No.:</b>	C011705-01					
<b>Client Sample I.D.:</b>	N005194-001A / VINP-01-14					
<b>Date Sampled:</b>	01/14/11					
<b>Date Analyzed:</b>	01/17/11					
<b>QC Batch No.:</b>	110117GC8A1					
<b>Analyst Initials:</b>	ZK					
<b>Dilution Factor:</b>	1.0					
<b>ANALYTE</b>	<b>Result % v/v</b>	<b>RL % v/v</b>				
Carbon Dioxide	0.20	0.010				
Oxygen/Argon	22	0.50				
Methane	0.016	0.0010				

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

Reviewed/Approved By:   
 Mark Johnson  
 Operations Manager

Date 1-28-11

The cover letter is an integral part of this analytical report

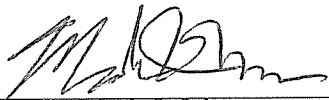


QC Batch No.: 110117GC8A1  
Matrix: Air  
Units: % v/v

QC for ASTM D1946

Lab No.:	Method Blank			LCS		LCSD			
Date Analyzed:	01/17/11			01/17/11		01/17/11			
Analyst Initials:	ZK			ZK		ZK			
Datafile:	17jan009			17jan007		17jan008			
Dilution Factor:	1.0			1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Oxygen/Argon	0.50	0.50	ND	109	70-130%	107	70-130%	2.1	<30
Methane	0.0010	0.0010	ND	89	70-130%	90	70-130%	1.3	<30
Carbon Dioxide	0.010	0.010	ND	97	70-130%	97	70-130%	0.1	<30

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

Reviewed/Approved By:  Date: 1-28-11  
Mark J. Johnson  
Operations Manager

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





February 21, 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.: N005337

RE: SFPP - Norwalk Site

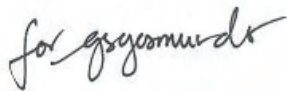
Attention: Daniel Jablonski

Enclosed are the results for sample(s) received on February 09, 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,



Jose Tenorio Jr.  
Laboratory Director

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



*Advanced Technology  
Laboratories*

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

---

**CLIENT:** CH2M HILL  
**Project:** SFPP - Norwalk Site  
**Lab Order:** N005337

**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.



**CLIENT:** CH2M HILL  
**Project:** SFPP - Norwalk Site  
**Lab Order:** N005337  
**Contract No:**

**Work Order Sample Summary**

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Matrix</b>	<b>Collection Date</b>	<b>Date Received</b>	<b>Date Reported</b>
N005337-001A	INF-02-08	Wastewater	2/8/2011 10:20:00 AM	2/9/2011	
N005337-001B	INF-02-08	Wastewater	2/8/2011 10:20:00 AM	2/9/2011	
N005337-001C	INF-02-08	Wastewater	2/8/2011 10:20:00 AM	2/9/2011	



**CLIENT:** CH2M HILL  
**Lab Order:** N005337  
**Project:** SFPP - Norwalk Site  
**Lab ID:** N005337-001

**Client Sample ID:** INF-02-08  
**Collection Date:** 2/8/2011 10:20:00 AM  
**Matrix:** WASTEWATER

**Analyses Result MDL PQL Qual Units DF Date Analyzed**

**TPH-FUEL PRODUCT BY GC/FID**

**EPA 3510C**

**EPA 8015B**

RunID:	QC Batch:	36247		PrepDate:	2/14/2011	Analyst:	MDM
TPH-Fuel Product	3500	13	50	ug/L	1	2/16/2011 12:50 AM	
Surr: Octacosane	134	0	26-152	%REC	1	2/16/2011 12:50 AM	
Surr: p-Terphenyl	94.2	0	57-132	%REC	1	2/16/2011 12:50 AM	

**GASOLINE RANGE ORGANICS BY GC/FID**

**EPA 8015B**

RunID:	QC Batch:	E11VW004		PrepDate:		Analyst:	QBM
TPH-Gasoline	5600	6.0	100	µg/L	1	2/10/2011	
Surr: Chlorobenzene - d5	110	0	74-138	%REC	1	2/10/2011	

**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

**EPA 8260B**

RunID:	QC Batch:	K11VW002		PrepDate:		Analyst:	QBM
1,1,1,2-Tetrachloroethane	ND	0.061	1.0	µg/L	1	2/10/2011 02:18 PM	
1,1,1-Trichloroethane	ND	0.068	1.0	µg/L	1	2/10/2011 02:18 PM	
1,1,2,2-Tetrachloroethane	ND	0.054	1.0	µg/L	1	2/10/2011 02:18 PM	
1,1,2-Trichloroethane	ND	0.083	1.0	µg/L	1	2/10/2011 02:18 PM	
1,1-Dichloroethane	ND	0.099	0.50	µg/L	1	2/10/2011 02:18 PM	
1,1-Dichloroethene	ND	0.094	1.0	µg/L	1	2/10/2011 02:18 PM	
1,1-Dichloropropene	ND	0.082	1.0	µg/L	1	2/10/2011 02:18 PM	
1,2,3-Trichlorobenzene	ND	0.10	1.0	µg/L	1	2/10/2011 02:18 PM	
1,2,3-Trichloropropane	ND	0.12	1.0	µg/L	1	2/10/2011 02:18 PM	
1,2,4-Trichlorobenzene	ND	0.12	1.0	µg/L	1	2/10/2011 02:18 PM	
1,2,4-Trimethylbenzene	32	0.095	1.0	µg/L	1	2/10/2011 02:18 PM	
1,2-Dibromo-3-chloropropane	ND	0.15	2.0	µg/L	1	2/10/2011 02:18 PM	
1,2-Dibromoethane	ND	0.14	1.0	µg/L	1	2/10/2011 02:18 PM	
1,2-Dichlorobenzene	ND	0.070	1.0	µg/L	1	2/10/2011 02:18 PM	
1,2-Dichloroethane	ND	0.17	0.50	µg/L	1	2/10/2011 02:18 PM	
1,2-Dichloropropane	ND	0.085	1.0	µg/L	1	2/10/2011 02:18 PM	
1,3,5-Trimethylbenzene	11	0.087	1.0	µg/L	1	2/10/2011 02:18 PM	
1,3-Dichlorobenzene	ND	0.090	1.0	µg/L	1	2/10/2011 02:18 PM	
1,3-Dichloropropane	ND	0.074	1.0	µg/L	1	2/10/2011 02:18 PM	
1,4-Dichlorobenzene	ND	0.092	1.0	µg/L	1	2/10/2011 02:18 PM	
2,2-Dichloropropane	ND	0.061	1.0	µg/L	1	2/10/2011 02:18 PM	
2-Butanone	ND	1.0	10	µg/L	1	2/10/2011 02:18 PM	
2-Chlorotoluene	ND	0.080	1.0	µg/L	1	2/10/2011 02:18 PM	

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



**Advanced Technology Laboratories, Inc.**

**ANALYTICAL RESULTS**

Print Date: 21-Feb-11

**CLIENT:** CH2M HILL  
**Lab Order:** N005337  
**Project:** SFPP - Norwalk Site  
**Lab ID:** N005337-001

**Client Sample ID:** INF-02-08  
**Collection Date:** 2/8/2011 10:20:00 AM  
**Matrix:** WASTEWATER

**Analyses Result MDL PQL Qual Units DF Date Analyzed**

**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

**EPA 8260B**

RunID: MS4_110210A	QC Batch: K11VW002	PrepDate:	Analyst: QBM
4-Chlorotoluene	ND 0.10	1.0	µg/L 1 2/10/2011 02:18 PM
4-Isopropyltoluene	ND 0.080	1.0	µg/L 1 2/10/2011 02:18 PM
4-Methyl-2-pentanone	ND 0.76	10	µg/L 1 2/10/2011 02:18 PM
Acetone	11 1.6	10	µg/L 1 2/10/2011 02:18 PM
Acrolein	ND 4.3	20	µg/L 1 2/10/2011 02:18 PM
Acrylonitrile	ND 0.61	20	µg/L 1 2/10/2011 02:18 PM
Benzene	2400 7.5	100	µg/L 100 2/10/2011 01:25 PM
Bromobenzene	ND 0.082	1.0	µg/L 1 2/10/2011 02:18 PM
Bromochloromethane	ND 0.15	1.0	µg/L 1 2/10/2011 02:18 PM
Bromodichloromethane	ND 0.063	1.0	µg/L 1 2/10/2011 02:18 PM
Bromoform	ND 0.086	1.0	µg/L 1 2/10/2011 02:18 PM
Bromomethane	ND 0.13	1.0	µg/L 1 2/10/2011 02:18 PM
Carbon disulfide	ND 0.054	1.0	µg/L 1 2/10/2011 02:18 PM
Carbon tetrachloride	ND 0.10	1.0	µg/L 1 2/10/2011 02:18 PM
Chlorobenzene	ND 0.092	1.0	µg/L 1 2/10/2011 02:18 PM
Chloroethane	ND 0.14	1.0	µg/L 1 2/10/2011 02:18 PM
Chloroform	ND 0.058	1.0	µg/L 1 2/10/2011 02:18 PM
Chloromethane	ND 0.054	1.0	µg/L 1 2/10/2011 02:18 PM
cis-1,2-Dichloroethene	ND 0.11	1.0	µg/L 1 2/10/2011 02:18 PM
cis-1,3-Dichloropropene	ND 0.10	1.0	µg/L 1 2/10/2011 02:18 PM
Dibromochloromethane	ND 0.061	1.0	µg/L 1 2/10/2011 02:18 PM
Dibromomethane	ND 0.15	1.0	µg/L 1 2/10/2011 02:18 PM
Dichlorodifluoromethane	ND 0.12	1.0	µg/L 1 2/10/2011 02:18 PM
Ethylbenzene	43 0.051	1.0	µg/L 1 2/10/2011 02:18 PM
Freon-113	ND 0.080	1.0	µg/L 1 2/10/2011 02:18 PM
Hexachlorobutadiene	ND 0.17	1.0	µg/L 1 2/10/2011 02:18 PM
Isopropylbenzene	8.6 0.057	1.0	µg/L 1 2/10/2011 02:18 PM
m,p-Xylene	140 0.17	1.0	µg/L 1 2/10/2011 02:18 PM
Methylene chloride	ND 0.10	5.0	µg/L 1 2/10/2011 02:18 PM
MTBE	420 0.89	10	µg/L 10 2/10/2011 01:55 PM
n-Butylbenzene	1.2 0.082	1.0	µg/L 1 2/10/2011 02:18 PM
n-Propylbenzene	18 0.087	1.0	µg/L 1 2/10/2011 02:18 PM
Naphthalene	110 0.056	1.0	µg/L 1 2/10/2011 02:18 PM
o-Xylene	48 0.077	1.0	µg/L 1 2/10/2011 02:18 PM
sec-Butylbenzene	1.4 0.098	1.0	µg/L 1 2/10/2011 02:18 PM
Styrene	ND 0.072	1.0	µg/L 1 2/10/2011 02:18 PM

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



Advanced Technology Laboratories

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

Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: 21-Feb-11

CLIENT: CH2M HILL  
 Lab Order: N005337  
 Project: SFPP - Norwalk Site  
 Lab ID: N005337-001

Client Sample ID: INF-02-08  
 Collection Date: 2/8/2011 10:20:00 AM  
 Matrix: WASTEWATER

Analyses Result MDL PQL Qual Units DF Date Analyzed

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID:	MS4_110210A	QC Batch:	K11VW002	PrepDate:	Analyst:	QBM
tert-Butylbenzene	ND	0.062	1.0	µg/L	1	2/10/2011 02:18 PM
Tetrachloroethene	ND	0.13	1.0	µg/L	1	2/10/2011 02:18 PM
Toluene	110	0.12	2.5	µg/L	1	2/10/2011 02:18 PM
trans-1,2-Dichloroethene	ND	0.094	1.0	µg/L	1	2/10/2011 02:18 PM
trans-1,3-Dichloropropene	ND	0.10	1.0	µg/L	1	2/10/2011 02:18 PM
Trichloroethene	ND	0.060	1.0	µg/L	1	2/10/2011 02:18 PM
Trichlorofluoromethane	ND	0.097	1.0	µg/L	1	2/10/2011 02:18 PM
Vinyl chloride	ND	0.12	1.0	µg/L	1	2/10/2011 02:18 PM
Xylenes, Total	190	1.5	2.0	µg/L	1	2/10/2011 02:18 PM
Surr: 1,2-Dichloroethane-d4	94.8	0	72-119	%REC	1	2/10/2011 02:18 PM
Surr: 1,2-Dichloroethane-d4	96.7	0	72-119	%REC	10	2/10/2011 01:55 PM
Surr: 1,2-Dichloroethane-d4	94.2	0	72-119	%REC	100	2/10/2011 01:25 PM
Surr: 4-Bromofluorobenzene	104	0	76-119	%REC	1	2/10/2011 02:18 PM
Surr: 4-Bromofluorobenzene	98.0	0	76-119	%REC	100	2/10/2011 01:25 PM
Surr: 4-Bromofluorobenzene	99.6	0	76-119	%REC	10	2/10/2011 01:55 PM
Surr: Dibromofluoromethane	99.4	0	85-115	%REC	100	2/10/2011 01:25 PM
Surr: Dibromofluoromethane	105	0	85-115	%REC	10	2/10/2011 01:55 PM
Surr: Dibromofluoromethane	96.2	0	85-115	%REC	1	2/10/2011 02:18 PM
Surr: Toluene-d8	95.3	0	81-120	%REC	100	2/10/2011 01:25 PM
Surr: Toluene-d8	95.4	0	81-120	%REC	1	2/10/2011 02:18 PM
Surr: Toluene-d8	100	0	81-120	%REC	10	2/10/2011 01:55 PM

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



Advanced Technology  
 Laboratories

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

**CLIENT:** CH2M HILL  
**Work Order:** N005337  
**Project:** SFPP - Norwalk Site

**ANALYTICAL QC SUMMARY REPORT**

**TestCode: 8015\_W\_FP\_SFPP**

Sample ID: <b>LCS-36247_DRO</b>	SampType: <b>LCS</b>	TestCode: <b>8015_W_FP_</b>	Units: <b>ug/L</b>	Prep Date: <b>2/14/2011</b>	RunNo: <b>79126</b>						
Client ID: <b>LCSW</b>	Batch ID: <b>36247</b>	TestNo: <b>EPA 8015B</b>	EPA <b>3510C</b>	Analysis Date: <b>2/15/2011</b>	SeqNo: <b>1245375</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Fuel Product	713.213	50	1000	0	71.3	61	143				
Surr: Octacosane	96.092		80.00		120	26	152				
Surr: p-Terphenyl	75.337		80.00		94.2	57	132				

Sample ID: <b>LCSD-36247_DRO</b>	SampType: <b>LCSD</b>	TestCode: <b>8015_W_FP_</b>	Units: <b>ug/L</b>	Prep Date: <b>2/14/2011</b>	RunNo: <b>79126</b>						
Client ID: <b>LCSS02</b>	Batch ID: <b>36247</b>	TestNo: <b>EPA 8015B</b>	EPA <b>3510C</b>	Analysis Date: <b>2/15/2011</b>	SeqNo: <b>1245376</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Fuel Product	780.808	50	1000	0	78.1	61	143	713.2	9.05	30	
Surr: Octacosane	108.770		80.00		136	26	152		0		
Surr: p-Terphenyl	73.627		80.00		92.0	57	132		0		

Sample ID: <b>MB-36247</b>	SampType: <b>MBLK</b>	TestCode: <b>8015_W_FP_</b>	Units: <b>ug/L</b>	Prep Date: <b>2/14/2011</b>	RunNo: <b>79126</b>						
Client ID: <b>PBW</b>	Batch ID: <b>36247</b>	TestNo: <b>EPA 8015B</b>	EPA <b>3510C</b>	Analysis Date: <b>2/16/2011</b>	SeqNo: <b>1245379</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Fuel Product	48.066	50									J
Surr: Octacosane	88.241		80.00		110	26	152				
Surr: p-Terphenyl	73.010		80.00		91.3	57	132				

**Qualifiers:**

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

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** CH2M HILL  
**Work Order:** N005337  
**Project:** SFPP - Norwalk Site

**TestCode:** 8015\_W\_GSFPP

Sample ID: <b>E110210LCS</b>	SampType: <b>LCS</b>	TestCode: <b>8015_W_GSF</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>79109</b>						
Client ID: <b>LCSW</b>	Batch ID: <b>E111VW004</b>	TestNo: <b>EPA 8015B</b>		Analysis Date: <b>2/10/2011</b>	SeqNo: <b>1244635</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline	853.000	100	1000	0	85.3	67	136				
Surr: Chlorobenzene - d5	47464.000		50000		94.9	74	138				

Sample ID: <b>E110210MB2</b>	SampType: <b>MBLK</b>	TestCode: <b>8015_W_GSF</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>79109</b>						
Client ID: <b>PBW</b>	Batch ID: <b>E111VW004</b>	TestNo: <b>EPA 8015B</b>		Analysis Date: <b>2/10/2011</b>	SeqNo: <b>1244636</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline	ND	100									
Surr: Chlorobenzene - d5	54811.000		50000		110	74	138				

Sample ID: <b>N005329-001BMS</b>	SampType: <b>MS</b>	TestCode: <b>8015_W_GSF</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>79109</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>E111VW004</b>	TestNo: <b>EPA 8015B</b>		Analysis Date: <b>2/10/2011</b>	SeqNo: <b>1244638</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline	835.000	100	1000	0	83.5	67	136				
Surr: Chlorobenzene - d5	47251.000		50000		94.5	74	138				

Sample ID: <b>N005329-001BMSD</b>	SampType: <b>MSD</b>	TestCode: <b>8015_W_GSF</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>79109</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>E111VW004</b>	TestNo: <b>EPA 8015B</b>		Analysis Date: <b>2/10/2011</b>	SeqNo: <b>1244639</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline	851.000	100	1000	0	85.1	67	136	835.0	1.90	30	
Surr: Chlorobenzene - d5	48267.000		50000		96.5	74	138		0	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





**CLIENT:** CH2M HILL  
**Work Order:** N005337  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8260\_WP\_SFPP

Sample ID: <b>K110210LCS</b>	SampType: <b>LCS</b>	TestCode: <b>8260_WP_SF</b>	Units: <b>µg/L</b>
Client ID: <b>LCSW</b>	Batch ID: <b>K11VW002</b>	TestNo: <b>EPA 8260B</b>	
Analyte	Result	PQL	SPK value
		SPK Ref Val	SPK Ref Val
		%REC	LowLimit
		HighLimit	RPD Ref Val
		%RPD	RPDLimit
		Qual	

RunNo: 79031  
 SeqNo: 1242262

Prep Date:  
 Analysis Date: 2/10/2011

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	25.320	1.0	25.00	0	101	81	129				
1,1,1-Trichloroethane	25.220	1.0	25.00	0	101	67	132				
1,1,2,2-Tetrachloroethane	25.170	1.0	25.00	0	101	63	128				
1,1,2-Trichloroethane	23.160	1.0	25.00	0	92.6	75	125				
1,1-Dichloroethane	24.900	0.50	25.00	0	99.6	69	133				
1,1-Dichloroethene	25.250	1.0	25.00	0	101	68	130				
1,1-Dichloropropene	24.730	1.0	25.00	0	98.9	73	132				
1,2,3-Trichlorobenzene	25.690	1.0	25.00	0	103	67	137				
1,2,3-Trichloropropane	24.720	1.0	25.00	0	98.9	73	124				
1,2,4-Trichlorobenzene	26.830	1.0	25.00	0	107	66	134				
1,2,4-Trimethylbenzene	26.720	1.0	25.00	0	107	74	132				
1,2-Dibromo-3-chloropropane	25.000	2.0	25.00	0	100	50	132				
1,2-Dibromoethane	23.920	1.0	25.00	0	95.7	80	121				
1,2-Dichlorobenzene	25.630	1.0	25.00	0	103	71	122				
1,2-Dichloroethane	24.170	0.50	25.00	0	96.7	69	132				
1,2-Dichloropropane	23.910	1.0	25.00	0	95.6	75	125				
1,3,5-Trimethylbenzene	27.290	1.0	25.00	0	109	74	131				
1,3-Dichlorobenzene	26.180	1.0	25.00	0	105	75	124				
1,3-Dichloropropane	24.770	1.0	25.00	0	99.1	73	126				
1,4-Dichlorobenzene	25.650	1.0	25.00	0	103	74	123				
2,2-Dichloropropane	26.770	1.0	25.00	0	107	69	137				
2-Butanone	261.470	10	250.0	0	105	49	136				
2-Chlorotoluene	26.200	1.0	25.00	0	105	73	126				
4-Chlorotoluene	26.600	1.0	25.00	0	106	74	128				
4-Isopropyltoluene	27.420	1.0	25.00	0	110	73	130				
4-Methyl-2-pentanone	272.920	10	250.0	0	109	58	134				
Acetone	273.010	10	250.0	0	109	40	135				
Acrolein	260.210	20	250.0	0	104	75	125				
Acrylonitrile	243.850	20	250.0	0	97.5	75	125				
Benzene	24.650	1.0	25.00	0	98.6	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



**CLIENT:** CH2M HILL  
**Work Order:** N005337  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_SFPP**

Sample ID: <b>K110210LCS</b>	SampType: <b>LCS</b>	TestCode: <b>8260_WP_SF</b>	Units: <b>µg/L</b>
Client ID: <b>LCSW</b>	Batch ID: <b>K11VW002</b>	TestNo: <b>EPA 8260B</b>	
Analyte	Result	PQL	SPK value
		SPK Ref Val	SPK Ref Val
		%REC	LowLimit
		HighLimit	RPD Ref Val
		%RPD	RPDLimit
		Qual	
		RunNo: <b>79031</b>	
		SeqNo: <b>1242262</b>	
		Prep Date:	
		Analysis Date: <b>2/10/2011</b>	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	25.440	1.0	25.00	0	102	76	124				
Bromochloromethane	24.650	1.0	25.00	0	98.6	65	129				
Bromodichloromethane	25.770	1.0	25.00	0	103	76	121				
Bromoform	22.340	1.0	25.00	0	89.4	69	128				
Bromomethane	22.690	1.0	25.00	0	90.8	53	141				
Carbon disulfide	24.820	1.0	25.00	0	99.3	75	125				
Carbon tetrachloride	26.250	1.0	25.00	0	105	66	138				
Chlorobenzene	24.570	1.0	25.00	0	98.3	81	122				
Chloroethane	24.750	1.0	25.00	0	99.0	58	133				
Chloroform	24.740	1.0	25.00	0	99.0	69	128				
Chloromethane	24.830	1.0	25.00	0	99.3	56	131				
cis-1,2-Dichloroethene	24.990	1.0	25.00	0	100	72	126				
cis-1,3-Dichloropropene	25.650	1.0	25.00	0	103	69	131				
Dibromochloromethane	23.520	1.0	25.00	0	94.1	66	133				
Dibromomethane	23.310	1.0	25.00	0	93.2	76	125				
Dichlorodifluoromethane	25.540	1.0	25.00	0	102	53	153				
Ethylbenzene	25.290	1.0	25.00	0	101	73	127				
Freon-113	24.930	1.0	25.00	0	99.7	75	125				
Hexachlorobutadiene	26.490	1.0	25.00	0	106	67	131				
Isopropylbenzene	27.710	1.0	25.00	0	111	75	127				
m,p-Xylene	52.880	1.0	50.00	0	106	76	128				
Methylene chloride	24.290	5.0	25.00	0	97.2	63	137				
MTBE	24.170	1.0	25.00	0	96.7	65	123				
n-Butylbenzene	27.770	1.0	25.00	0	111	69	137				
n-Propylbenzene	27.650	1.0	25.00	0	111	72	129				
Naphthalene	25.070	1.0	25.00	0	100	54	138				
o-Xylene	26.570	1.0	25.00	0	106	80	121				
sec-Butylbenzene	27.070	1.0	25.00	0	108	72	127				
Styrene	26.060	1.0	25.00	0	104	65	134				
tert-Butylbenzene	27.000	1.0	25.00	0	108	70	129				

**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

**CLIENT:** CH2M HILL  
**Work Order:** N005337  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8260\_WP\_SFPP

Sample ID: <b>K110210LCS</b>	SampType: <b>LCS</b>	TestCode: <b>8260_WP_SF</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>79031</b>						
Client ID: <b>LCSW</b>	Batch ID: <b>K11VW002</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>2/10/2011</b>	SeqNo: <b>1242262</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Tetrachloroethene	25.290	1.0	25.00	0	101	66	128				
Toluene	24.830	2.5	25.00	0	99.3	77	122				
trans-1,2-Dichloroethene	23.750	1.0	25.00	0	95.0	63	137				
trans-1,3-Dichloropropene	24.770	1.0	25.00	0	99.1	59	135				
Trichloroethene	23.900	1.0	25.00	0	95.6	70	127				
Trichlorofluoromethane	26.030	1.0	25.00	0	104	57	129				
Vinyl chloride	25.950	1.0	25.00	0	104	50	134				
Xylenes, Total	79.450	2.0	75.00	0	106	75	125				
Surr: 1,2-Dichloroethane-d4	24.770		25.00		99.1	72	119				
Surr: 4-Bromofluorobenzene	26.600		25.00		106	76	119				
Surr: Dibromofluoromethane	25.490		25.00		102	85	115				
Surr: Toluene-d8	25.590		25.00		102	81	120				

Sample ID: <b>N005336-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>8260_WP_SF</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>79031</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>K11VW002</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>2/10/2011</b>	SeqNo: <b>1242263</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1,2-Tetrachloroethane	26.100	1.0	25.00	0	104	81	129				
1,1,1-Trichloroethane	23.980	1.0	25.00	0	95.9	67	132				
1,1,2,2-Tetrachloroethane	24.970	1.0	25.00	0	99.9	63	128				
1,1,2-Trichloroethane	23.590	1.0	25.00	0	94.4	75	125				
1,1-Dichloroethane	23.430	0.50	25.00	0	93.7	69	133				
1,1-Dichloroethene	24.180	1.0	25.00	0	96.7	68	130				
1,1-Dichloropropene	25.260	1.0	25.00	0	101	73	132				
1,2,3-Trichlorobenzene	26.180	1.0	25.00	0	105	67	137				
1,2,3-Trichloropropane	25.500	1.0	25.00	0	102	73	124				
1,2,4-Trichlorobenzene	26.770	1.0	25.00	0	107	66	134				
1,2,4-Trimethylbenzene	26.390	1.0	25.00	0	106	74	132				
1,2-Dibromo-3-chloropropane	24.230	2.0	25.00	0	96.9	50	132				
1,2-Dibromoethane	24.450	1.0	25.00	0	97.8	80	121				

**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:** N005337  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8260\_WP\_SFPP

Sample ID: <b>N005336-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>8260_WP_SF</b>	Units: <b>µg/L</b>
Client ID: <b>ZZZZZ</b>	Batch ID: <b>K11VW002</b>	TestNo: <b>EPA 8260B</b>	
Prep Date:		RunNo: <b>79031</b>	
Analysis Date: <b>2/10/2011</b>		SeqNo: <b>1242263</b>	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichlorobenzene	25.880	1.0	25.00	0	104	71	122				
1,2-Dichloroethane	24.690	0.50	25.00	0	98.8	69	132				
1,2-Dichloropropane	22.350	1.0	25.00	0	89.4	75	125				
1,3,5-Trimethylbenzene	27.030	1.0	25.00	0	108	74	131				
1,3-Dichlorobenzene	26.110	1.0	25.00	0	104	75	124				
1,3-Dichloropropane	24.890	1.0	25.00	0	99.6	73	126				
1,4-Dichlorobenzene	25.010	1.0	25.00	0	100	74	123				
2,2-Dichloropropane	24.970	1.0	25.00	0	99.9	69	137				
2-Butanone	121.180	10	250.0	0	48.5	49	136				S
2-Chlorotoluene	25.640	1.0	25.00	0	103	73	126				
4-Chlorotoluene	26.780	1.0	25.00	0	107	74	128				
4-Isopropyltoluene	26.970	1.0	25.00	0	108	73	130				
4-Methyl-2-pentanone	232.250	10	250.0	0	92.9	58	134				
Acetone	90.660	10	250.0	0	36.3	40	135				
Acrolein	236.510	20	250.0	0	94.6	75	125				
Acrylonitrile	223.480	20	250.0	0	89.4	75	125				
Benzene	24.830	1.0	25.00	0	99.3	81	122				
Bromobenzene	25.980	1.0	25.00	0	104	76	124				
Bromochloromethane	24.430	1.0	25.00	0	97.7	65	129				
Bromodichloromethane	24.720	1.0	25.00	0	98.9	76	121				
Bromoform	23.950	1.0	25.00	0	95.8	69	128				
Bromomethane	21.100	1.0	25.00	0	84.4	53	141				
Carbon disulfide	23.270	1.0	25.00	0	93.1	75	125				
Carbon tetrachloride	26.150	1.0	25.00	0	105	66	138				
Chlorobenzene	24.460	1.0	25.00	0	97.8	81	122				
Chloroethane	24.570	1.0	25.00	0	98.3	58	133				
Chloroform	23.960	1.0	25.00	0	95.8	69	128				
Chloromethane	23.060	1.0	25.00	0	92.2	56	131				
cis-1,2-Dichloroethene	24.390	1.0	25.00	0	97.6	72	126				
cis-1,3-Dichloropropene	25.450	1.0	25.00	0	102	69	131				

**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

**CLIENT:** CH2M HILL  
**Work Order:** N005337  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8260\_WP\_SFPP

Sample ID: <b>N005336-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>8260_WP_SF</b>	Units: <b>µg/L</b>	RunNo: <b>79031</b>
Client ID: <b>ZZZZZ</b>	Batch ID: <b>K11VW002</b>	TestNo: <b>EPA 8260B</b>		SeqNo: <b>1242263</b>
Prep Date:		Analysis Date: <b>2/10/2011</b>		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	23.710	1.0	25.00	0	94.8	66	133				
Dibromomethane	24.190	1.0	25.00	0	96.8	76	125				
Dichlorodifluoromethane	23.960	1.0	25.00	0	95.8	53	153				
Ethylbenzene	25.310	1.0	25.00	0	101	73	127				
Freon-113	24.060	1.0	25.00	0	96.2	75	125				
Hexachlorobutadiene	25.210	1.0	25.00	0	101	67	131				
Isopropylbenzene	26.530	1.0	25.00	0	106	75	127				
m,p-Xylene	52.520	1.0	50.00	0	105	76	128				
Methylene chloride	23.350	5.0	25.00	0	93.4	63	137				
MTBE	23.000	1.0	25.00	0	92.0	65	123				
n-Butylbenzene	27.170	1.0	25.00	0	109	69	137				
n-Propylbenzene	26.560	1.0	25.00	0	106	72	129				
Naphthalene	26.500	1.0	25.00	0	106	54	138				
o-Xylene	25.860	1.0	25.00	0	103	80	121				
sec-Butylbenzene	26.190	1.0	25.00	0	105	72	127				
Styrene	25.620	1.0	25.00	0	102	65	134				
tert-Butylbenzene	26.040	1.0	25.00	0	104	70	129				
Tetrachloroethene	24.150	1.0	25.00	0	96.6	66	128				
Toluene	24.230	2.5	25.00	0	96.9	77	122				
trans-1,2-Dichloroethene	23.000	1.0	25.00	0	92.0	63	137				
trans-1,3-Dichloropropene	23.610	1.0	25.00	0	94.4	59	135				
Trichloroethene	23.160	1.0	25.00	0	92.6	70	127				
Trichlorofluoromethane	24.290	1.0	25.00	0	97.2	57	129				
Vinyl chloride	24.330	1.0	25.00	0	97.3	50	134				
Xylenes, Total	78.380	2.0	75.00	0	105	75	125				
Surr: 1,2-Dichloroethane-d4	24.210		25.00		96.8	72	119				
Surr: 4-Bromofluorobenzene	26.460		25.00		106	76	119				
Surr: Dibromofluoromethane	24.880		25.00		99.5	85	115				
Surr: Toluene-d8	25.050		25.00		100	81	120				

**Qualifiers:**

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

**CLIENT:** CH2M HILL  
**Work Order:** N005337  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_SFPP**

Sample ID: N005336-001AMSD	SampType: MSD	TestCode: 8260_WP_SF	Units: µg/L	Prep Date:	RunNo: 79031						
Client ID: ZZZZZZ	Batch ID: K11VW002	TestNo: EPA 8260B		Analysis Date: 2/10/2011	SeqNo: 1242264						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	24.660	1.0	25.00	0	98.6	81	129	26.10	5.67	20	
1,1,1-Trichloroethane	25.640	1.0	25.00	0	103	67	132	23.98	6.69	20	
1,1,2,2-Tetrachloroethane	25.230	1.0	25.00	0	101	63	128	24.97	1.04	20	
1,1,2-Trichloroethane	23.870	1.0	25.00	0	95.5	75	125	23.59	1.18	20	
1,1-Dichloroethane	24.800	0.50	25.00	0	99.2	69	133	23.43	5.68	20	
1,1-Dichloroethene	23.960	1.0	25.00	0	95.8	68	130	24.18	0.914	20	
1,1-Dichloropropene	25.030	1.0	25.00	0	100	73	132	25.26	0.915	20	
1,2,3-Trichlorobenzene	26.120	1.0	25.00	0	104	67	137	26.18	0.229	20	
1,2,3-Trichloropropane	26.160	1.0	25.00	0	105	73	124	25.50	2.56	20	
1,2,4-Trichlorobenzene	26.700	1.0	25.00	0	107	66	134	26.77	0.262	20	
1,2,4-Trimethylbenzene	25.850	1.0	25.00	0	103	74	132	26.39	2.07	20	
1,2-Dibromo-3-chloropropane	24.750	2.0	25.00	0	99.0	50	132	24.23	2.12	20	
1,2-Dibromoethane	25.380	1.0	25.00	0	102	80	121	24.45	3.73	20	
1,2-Dichlorobenzene	25.870	1.0	25.00	0	103	71	122	25.88	0.0386	20	
1,2-Dichloroethane	24.250	0.50	25.00	0	97.0	69	132	24.69	1.80	20	
1,2-Dichloropropane	23.860	1.0	25.00	0	95.4	75	125	22.35	6.54	20	
1,3,5-Trimethylbenzene	26.830	1.0	25.00	0	107	74	131	27.03	0.743	20	
1,3-Dichlorobenzene	25.440	1.0	25.00	0	102	75	124	26.11	2.60	20	
1,3-Dichloropropane	25.080	1.0	25.00	0	100	73	126	24.89	0.760	20	
1,4-Dichlorobenzene	24.820	1.0	25.00	0	99.3	74	123	25.01	0.763	20	
2,2-Dichloropropane	26.370	1.0	25.00	0	105	69	137	24.97	5.45	20	
2-Butanone	129.750	10	250.0	0	51.9	49	136	121.2	6.83	20	
2-Chlorotoluene	25.530	1.0	25.00	0	102	73	126	25.64	0.430	20	
4-Chlorotoluene	26.220	1.0	25.00	0	105	74	128	26.78	2.11	20	
4-Isopropyltoluene	26.650	1.0	25.00	0	107	73	130	26.97	1.19	20	
4-Methyl-2-pentanone	248.760	10	250.0	0	99.5	58	134	232.2	6.86	20	S
Acetone	96.610	10	250.0	0	38.6	40	135	90.66	6.35	20	
Acrolein	266.020	20	250.0	0	106	75	125	236.5	11.7	20	
Acrylonitrile	248.220	20	250.0	0	99.3	75	125	223.5	10.5	20	
Benzene	24.840	1.0	25.00	0	99.4	81	122	24.83	0.0403	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



**CLIENT:** CH2M HILL  
**Work Order:** N005337  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_SFPP**

Sample ID: <b>N005336-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>8260_WP_SF</b>	Units: <b>µg/L</b>
Client ID: <b>ZZZZZ</b>	Batch ID: <b>K11VW002</b>	TestNo: <b>EPA 8260B</b>	
Prep Date:		RunNo: <b>79031</b>	
Analysis Date: <b>2/10/2011</b>		SeqNo: <b>1242264</b>	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	25.510	1.0	25.00	0	102	76	124	25.98	1.83	20	
Bromochloromethane	25.920	1.0	25.00	0	104	65	129	24.43	5.92	20	
Bromodichloromethane	26.510	1.0	25.00	0	106	76	121	24.72	6.99	20	
Bromoform	24.030	1.0	25.00	0	96.1	69	128	23.95	0.333	20	
Bromomethane	22.730	1.0	25.00	0	90.9	53	141	21.10	7.44	20	
Carbon disulfide	24.500	1.0	25.00	0	98.0	75	125	23.27	5.15	20	
Carbon tetrachloride	26.390	1.0	25.00	0	106	66	138	26.15	0.914	20	
Chlorobenzene	24.900	1.0	25.00	0	99.6	81	122	24.46	1.78	20	
Chloroethane	24.950	1.0	25.00	0	99.8	58	133	24.57	1.53	20	
Chloroform	25.000	1.0	25.00	0	100	69	128	23.96	4.25	20	
Chloromethane	24.780	1.0	25.00	0	99.1	56	131	23.06	7.19	20	
cis-1,2-Dichloroethene	25.540	1.0	25.00	0	102	72	126	24.39	4.61	20	
cis-1,3-Dichloropropene	26.730	1.0	25.00	0	107	69	131	25.45	4.91	20	
Dibromochloromethane	24.150	1.0	25.00	0	96.6	66	133	23.71	1.84	20	
Dibromomethane	25.150	1.0	25.00	0	101	76	125	24.19	3.89	20	
Dichlorodifluoromethane	25.120	1.0	25.00	0	100	53	153	23.96	4.73	20	
Ethylbenzene	25.510	1.0	25.00	0	102	73	127	25.31	0.787	20	
Freon-113	25.510	1.0	25.00	0	102	75	125	24.06	5.85	20	
Hexachlorobutadiene	25.090	1.0	25.00	0	100	67	131	25.21	0.477	20	
Isopropylbenzene	26.400	1.0	25.00	0	106	75	127	26.53	0.491	20	
m,p-Xylene	53.710	1.0	50.00	0	107	76	128	52.52	2.24	20	
Methylene chloride	24.990	5.0	25.00	0	100	63	137	23.35	6.79	20	
MTBE	24.900	1.0	25.00	0	99.6	65	123	23.00	7.93	20	
n-Butylbenzene	26.490	1.0	25.00	0	106	69	137	27.17	2.53	20	
n-Propylbenzene	27.020	1.0	25.00	0	108	72	129	26.56	1.72	20	
Naphthalene	26.020	1.0	25.00	0	104	54	138	26.50	1.83	20	
o-Xylene	26.720	1.0	25.00	0	107	80	121	25.86	3.27	20	
sec-Butylbenzene	26.320	1.0	25.00	0	105	72	127	26.19	0.495	20	
Styrene	26.340	1.0	25.00	0	105	65	134	25.62	2.77	20	
tert-Butylbenzene	26.150	1.0	25.00	0	105	70	129	26.04	0.422	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

**CLIENT:** CH2M HILL  
**Work Order:** N005337  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_SFPP**

Sample ID: N005336-001AMSD	SampType: MSD	TestCode: 8260_WP_SF	Units: µg/L	Prep Date:	RunNo: 79031						
Client ID: ZZZZZZ	Batch ID: K11VW002	TestNo: EPA 8260B		Analysis Date: 2/10/2011	SeqNo: 1242264						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tetrachloroethene	24.750	1.0	25.00	0	99.0	66	128	24.15	2.45	20	
Toluene	25.140	2.5	25.00	0	101	77	122	24.23	3.69	20	
trans-1,2-Dichloroethene	23.960	1.0	25.00	0	95.8	63	137	23.00	4.09	20	
trans-1,3-Dichloropropene	25.940	1.0	25.00	0	104	59	135	23.61	9.40	20	
Trichloroethene	23.330	1.0	25.00	0	93.3	70	127	23.16	0.731	20	
Trichlorofluoromethane	25.400	1.0	25.00	0	102	57	129	24.29	4.47	20	
Vinyl chloride	25.480	1.0	25.00	0	102	50	134	24.33	4.62	20	
Xylenes, Total	80.430	2.0	75.00	0	107	75	125	78.38	2.58	20	
Surr: 1,2-Dichloroethane-d4	25.010		25.00		100	72	119		0		
Surr: 4-Bromofluorobenzene	27.280		25.00		109	76	119		0		
Surr: Dibromofluoromethane	26.020		25.00		104	85	115		0		
Surr: Toluene-d8	25.800		25.00		103	81	120		0		

Sample ID: K110210MB3	SampType: MBLK	TestCode: 8260_WP_SF	Units: µg/L	Prep Date:	RunNo: 79031						
Client ID: PBW	Batch ID: K11VW002	TestNo: EPA 8260B		Analysis Date: 2/10/2011	SeqNo: 1242265						
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									

**Qualifiers:**

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



**CLIENT:** CH2M HILL  
**Work Order:** N005337  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8260\_WP\_SFPP

Sample ID: <b>K110210MB3</b>	SampType: <b>MBLK</b>	TestCode: <b>8260_WP_SF</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>79031</b>						
Client ID: <b>PBW</b>	Batch ID: <b>K11VW002</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>2/10/2011</b>	SeqNo: <b>1242265</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

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									
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									

**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

**CLIENT:** CH2M HILL  
**Work Order:** N005337  
**Project:** SFPP - Norwalk Site

# ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8260\_WP\_SFPP

Sample ID: <b>K110210MB3</b>	SampType: <b>MBLK</b>	TestCode: <b>8260_WP_SF</b>	Units: <b>µg/L</b>
Client ID: <b>PBW</b>	Batch ID: <b>K11VW002</b>	TestNo: <b>EPA 8260B</b>	
Analyte	Result	PQL	SPK value
		SPK Ref Val	%REC
		LowLimit	HighLimit
		RPD Ref Val	%RPD
		RPDLimit	Qual
		Prep Date:	RunNo: <b>79031</b>
		Analysis Date: <b>2/10/2011</b>	SeqNo: <b>1242265</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	1.0									
Dibromomethane	ND	1.0									
Dichlorodifluoromethane	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	5.0									
MTBE	ND	1.0									
n-Butylbenzene	ND	1.0									
n-Propylbenzene	ND	1.0									
Naphthalene	ND	1.0									
o-Xylene	ND	1.0									
sec-Butylbenzene	ND	1.0									
Styrene	ND	1.0									
tert-Butylbenzene	ND	1.0									
Tetrachloroethene	ND	1.0									
Toluene	ND	2.5									
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	24.990		25.00		100	72		119			
Surr: 4-Bromofluorobenzene	25.030		25.00		100	76		119			
Surr: Dibromofluoromethane	25.770		25.00		103	85		115			
Surr: Toluene-d8	26.240		25.00		105	81		120			

**Qualifiers:**

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

# CHAIN OF CUSTODY RECORD

atories

ax: 702-307-2691  
 .marlon@ati-labs.com

DATE: 02-08-11  
 PAGE: 1 OF 1

CLIENT PROJECT NAME / NUMBER <b>SFPF - Norwalk Site</b>	P.O. NO.: QUOTE NO.:
PROJECT CONTACT: <b>James Dye</b> SAMPLER(S) (SIGNATURE):	LAB USE ONLY <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Orange, CA 92868 TEL: <b>714-560-4802</b> FAX: <b>714-560-4601</b> E-MAIL: <a href="mailto:info@ati-labs.com">info@ati-labs.com</a>	Energy Partners, Attn: Steve Defibaugh 1 & Country Road
TURNAROUND TIME <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48HR <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> 5 DAYS <input type="checkbox"/> 10 DAYS SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)	
<input type="checkbox"/> RWQCB REPORTING <input type="checkbox"/> ARCHIVE SAMPLES UNTIL <u>1</u> / <u>1</u> / <u>1</u>	

SPECIAL INSTRUCTIONS Report to D. Jablonski/CH2M HILL, cc: KMEP Direct Bill KMEP/SFPF - Steve Defibaugh-ref. AFE# 81195 "J" flags required/Use lowest possible detection limit - all methods.			
LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING
NO. OF CONT.	DATE	TIME	MAT. RIX
INF. 02-08 Influent	02/08/11 1030	WW	7
REQUESTED ANALYSIS			
TPH - g (8015M)	X		
TPH - fp (8015M)	X		
VOCs, Full List (8260B)	X		
Comments Temperature* = _____ (Temp. as sampled*) Monthly			
Relinquished by: (Signature)	 Received by: (Signature)		Date: <u>2/9/11</u> Time: <u>1540</u>
Relinquished by: (Signature)	 Received by: (Signature)		Date: <u>2/9/11</u> Time: <u>1608</u>
Relinquished by: (Signature)	C. Dye Received by: (Signature)		Date: <u>2/10/11</u> Time: <u>9:05am</u>

WWW.CALOVER.COM

**OnTrac**  
The OnTrac Company

**800-334-5000**  
Call For A Pickup!

FROM (Company)

EWING TREATMENT & TECHNOLOGY\*

Street Address

3275 WALKER AVE

Suite

City

STONING HILL

State

Zip Code (Required)

GA 30755

Phone Number

**PLEASE PRINT IN BLOCK LETTERS with Blue / Black Ink**

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

State

ATL

Street Address

5151 W POST RD

Suite #

City

LAS VEGAS

State

Zip Code (Required)

NV 89118

Phone Number

702-307-2659

Recipient's Name

MARLON C

Shipper's Ref. #

U99MATHL U20911

Account Number

B10262325830

Date

08/09/11



B10262325830

Service Options	Billing Information	Weight
<input type="checkbox"/> SUNRISE - BY 10:30 AM* <input type="checkbox"/> SUNRISE GOLD - BY 8:00 AM* <input type="checkbox"/> HEAVYWEIGHT** <input type="checkbox"/> Saturday Delivery - Extra Charge (see Service Guide for details) <input type="checkbox"/> HOLD FOR PICKUP <input checked="" type="checkbox"/> This shipment requires a delivery signature <input type="checkbox"/> Declared Value \$ [redacted] (maximum \$25,000)	<input type="checkbox"/> Bill Shipper's Account <input checked="" type="checkbox"/> Bill Other Acct # [redacted]	<input type="checkbox"/> 8 oz. Letter or <input type="checkbox"/> Weight lbs (Subject to verifier) Dim weight charge if greater than actual wt L in. X W in. X H in. +200 =
<input type="checkbox"/> C.O.D. Amount \$ Limit \$10,000 (only C.O.D. tag to package)	<input type="checkbox"/> Secured Payment (Money Order or Certified Check) <input type="checkbox"/> Unsecured Payment (Company Check or Personal Check)	
Other #	Pick-up Time	Shipper's Signature
Shipper's Initials	Shipper's Name	



# 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: 2/10/2011 Workorder: N005337  
 Rep sample Temp (Deg C): 1.2 IR Gun ID: IR 1  
 Temp Blank:  Yes  No  
 Carrier name: OnTrac  
 Last 4 digits of Tracking No.: 5830 Packing Material Used: Bubble Wrap  
 Cooling process:  Ice  Ice Pack  Dry Ice  Other  None


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

Comments:

Checklist Completed B

  
 NS 2/10/11

Reviewed By:



February 21, 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.: N005335

RE: SFPP - Norwalk Site

Attention: Daniel Jablonski

Enclosed are the results for sample(s) received on February 09, 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,



Jose Tenorio Jr.  
Laboratory Director

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



*Advanced Technology  
Laboratories*

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

---

**CLIENT:** CH2M HILL  
**Project:** SFPP - Norwalk Site  
**Lab Order:** N005335  
**Contract No:**

**Work Order Sample Summary**

---

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Matrix</b>	<b>Collection Date</b>	<b>Date Received</b>	<b>Date Reported</b>
N005335-001A	VINF-02-08	Air	2/8/2011 12:20:00 PM	2/9/2011	
N005335-001B	VINF-02-08	Air	2/8/2011 12:20:00 PM	2/9/2011	
N005335-001C	VINF-02-08	Air	2/8/2011 12:20:00 PM	2/9/2011	



---

**CLIENT:** CH2M HILL  
**Project:** SFPP - Norwalk Site  
**Lab Order:** N005335

---

**CASE NARRATIVE**

---

Subcontracted Analyses:

TO-15 and TO-3 were subcontracted to Advanced Technology Laboratories-Signal Hill, CA.

ASTM 1946 was subcontracted to Air Technology Laboratories.





# CHAIN OF CUSTODY RECORD

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

DATE: 02-08-11  
 PAGE: 1 OF 1

LABORATORY CLIENT: <b>Kinder Morgan Energy Partners, Attn: Steve Definbough</b> ADDRESS: <b>1100 Town &amp; Country Road</b> CITY: <b>Orange, CA 92868</b> TEL: <b>714-560-4802</b> FAX: <b>714-560-4601</b> E-MAIL: <b>john.d.definbough@kemp.com</b>		CLIENT PROJECT NAME/NUMBER: <b>SFPP - Norwalk Site</b> PROJECT CONTACT: <b>James Dye</b> SAMPLER(S), (SIGNATURE):		P.O. NO.: QUOTE NO.: LAB USE ONLY: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48HR <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> 5 DAYS <input type="checkbox"/> 10 DAYS SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY) <input type="checkbox"/> RWOCB REPORTING <input type="checkbox"/> ARCHIVE SAMPLES UNTIL <u>1</u> / <u>1</u>		<b>REQUESTED ANALYSIS</b>			
SPECIAL INSTRUCTIONS: <b>Report to D. Jablonski/CH2M HILL, cc: KMEP                  Direct Bill KMEP/SFPP - Steve Definbough-ref. AFE# 81195                  "J" flags required/Use lowest possible detection limit - all methods.</b>		TO-15 <input checked="" type="checkbox"/> TO-3 (PH-g) <input checked="" type="checkbox"/> ASTM-1946 (O2/Argon, CO2, CH4) <input checked="" type="checkbox"/>		Comments: Monthly sample	
SAMPLE ID: <b>VINF-02-08-</b> LOCATION/DESCRIPTION: <b>Inf. Vapor (from header)</b> DATE: <b>02-08-11</b> TIME: <b>1200</b> MAT-RIX: <b>Air</b> NO. OF CONT.: <b>4</b>		Relinquished by: (Signature)  Received by: (Signature)		Date: <b>2/9/11</b> Time: <b>1540</b>	
Relinquished by: (Signature)  Received by: (Signature)		Relinquished by: (Signature)  Received by: (Signature)		Date: <b>2/9/11</b> Time: <b>1608</b>	
Relinquished by: (Signature)  Received by: (Signature)		Relinquished by: (Signature)  Received by: (Signature)		Date: <b>2/10/11</b> Time: <b>915</b>	
Revised: 01/11/2011					

February 21, 2011



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

ELAP No.: 1838  
NELAP No.: 02107CA  
CSDLAC No.: 10196  
ORELAP No.: CA300003  
  
Workorder No.: 116266

RE:

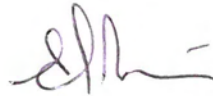
Attention: Marlon Cartin

Enclosed are the results for sample(s) received on February 10, 2011 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

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

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

  
for Eddie F. Rodriguez  
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.



---

**CLIENT:** Advanced Technology Laboratory-Las Vega

**Project:**

**Lab Order:** 116266

**CASE NARRATIVE**

---

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

# ANALYTICAL RESULTS

Print Date: 21-Feb-11

**CLIENT:** Advanced Technology Laboratory-Las Vega    **Client Sample ID:** N005335-001A / VINP-02-08  
**Lab Order:** 116266    **Collection Date:** 2/8/2011 12:20:00 PM  
**Project:**    **Matrix:** AIR  
**Lab ID:** 116266-001A

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
----------	--------	-----	-----	------	-------	----	---------------

## VOCS IN AIR BY GCMS

## EPA TO15

RunID: <b>MS14_110210C</b>	QC Batch: <b>W11A012</b>	PrepDate:	Analyst: <b>DMP</b>
1,1,1-Trichloroethane	ND 0.30	2.5 ppbv	10 2/10/2011 06:53 PM
1,1,2,2-Tetrachloroethane	ND 0.39	2.5 ppbv	10 2/10/2011 06:53 PM
1,1,2-Trichloroethane	ND 0.28	2.5 ppbv	10 2/10/2011 06:53 PM
1,1-Dichloroethane	ND 0.25	2.5 ppbv	10 2/10/2011 06:53 PM
1,1-Dichloroethene	ND 0.15	2.5 ppbv	10 2/10/2011 06:53 PM
1,2,4-Trichlorobenzene	ND 0.35	2.5 ppbv	10 2/10/2011 06:53 PM
1,2,4-Trimethylbenzene	520 26	150 ppbv	600 2/11/2011 07:42 AM
1,2-Dibromoethane	ND 0.18	2.5 ppbv	10 2/10/2011 06:53 PM
1,2-Dichlorobenzene	ND 0.50	2.5 ppbv	10 2/10/2011 06:53 PM
1,2-Dichloroethane	ND 0.15	2.5 ppbv	10 2/10/2011 06:53 PM
1,2-Dichloropropane	ND 0.31	2.5 ppbv	10 2/10/2011 06:53 PM
1,3,5-Trimethylbenzene	130 0.44	2.5 ppbv	10 2/10/2011 06:53 PM
1,3-Dichlorobenzene	ND 0.43	2.5 ppbv	10 2/10/2011 06:53 PM
1,4-Dichlorobenzene	ND 0.42	2.5 ppbv	10 2/10/2011 06:53 PM
2-Butanone	19 0.31	2.5 ppbv	10 2/10/2011 06:53 PM
2-Hexanone	ND 0.25	2.5 ppbv	10 2/10/2011 06:53 PM
4-Ethyl Toluene	96 0.48	2.5 ppbv	10 2/10/2011 06:53 PM
4-Methyl-2-pentanone	ND 0.38	2.5 ppbv	10 2/10/2011 06:53 PM
Acetone	ND 0.51	2.5 ppbv	10 2/10/2011 06:53 PM
Benzene	3000 7.2	150 ppbv	600 2/11/2011 07:42 AM
Benzyl chloride	49 0.36	2.5 ppbv	10 2/10/2011 06:53 PM
Bromodichloromethane	ND 0.12	2.5 ppbv	10 2/10/2011 06:53 PM
Bromoform	ND 0.38	2.5 ppbv	10 2/10/2011 06:53 PM
Bromomethane	ND 0.17	2.5 ppbv	10 2/10/2011 06:53 PM
Carbon disulfide	ND 1.1	2.5 ppbv	10 2/10/2011 06:53 PM
Carbon tetrachloride	ND 0.12	2.5 ppbv	10 2/10/2011 06:53 PM
Chlorobenzene	ND 0.25	2.5 ppbv	10 2/10/2011 06:53 PM
Chloroethane	ND 0.40	2.5 ppbv	10 2/10/2011 06:53 PM
Chloroform	ND 0.18	2.5 ppbv	10 2/10/2011 06:53 PM
Chloromethane	ND 0.22	2.5 ppbv	10 2/10/2011 06:53 PM
cis-1,2-Dichloroethene	ND 0.34	2.5 ppbv	10 2/10/2011 06:53 PM
cis-1,3-Dichloropropene	ND 0.25	2.5 ppbv	10 2/10/2011 06:53 PM
Dibromochloromethane	ND 0.24	2.5 ppbv	10 2/10/2011 06:53 PM
Dichlorodifluoromethane	ND 0.22	2.5 ppbv	10 2/10/2011 06:53 PM
Dichlorotetrafluoroethane	ND 0.17	2.5 ppbv	10 2/10/2011 06:53 PM

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



Advanced Technology  
Laboratories

3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**Advanced Technology Laboratories**

**ANALYTICAL RESULTS**

Print Date: 21-Feb-11

**CLIENT:** Advanced Technology Laboratory-Las Vega **Client Sample ID:** N005335-001A / VINP-02-08  
**Lab Order:** 116266 **Collection Date:** 2/8/2011 12:20:00 PM  
**Project:** **Matrix:** AIR  
**Lab ID:** 116266-001A

**Analyses Result MDL PQL Qual Units DF Date Analyzed**

**VOCS IN AIR BY GCMS**

**EPA TO15**

RunID: <b>MS14_110210C</b>	QC Batch: <b>W11A012</b>				PrepDate:	Analyst: <b>DMP</b>
Ethylbenzene	1700	21	150	ppbv	600	2/11/2011 07:42 AM
Freon-113	ND	0.12	2.5	ppbv	10	2/10/2011 06:53 PM
Hexachlorobutadiene	ND	0.43	2.5	ppbv	10	2/10/2011 06:53 PM
m,p-Xylene	5600	21	150	ppbv	600	2/11/2011 07:42 AM
MTBE	110	0.15	2.5	ppbv	10	2/10/2011 06:53 PM
Methylene chloride	ND	0.15	2.5	ppbv	10	2/10/2011 06:53 PM
o-Xylene	1800	15	150	ppbv	600	2/11/2011 07:42 AM
Styrene	ND	0.36	2.5	ppbv	10	2/10/2011 06:53 PM
Tetrachloroethene	ND	0.25	2.5	ppbv	10	2/10/2011 06:53 PM
Toluene	11000	9.0	150	ppbv	600	2/11/2011 07:42 AM
trans-1,2-Dichloroethene	ND	0.15	2.5	ppbv	10	2/10/2011 06:53 PM
trans-1,3-Dichloropropene	ND	0.24	2.5	ppbv	10	2/10/2011 06:53 PM
Trichloroethene	ND	0.31	2.5	ppbv	10	2/10/2011 06:53 PM
Trichlorofluoromethane	ND	0.15	2.5	ppbv	10	2/10/2011 06:53 PM
Vinyl acetate	ND	0.63	2.5	ppbv	10	2/10/2011 06:53 PM
Vinyl chloride	ND	0.17	2.5	ppbv	10	2/10/2011 06:53 PM
Surr: 4-Bromofluorobenzene	110	0	70-130	%REC	600	2/11/2011 07:42 AM
Surr: 4-Bromofluorobenzene	112	0	70-130	%REC	10	2/10/2011 06:53 PM

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



Advanced Technology  
Laboratories

3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

# Advanced Technology Laboratories

# ANALYTICAL RESULTS

Print Date: 21-Feb-11

**CLIENT:** Advanced Technology Laboratory-Las Vega    **Client Sample ID:** N005335-001B / VINP-02-08  
**Lab Order:** 116266    **Collection Date:** 2/8/2011 12:20:00 PM  
**Project:**    **Matrix:** AIR  
**Lab ID:** 116266-002A

**Analyses**                      **Result**    **MDL**    **PQL**    **Qual Units**                      **DF**    **Date Analyzed**

## GASOLINE RANGE ORGANICS BY GC-MS

## EPA TO3

RunID: **MS14\_110210C**                      QC Batch: **W11A012**                      PrepDate:                      Analyst: **DMP**  
Gasoline                      210    2.2                      6.0                      ppmv                      300    2/10/2011 08:04 PM  
Surr: 4-Bromofluorobenzene                      82.0    0                      70-130                      %REC                      300    2/10/2011 08:04 PM

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



CLIENT: Advanced Technology Laboratory-Las Vegas  
 Work Order: 116266  
 Project:

**ANALYTICAL QC SUMMARY REPORT**

TestCode: TO15\_CH2

Sample ID: <b>LCS-WA11012</b>	SampType: <b>LCS</b>	TestCode: <b>TO15_CH2</b>	Units: <b>ppbv</b>	Prep Date:	RunNo: <b>130083</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>W11A012</b>	TestNo: <b>EPA TO15</b>		Analysis Date: <b>2/10/2011</b>	SeqNo: <b>2113900</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

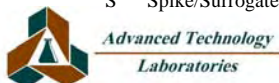
1,1-Dichloroethane	1.920	0.25	2.000	0	96.0	70	130				
Benzene	2.390	0.25	2.000	0	120	70	130				
Chloroform	1.790	0.25	2.000	0	89.5	70	130				
m,p-Xylene	4.050	0.25	4.000	0	101	70	130				
o-Xylene	2.090	0.25	2.000	0	104	70	130				
Tetrachloroethene	1.650	0.25	2.000	0	82.5	70	130				
Toluene	2.180	0.25	2.000	0	109	70	130				
Trichloroethene	1.780	0.25	2.000	0	89.0	70	130				
Vinyl chloride	1.890	0.25	2.000	0	94.5	70	130				
Surr: 4-Bromofluorobenzene	2.860		2.500		114	70	130				

Sample ID: <b>LCSD-WA11012</b>	SampType: <b>LCS</b>	TestCode: <b>TO15_CH2</b>	Units: <b>ppbv</b>	Prep Date:	RunNo: <b>130083</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>W11A012</b>	TestNo: <b>EPA TO15</b>		Analysis Date: <b>2/10/2011</b>	SeqNo: <b>2113901</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1-Dichloroethane	1.930	0.25	2.000	0	96.5	70	130	1.920	0.519	0	
Benzene	2.380	0.25	2.000	0	119	70	130	2.390	0.419	0	
Chloroform	1.800	0.25	2.000	0	90.0	70	130	1.790	0.557	0	
m,p-Xylene	4.000	0.25	4.000	0	100	70	130	4.050	1.24	0	
o-Xylene	2.070	0.25	2.000	0	104	70	130	2.090	0.962	0	
Tetrachloroethene	1.620	0.25	2.000	0	81.0	70	130	1.650	1.83	0	
Toluene	2.190	0.25	2.000	0	110	70	130	2.180	0.458	0	
Trichloroethene	1.790	0.25	2.000	0	89.5	70	130	1.780	0.560	0	
Vinyl chloride	1.880	0.25	2.000	0	94.0	70	130	1.890	0.531	0	
Surr: 4-Bromofluorobenzene	2.820		2.500		113	70	130		0	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



**CLIENT:** Advanced Technology Laboratory-Las Vegas  
**Work Order:** 116266  
**Project:**

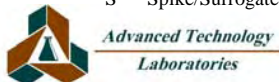
## ANALYTICAL QC SUMMARY REPORT

**TestCode: TO15\_CH2**

Sample ID: <b>MB-WA11012</b>	SampType: <b>MBLK</b>	TestCode: <b>TO15_CH2</b>	Units: <b>ppbv</b>	Prep Date:	RunNo: <b>130083</b>						
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>W11A012</b>	TestNo: <b>EPA TO15</b>		Analysis Date: <b>2/10/2011</b>	SeqNo: <b>2113902</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.25									
1,1,2-Tetrachloroethane	ND	0.25									
1,1,2-Trichloroethane	ND	0.25									
1,1-Dichloroethane	ND	0.25									
1,1-Dichloroethene	ND	0.25									
1,2,4-Trichlorobenzene	ND	0.25									
1,2,4-Trimethylbenzene	ND	0.25									
1,2-Dibromoethane	ND	0.25									
1,2-Dichlorobenzene	ND	0.25									
1,2-Dichloroethane	ND	0.25									
1,2-Dichloropropane	ND	0.25									
1,3,5-Trimethylbenzene	ND	0.25									
1,3-Dichlorobenzene	ND	0.25									
1,4-Dichlorobenzene	ND	0.25									
2-Butanone	ND	0.25									
2-Hexanone	ND	0.25									
4-Ethyl Toluene	ND	0.25									
4-Methyl-2-pentanone	ND	0.25									
Acetone	ND	0.25									
Benzene	ND	0.25									
Benzyl chloride	ND	0.25									
Bromodichloromethane	ND	0.25									
Bromoform	ND	0.25									
Bromomethane	ND	0.25									
Carbon disulfide	ND	0.25									
Carbon tetrachloride	ND	0.25									
Chlorobenzene	ND	0.25									
Chloroethane	ND	0.25									
Chloroform	ND	0.25									
Chloromethane	ND	0.25									

**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:** Advanced Technology Laboratory-Las Vegas  
**Work Order:** 116266  
**Project:**

## ANALYTICAL QC SUMMARY REPORT

**TestCode: TO15\_CH2**

Sample ID: <b>MB-WA11012</b>	SampType: <b>MBLK</b>	TestCode: <b>TO15_CH2</b>	Units: <b>ppbv</b>	Prep Date:	RunNo: <b>130083</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>W11A012</b>	TestNo: <b>EPA TO15</b>		Analysis Date: <b>2/10/2011</b>	SeqNo: <b>2113902</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	ND	0.25									
cis-1,3-Dichloropropene	ND	0.25									
Dibromochloromethane	ND	0.25									
Dichlorodifluoromethane	ND	0.25									
Dichlorotetrafluoroethane	ND	0.25									
Ethylbenzene	ND	0.25									
Freon-113	ND	0.25									
Hexachlorobutadiene	ND	0.25									
m,p-Xylene	ND	0.25									
MTBE	ND	0.25									
Methylene chloride	ND	0.25									
o-Xylene	ND	0.25									
Styrene	ND	0.25									
Tetrachloroethene	ND	0.25									
Toluene	ND	0.25									
trans-1,2-Dichloroethene	ND	0.25									
trans-1,3-Dichloropropene	ND	0.25									
Trichloroethene	ND	0.25									
Trichlorofluoromethane	ND	0.25									
Vinyl acetate	ND	0.25									
Vinyl chloride	ND	0.25									
Surr: 4-Bromofluorobenzene	2.750		2.500		110	70	130				

**Qualifiers:**

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



*Advanced Technology  
Laboratories*

3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Advanced Technology Laboratory-Las Vegas  
**Work Order:** 116266  
**Project:**

## ANALYTICAL QC SUMMARY REPORT

**TestCode: TO3\_GAS\_CH2**

Sample ID: <b>LCS-WA11012</b>	SampType: <b>LCS</b>	TestCode: <b>TO3_GAS_C</b>	Units: <b>ppmv</b>	Prep Date:	RunNo: <b>130083</b>						
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>W11A012</b>	TestNo: <b>EPA TO3</b>		Analysis Date: <b>2/10/2011</b>	SeqNo: <b>2113905</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	0.242	0.020	0.2000	0.01363	114	70	130				
Surr: 4-Bromofluorobenzene	0.003		0.002500		109	70	130				

Sample ID: <b>MB-WA11012</b>	SampType: <b>MBLK</b>	TestCode: <b>TO3_GAS_C</b>	Units: <b>ppmv</b>	Prep Date:	RunNo: <b>130083</b>						
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>W11A012</b>	TestNo: <b>EPA TO3</b>		Analysis Date: <b>2/10/2011</b>	SeqNo: <b>2113906</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

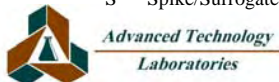
Gasoline	0.014	0.020									J
Surr: 4-Bromofluorobenzene	0.003		0.002500		130	70	130				

Sample ID: <b>LCSD-WA11012</b>	SampType: <b>LCSD</b>	TestCode: <b>TO3_GAS_C</b>	Units: <b>ppmv</b>	Prep Date:	RunNo: <b>130083</b>						
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>W11A012</b>	TestNo: <b>EPA TO3</b>		Analysis Date: <b>2/10/2011</b>	SeqNo: <b>2113908</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	0.242	0.020	0.2000	0.01363	114	70	130	0.2419	0.0910	20	
Surr: 4-Bromofluorobenzene	0.003		0.002500		109	70	130		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                 |



## Carmen Aguila

---

**From:** Marlon Cartin [marlon@atl-labs.com]  
**Sent:** Wednesday, February 09, 2011 3:12 PM  
**To:** Carmen Aguila  
**Cc:** ronnie@atglobal.com; Rachele Arada  
**Subject:** RE: ATL-LV Tedlar Bag Sample

Hi Carmen!

For the samples that you got from Norwalk this afternoon, TO3 and TO15 will be subcontracted to you. The ASTM 1946 is for Air Tech Labs and please ship overnight the rest of the samples to us.

Thanks,

Marlon





# Advanced Technology Laboratories

3151-3153 W Post Rd., Las Vegas, NV 89118  
www.atglobal.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:

09-Feb-11

Sample ID	Matrix	Date Collected	Bottle Type	Requested Tests	
				EPA TO15	EPA TO3
N005335-001A / VINP-02-08	Air	2/8/2011 12:20:00 PM	1		
N005335-001B / VINP-02-08	Air	2/8/2011 12:20:00 PM		1	


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

Please use PO# N005335. Please fax results by : Normal TAT

Please analyze for TO3 and TO15

Relinquished by: <u>NJ</u>	Date/Time: <u>2/10/11 0930</u>
Received by: <u>[Signature]</u>	
Received by:	

# CHAIN OF CUSTODY RECORD

 <b>ADVANCED TECHNOLOGY LABORATORIES</b>		P.O. #: _____ Quote #: _____ Logged By: _____ Date: _____		<b>FOR LABORATORY USE ONLY</b>		<b>Method of Transport</b> <input type="checkbox"/> Client <input type="checkbox"/> ATL <input type="checkbox"/> FedEx <input type="checkbox"/> OnTrac <input type="checkbox"/> GSO <input type="checkbox"/> Other: _____		<b>Sample Condition Upon Receipt</b> 1. CHILLED    Y <input type="checkbox"/> N <input type="checkbox"/> 4. SEALED    Y <input type="checkbox"/> N <input type="checkbox"/> 2. HEADSPACE (VOA)    Y <input type="checkbox"/> N <input type="checkbox"/> 5. # OF SPLS MATCH COC    Y <input type="checkbox"/> N <input type="checkbox"/> 3. CONTAINER INTACT    Y <input type="checkbox"/> N <input type="checkbox"/> 6. PRESERVED    Y <input type="checkbox"/> N <input type="checkbox"/>			
3275 Walnut Ave., Signal Hill, CA 90755 Tel: (562) 989-4045 • Fax: (562) 989-4040		NOTE: Please include your Quote No. to ensure proper pricing of your project.		Address: 3151 W Post Rd.    Tel: (702) 307-2659		City: Las Vegas    State: NV    Zip Code: 89118    Fax: _____		Sampler: _____ (Signature)			
Client: Advanced Technology Laboratory		Project #: _____		Relinquished by: (Signature and Printed Name) _____ Date: _____		Relinquished by: (Signature and Printed Name) _____ Date: _____		Relinquished by: (Signature and Printed Name) _____ Date: _____			
Project Name: CH2M Hill -Norwalk		Send Report To: _____		Bill To: _____		Special Instructions/Comments: 10 min Shipping Time		QA/QC RTNE <input type="checkbox"/> CT <input type="checkbox"/> Legal <input type="checkbox"/>			
I hereby authorize ATL to perform the work indicated below:		Print Name _____ Date _____		Co: _____		Circle or Add Analysis(es) Requested:		PRESERVATION			
Signature _____		City: _____ State: _____ Zip: _____		City: _____ State: _____ Zip: _____		SPECIFY APPROPRIATE MATRIX		CONTAINER TYPE			
Sample/Records - Archival & Disposal Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.		Storage Fees (applies when storage is requested): ■ Sample: \$2.00 / sample /mo (after 45 days) ■ Records: \$1 /ATL workorder /mo (after 1 year)		Sample ID / Location		Sample Description		Date			
LAB USE ONLY: Batch #: _____		Sample ID / Location		Sample Description		Date		Time			
Lab No.		Sample ID / Location		Sample Description		Date		Time			
TAT: <input type="checkbox"/> A = Overnight ≤ 24 hrs <input type="checkbox"/> B = Emergency Next Workday <input type="checkbox"/> C = Critical 2 Workdays <input type="checkbox"/> D = Urgent 3 Workdays <input type="checkbox"/> E = Routine 7 Workdays		Container Types: T=Tube    V=VOA    L=Liter    P=Pint    J=Jar    B=Bedlar    G=Glass    P=Plastic    M=Metal		Preservatives: H=HCl    N=HNO <sub>3</sub> S=H <sub>2</sub> SO <sub>4</sub> C=4°C Z=Zn(AC) <sub>2</sub> O=NaOH    T=Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>		Matrix: _____ Sediment _____ Soil _____ Drinking Water _____ Ground Water _____ Stormwater _____ Aqueous _____		TAT #    Type		REMARKS	

February 21, 2011

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



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

### LABORATORY TEST RESULTS

Project Reference: N005335  
Lab Number: C021002-01

Enclosed are results for sample(s) received 2/10/11 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,

A handwritten signature in black ink, appearing to read "Mark Johnson".

Mark Johnson  
Operations Manager  
MJohnson@AirTechLabs.com

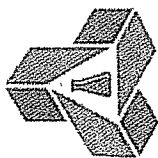
Note: The cover letter is an integral part of this analytical report.

CO21002-01/

# CHAIN-OF-CUSTODY RECORD

**Advanced Technology Laboratories**

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



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:

09-Feb-11

Sample ID	Matrix	Date Collected	Bottle Type	Requested Tests
N005335-001C / VINP-02-08	Air	2/8/2011 12:20:00 PM	ASTM D1946	1

General Comments: Please email sample receipt acknowledgement to the PM.  
Please use PO# N005335. Please fax result by: Normal TAT  
Please analyze for ASTM-1946

Date/Time	Date/Time
2/9/11	2/10/11
Relinquished by: <i>VS</i>	Received by: <i>Juan De la Ossa</i>
Relinquished by:	Received by: <i>via email</i>




**Client:** ATL  
**Attn:** Marlon Cartin  
**Project Name:** NA  
**Project No.:** N005335  
**Date Received:** 02/10/11  
**Matrix:** Air  
**Reporting Units:** % v/v

**ASTM D1946**

<b>Lab No.:</b>	C021002-01						
<b>Client Sample I.D.:</b>	N005335-001C/ VINP-02-08						
<b>Date Sampled:</b>	02/08/11						
<b>Date Analyzed:</b>	02/11/11						
<b>QC Batch No.:</b>	110211GC8A1						
<b>Analyst Initials:</b>	ZK						
<b>Dilution Factor:</b>	1.0						
<b>ANALYTE</b>	<b>Result % v/v</b>	<b>RL % v/v</b>					
Carbon Dioxide	0.24	0.010					
Oxygen/Argon	21	0.50					
Nitrogen	74	1.0					
Methane	0.026	0.0010					

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

Reviewed/Approved By:   
 Mark Johnson  
 Operations Manager

Date 2-21-11

The cover letter is an integral part of this analytical report



QC Batch No.: 110211GC8A1  
 Matrix: Air  
 Units: % v/v

QC for ASTM D1946

Lab No.:	Method Blank			LCS		LCSD			
Date Analyzed:	02/11/11			02/11/11		02/11/11			
Analyst Initials:	ZK			ZK		ZK			
Datafile:	11feb008			11feb006		11feb007			
Dilution Factor:	1.0			1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Oxygen/Argon	0.50	0.50	ND	91	70-130%	89	70-130%	1.9	<30
Nitrogen	1.0	1.0	ND	92	70-130%	91	70-130%	1.0	<30
Methane	0.0010	0.0010	ND	106	70-130%	106	70-130%	0.5	<30
Carbon Dioxide	0.010	0.010	ND	98	70-130%	97	70-130%	0.5	<30

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:



Mark J. Johnson  
 Operations Manager

Date:

2-21-11

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



April 05, 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.: N005544

RE: SFPP-Norwalk Site

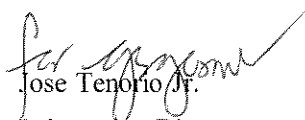
Attention: Daniel Jablonski

Enclosed are the results for sample(s) received on March 26, 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.

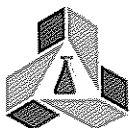
Thank you for the opportunity to service the needs of your company.

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

Sincerely,

  
Jose Tenorio Jr.  
Laboratory Director

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



*Advanced Technology*  
*Laboratories, Inc.*

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

**CLIENT:** CH2M HILL  
**Project:** SFPP-Norwalk Site  
**Lab Order:** N005544

**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.

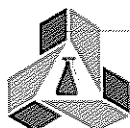
**Analytical Comments for EPA 8260B:**

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for some analytes on QC samples N005512-001EMS and N005512-001EMSD possibly due to matrix interference. The associated Laboratory Control Sample (LCS) recovery was acceptable.

RPD for Matrix Spike (MS)/Matrix Spike Duplicate (MSD) is outside criteria for Acetone, Acrolein, Acrylonitrile and Styrene ; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

**Analytical Comments for EPA 8015B\_DRO:**

Matrix Spike(MS) and Matrix Spike Duplicate(MSD) were not performed due to limited sample. LCS/LCSD was used instead to measure precision.



**CLIENT:** CH2M HILL  
**Project:** SFPP-Norwalk Site  
**Lab Order:** N005544  
**Contract No:**

**Work Order Sample Summary**

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N005544-001A	INF-03-25	Wastewater	3/25/2011 1:24:00 PM	3/26/2011	
N005544-001B	INF-03-25	Wastewater	3/25/2011 1:24:00 PM	3/26/2011	
N005544-001C	INF-03-25	Wastewater	3/25/2011 1:24:00 PM	3/26/2011	



**Advanced Technology Laboratories, Inc.**

**ANALYTICAL RESULTS**

Print Date: 05-Apr-11

**CLIENT:** CH2M HILL  
**Lab Order:** N005544  
**Project:** SFPP-Norwalk Site  
**Lab ID:** N005544-001

**Client Sample ID:** INF-03-25  
**Collection Date:** 3/25/2011 1:24:00 PM  
**Matrix:** WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
----------	--------	-----	-----	------	-------	----	---------------

**TPH-FUEL PRODUCT BY GC/FID**

**EPA 3510C**

**EPA 8015B**

RunID: <b>GC3_110331A</b>	QC Batch: <b>36536</b>					PrepDate: <b>3/28/2011</b>	Analyst: <b>MDM</b>
TPH-Fuel Product	1200	13	50	ug/L	1	3/31/2011 02:53 PM	
Surr: Octacosane	138	0	26-152	%REC	1	3/31/2011 02:53 PM	
Surr: p-Terphenyl	64.8	0	57-132	%REC	1	3/31/2011 02:53 PM	

**GASOLINE RANGE ORGANICS BY GC/FID**

**EPA 8015B**

RunID: <b>GC4_110328B</b>	QC Batch: <b>E11VW013</b>					PrepDate:	Analyst: <b>QBM</b>
TPH-Gasoline	3100	6.0	100	µg/L	1	3/28/2011	
Surr: Chlorobenzene - d5	103	0	74-138	%REC	1	3/28/2011	

**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

**EPA 8260B**

RunID: <b>MS1_110328A</b>	QC Batch: <b>D11VW041</b>					PrepDate:	Analyst: <b>QBM</b>
1,1,1,2-Tetrachloroethane	ND	0.061	1.0	ug/L	1	3/28/2011 04:48 PM	
1,1,1-Trichloroethane	ND	0.068	1.0	ug/L	1	3/28/2011 04:48 PM	
1,1,2,2-Tetrachloroethane	ND	0.054	1.0	ug/L	1	3/28/2011 04:48 PM	
1,1,2-Trichloroethane	ND	0.083	1.0	ug/L	1	3/28/2011 04:48 PM	
1,1-Dichloroethane	ND	0.099	1.0	ug/L	1	3/28/2011 04:48 PM	
1,1-Dichloroethene	ND	0.094	1.0	ug/L	1	3/28/2011 04:48 PM	
1,1-Dichloropropene	ND	0.082	1.0	ug/L	1	3/28/2011 04:48 PM	
1,2,3-Trichlorobenzene	ND	0.10	1.0	ug/L	1	3/28/2011 04:48 PM	
1,2,3-Trichloropropane	ND	0.12	1.0	ug/L	1	3/28/2011 04:48 PM	
1,2,4-Trichlorobenzene	ND	0.12	1.0	ug/L	1	3/28/2011 04:48 PM	
1,2,4-Trimethylbenzene	40	0.095	1.0	ug/L	1	3/28/2011 04:48 PM	
1,2-Dibromo-3-chloropropane	ND	0.15	2.0	ug/L	1	3/28/2011 04:48 PM	
1,2-Dibromoethane	ND	0.14	1.0	ug/L	1	3/28/2011 04:48 PM	
1,2-Dichlorobenzene	ND	0.070	1.0	ug/L	1	3/28/2011 04:48 PM	
1,2-Dichloroethane	ND	0.17	1.0	ug/L	1	3/28/2011 04:48 PM	
1,2-Dichloropropane	ND	0.085	1.0	ug/L	1	3/28/2011 04:48 PM	
1,3,5-Trimethylbenzene	11	0.087	1.0	ug/L	1	3/28/2011 04:48 PM	
1,3-Dichlorobenzene	ND	0.090	1.0	ug/L	1	3/28/2011 04:48 PM	
1,3-Dichloropropane	ND	0.074	1.0	ug/L	1	3/28/2011 04:48 PM	
1,4-Dichlorobenzene	ND	0.092	1.0	ug/L	1	3/28/2011 04:48 PM	
2,2-Dichloropropane	ND	0.061	1.0	ug/L	1	3/28/2011 04:48 PM	
2-Butanone	ND	1.0	10	ug/L	1	3/28/2011 04:48 PM	
2-Chlorotoluene	ND	0.080	1.0	ug/L	1	3/28/2011 04:48 PM	

**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



Advanced Technology  
Laboratories, Inc.

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

**Advanced Technology Laboratories, Inc.**

**ANALYTICAL RESULTS**

Print Date: 05-Apr-11

**CLIENT:** CH2M HILL  
**Lab Order:** N005544  
**Project:** SFPP-Norwalk Site  
**Lab ID:** N005544-001

**Client Sample ID:** INF-03-25  
**Collection Date:** 3/25/2011 1:24:00 PM  
**Matrix:** WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
----------	--------	-----	-----	------	-------	----	---------------

**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

**EPA 8260B**

RunID: <b>MS1_110328A</b>	QC Batch: <b>D11VW041</b>	PrepDate:	Analyst: <b>QBM</b>			
4-Chlorotoluene	ND	0.10	1.0	ug/L	1	3/28/2011 04:48 PM
4-Isopropyltoluene	ND	0.080	1.0	ug/L	1	3/28/2011 04:48 PM
4-Methyl-2-pentanone	ND	0.76	10	ug/L	1	3/28/2011 04:48 PM
Acetone	ND	1.6	10	ug/L	1	3/28/2011 04:48 PM
Acrolein	ND	4.3	20	ug/L	1	3/28/2011 04:48 PM
Acrylonitrile	ND	0.61	20	ug/L	1	3/28/2011 04:48 PM
Benzene	1300	0.75	10	ug/L	10	3/28/2011 04:02 PM
Bromobenzene	ND	0.082	1.0	ug/L	1	3/28/2011 04:48 PM
Bromochloromethane	ND	0.15	1.0	ug/L	1	3/28/2011 04:48 PM
Bromodichloromethane	ND	0.063	1.0	ug/L	1	3/28/2011 04:48 PM
Bromoform	ND	0.086	1.0	ug/L	1	3/28/2011 04:48 PM
Bromomethane	ND	0.13	1.0	ug/L	1	3/28/2011 04:48 PM
Carbon disulfide	ND	0.054	1.0	ug/L	1	3/28/2011 04:48 PM
Carbon tetrachloride	ND	0.10	1.0	ug/L	1	3/28/2011 04:48 PM
Chlorobenzene	ND	0.092	1.0	ug/L	1	3/28/2011 04:48 PM
Chloroethane	ND	0.14	1.0	ug/L	1	3/28/2011 04:48 PM
Chloroform	ND	0.058	1.0	ug/L	1	3/28/2011 04:48 PM
Chloromethane	ND	0.054	1.0	ug/L	1	3/28/2011 04:48 PM
cis-1,2-Dichloroethene	ND	0.11	1.0	ug/L	1	3/28/2011 04:48 PM
cis-1,3-Dichloropropene	ND	0.10	1.0	ug/L	1	3/28/2011 04:48 PM
Dibromochloromethane	ND	0.061	1.0	ug/L	1	3/28/2011 04:48 PM
Dibromomethane	ND	0.15	1.0	ug/L	1	3/28/2011 04:48 PM
Dichlorodifluoromethane	ND	0.12	1.0	ug/L	1	3/28/2011 04:48 PM
Ethylbenzene	51	0.051	1.0	ug/L	1	3/28/2011 04:48 PM
Freon-113	ND	0.080	1.0	ug/L	1	3/28/2011 04:48 PM
Hexachlorobutadiene	ND	0.17	1.0	ug/L	1	3/28/2011 04:48 PM
Isopropylbenzene	5.4	0.057	1.0	ug/L	1	3/28/2011 04:48 PM
m,p-Xylene	150	0.17	1.0	ug/L	1	3/28/2011 04:48 PM
Methylene chloride	ND	0.10	5.0	ug/L	1	3/28/2011 04:48 PM
MTBE	300	0.89	10	ug/L	10	3/28/2011 04:02 PM
n-Butylbenzene	ND	0.082	1.0	ug/L	1	3/28/2011 04:48 PM
n-Propylbenzene	11	0.087	1.0	ug/L	1	3/28/2011 04:48 PM
Naphthalene	36	0.056	1.0	ug/L	1	3/28/2011 04:48 PM
o-Xylene	41	0.077	1.0	ug/L	1	3/28/2011 04:48 PM
sec-Butylbenzene	ND	0.098	1.0	ug/L	1	3/28/2011 04:48 PM
Styrene	ND	0.072	1.0	ug/L	1	3/28/2011 04:48 PM

**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



*Advanced Technology  
Laboratories, Inc.*

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

**CLIENT:** CH2M HILL  
**Lab Order:** N005544  
**Project:** SFPP-Norwalk Site  
**Lab ID:** N005544-001

**Client Sample ID:** INF-03-25  
**Collection Date:** 3/25/2011 1:24:00 PM  
**Matrix:** WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
----------	--------	-----	-----	------	-------	----	---------------

**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

**EPA 8260B**

RunID: <b>MS1_110328A</b>	QC Batch: <b>D11VW041</b>					PrepDate:	Analyst: <b>QBM</b>
tert-Butylbenzene	ND	0.062	1.0	ug/L	1	3/28/2011 04:48 PM	
Tetrachloroethene	ND	0.13	1.0	ug/L	1	3/28/2011 04:48 PM	
Toluene	92	0.12	2.5	ug/L	1	3/28/2011 04:48 PM	
trans-1,2-Dichloroethene	ND	0.094	1.0	ug/L	1	3/28/2011 04:48 PM	
trans-1,3-Dichloropropene	ND	0.10	1.0	ug/L	1	3/28/2011 04:48 PM	
Trichloroethene	ND	0.060	1.0	ug/L	1	3/28/2011 04:48 PM	
Trichlorofluoromethane	ND	0.097	1.0	ug/L	1	3/28/2011 04:48 PM	
Vinyl chloride	ND	0.12	1.0	ug/L	1	3/28/2011 04:48 PM	
Xylenes, Total	200	1.5	2.0	ug/L	1	3/28/2011 04:48 PM	
Surr: 1,2-Dichloroethane-d4	95.4	0	72-119	%REC	1	3/28/2011 04:48 PM	
Surr: 1,2-Dichloroethane-d4	88.9	0	72-119	%REC	10	3/28/2011 04:02 PM	
Surr: 4-Bromofluorobenzene	108	0	76-119	%REC	1	3/28/2011 04:48 PM	
Surr: 4-Bromofluorobenzene	107	0	76-119	%REC	10	3/28/2011 04:02 PM	
Surr: Dibromofluoromethane	97.1	0	85-115	%REC	1	3/28/2011 04:48 PM	
Surr: Dibromofluoromethane	94.6	0	85-115	%REC	10	3/28/2011 04:02 PM	
Surr: Toluene-d8	108	0	81-120	%REC	10	3/28/2011 04:02 PM	
Surr: Toluene-d8	107	0	81-120	%REC	1	3/28/2011 04:48 PM	

**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  
**Work Order:** N005544  
**Project:** SFPP-Norwalk Site

**ANALYTICAL QC SUMMARY REPORT**

**TestCode: 8015\_W\_FP\_SFPP**

Sample ID: <b>LCS-36536_DRO</b>	SampType: <b>LCS</b>	TestCode: <b>8015_W_FP_</b>	Units: <b>ug/L</b>	Prep Date: <b>3/28/2011</b>	RunNo: <b>79554</b>						
Client ID: <b>LCSW</b>	Batch ID: <b>36536</b>	TestNo: <b>EPA 8015B EPA 3510C</b>		Analysis Date: <b>3/31/2011</b>	SeqNo: <b>1253798</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH-Fuel Product	769.520	50	1000	0	77.0	61	143				
Surr: Octacosane	50.309		80.00		62.9	26	152				
Surr: p-Terphenyl	57.221		80.00		71.5	57	132				

Sample ID: <b>LCSD-36536_DRO</b>	SampType: <b>LCSD</b>	TestCode: <b>8015_W_FP_</b>	Units: <b>ug/L</b>	Prep Date: <b>3/28/2011</b>	RunNo: <b>79554</b>						
Client ID: <b>LCSS02</b>	Batch ID: <b>36536</b>	TestNo: <b>EPA 8015B EPA 3510C</b>		Analysis Date: <b>3/31/2011</b>	SeqNo: <b>1253799</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH-Fuel Product	762.743	50	1000	0	76.3	61	143	769.5	0.885	30	
Surr: Octacosane	60.359		80.00		75.4	26	152		0		
Surr: p-Terphenyl	61.845		80.00		77.3	57	132		0		

Sample ID: <b>MB-36536</b>	SampType: <b>MBLK</b>	TestCode: <b>8015_W_FP_</b>	Units: <b>ug/L</b>	Prep Date: <b>3/28/2011</b>	RunNo: <b>79554</b>						
Client ID: <b>PBW</b>	Batch ID: <b>36536</b>	TestNo: <b>EPA 8015B EPA 3510C</b>		Analysis Date: <b>3/31/2011</b>	SeqNo: <b>1253800</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH-Fuel Product	30.410	50									
Surr: Octacosane	87.046		80.00		109	26	152				
Surr: p-Terphenyl	58.625		80.00		73.3	57	132				

**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:** N005544  
**Project:** SFPP-Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8015\_W\_GSFPP**

Sample ID: <b>E110328LCS</b>	SampType: <b>LCS</b>	TestCode: <b>8015_W_GSF</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>79543</b>						
Client ID: <b>LCSW</b>	Batch ID: <b>E11VW013</b>	TestNo: <b>EPA 8015B</b>	Analysis Date: <b>3/28/2011</b>	SeqNo: <b>1253510</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline	866.000	100	1000	0	86.6	67	136				
Surr: Chlorobenzene - d5	49.193		50.00		98.4	74	138				

Sample ID: <b>E110328MB1</b>	SampType: <b>MBLK</b>	TestCode: <b>8015_W_GSF</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>79543</b>						
Client ID: <b>PBW</b>	Batch ID: <b>E11VW013</b>	TestNo: <b>EPA 8015B</b>	Analysis Date: <b>3/28/2011</b>	SeqNo: <b>1253511</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline	ND	100									
Surr: Chlorobenzene - d5	57.127		50.00		114	74	138				

Sample ID: <b>N005541-002BMS</b>	SampType: <b>MS</b>	TestCode: <b>8015_W_GSF</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>79543</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>E11VW013</b>	TestNo: <b>EPA 8015B</b>	Analysis Date: <b>3/28/2011</b>	SeqNo: <b>1253513</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline	857.000	100	1000	0	85.7	67	136				
Surr: Chlorobenzene - d5	48.638		50.00		97.3	74	138				

Sample ID: <b>N005541-002BMSD</b>	SampType: <b>MSD</b>	TestCode: <b>8015_W_GSF</b>	Units: <b>µg/L</b>	Prep Date:	RunNo: <b>79543</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>E11VW013</b>	TestNo: <b>EPA 8015B</b>	Analysis Date: <b>3/28/2011</b>	SeqNo: <b>1253514</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline	906.000	100	1000	0	90.6	67	136	857.0	5.56	30	
Surr: Chlorobenzene - d5	51.799		50.00		104	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           |
| 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:** N005544  
**Project:** SFPP-Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPGE**

Sample ID: <b>D110328LCS</b>		SampType: <b>LCS</b>		TestCode: <b>8260_WP_LL</b>		Units: <b>ug/L</b>		Prep Date:		RunNo: <b>79526</b>		
Client ID: <b>LCSW</b>		Batch ID: <b>D11VW041</b>		TestNo: <b>EPA 8260B</b>		Analysis Date: <b>3/28/2011</b>		SeqNo: <b>1253309</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
1,1,1,2-Tetrachloroethane	25.470	1.0	25.00	0	102	81	129					
1,1,1-Trichloroethane	19.570	1.0	25.00	0	78.3	67	132					
1,1,2,2-Tetrachloroethane	23.740	1.0	25.00	0	95.0	63	128					
1,1,2-Trichloroethane	23.550	1.0	25.00	0	94.2	75	125					
1,1-Dichloroethane	23.800	1.0	25.00	0	95.2	69	133					
1,1-Dichloroethene	23.890	1.0	25.00	0	95.6	68	130					
1,1-Dichloropropene	21.940	1.0	25.00	0	87.8	73	132					
1,2,3-Trichlorobenzene	26.460	1.0	25.00	0	106	67	137					
1,2,3-Trichloropropane	23.640	1.0	25.00	0	94.6	73	124					
1,2,4-Trichlorobenzene	27.050	1.0	25.00	0	108	66	134					
1,2,4-Trimethylbenzene	25.590	1.0	25.00	0	102	74	132					
1,2-Dibromo-3-chloropropane	25.750	2.0	25.00	0	103	50	132					
1,2-Dibromoethane	24.690	1.0	25.00	0	98.8	80	121					
1,2-Dichlorobenzene	24.840	1.0	25.00	0	99.4	71	122					
1,2-Dichloroethane	24.740	1.0	25.00	0	99.0	69	132					
1,2-Dichloropropane	21.990	1.0	25.00	0	88.0	75	125					
1,3,5-Trimethylbenzene	25.110	1.0	25.00	0	100	74	131					
1,3-Dichlorobenzene	24.930	1.0	25.00	0	99.7	75	124					
1,3-Dichloropropane	22.500	1.0	25.00	0	90.0	73	126					
1,4-Dichlorobenzene	24.790	1.0	25.00	0	99.2	74	123					
2,2-Dichloropropane	20.550	1.0	25.00	0	82.2	69	137					
2-Butanone	237.600	10	250.0	0	95.0	49	136					
2-Hexanone	267.430	5.0	250.0	0	107	70	130					
4-Isopropyltoluene	25.010	1.0	25.00	0	100	73	130					
4-Methyl-2-pentanone	257.440	10	250.0	0	103	58	134					
Acetone	258.170	10	250.0	0	103	40	135					
Acrolein	214.710	20	250.0	0	85.9	75	125					
Acrylonitrile	219.630	20	250.0	0	87.9	75	125					
Benzene	23.580	1.0	25.00	0	94.3	81	122					
Bromobenzene	24.370	1.0	25.00	0	97.5	76	124					

**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:** N005544  
**Project:** SFPP-Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPGE**

Sample ID: <b>D110328LCS</b>		SampType: <b>LCS</b>		TestCode: <b>8260_WP_LL</b>		Units: <b>ug/L</b>		Prep Date:		RunNo: <b>79526</b>		
Client ID: <b>LCSW</b>		Batch ID: <b>D11VW041</b>		TestNo: <b>EPA 8260B</b>		Analysis Date: <b>3/28/2011</b>		SeqNo: <b>1253309</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Bromochloromethane	24.250	1.0	25.00	0	97.0	65	129					
Bromodichloromethane	21.420	1.0	25.00	0	85.7	76	121					
Bromoform	22.360	1.0	25.00	0	89.4	69	128					
Bromomethane	28.080	1.0	25.00	0	112	53	141					
Carbon disulfide	22.600	1.0	25.00	0	90.4	75	125					
Carbon tetrachloride	20.050	1.0	25.00	0	80.2	66	138					
Chlorobenzene	24.480	1.0	25.00	0	97.9	81	122					
Chloroethane	21.930	1.0	25.00	0	87.7	58	133					
Chloroform	24.500	1.0	25.00	0	98.0	69	128					
Chloromethane	24.820	1.0	25.00	0	99.3	56	131					
cis-1,2-Dichloroethene	24.660	1.0	25.00	0	98.6	72	126					
cis-1,3-Dichloropropene	23.280	1.0	25.00	0	93.1	69	131					
Cyclohexanone	25.220	5.0	25.00	0	101	70	130					
Di-isopropyl ether	22.690	1.0	25.00	0	90.8	70	130					
Dibromomethane	25.520	1.0	25.00	0	102	76	125					
Dichlorodifluoromethane	24.200	1.0	25.00	0	96.8	53	153					
Freon-113	21.590	1.0	25.00	0	86.4	75	125					
Hexachlorobutadiene	26.080	1.0	25.00	0	104	67	131					
Isopropylbenzene	24.250	1.0	25.00	0	97.0	75	127					
Methylene chloride	22.640	5.0	25.00	0	90.6	63	137					
MTBE	21.310	1.0	25.00	0	85.2	65	123					
n-Butylbenzene	25.700	1.0	25.00	0	103	69	137					
n-Propylbenzene	24.520	1.0	25.00	0	98.1	72	129					
Naphthalene	25.720	1.0	25.00	0	103	54	138					
o-Xylene	24.790	1.0	25.00	0	99.2	80	121					
sec-Butylbenzene	24.460	1.0	25.00	0	97.8	72	127					
Styrene	25.600	1.0	25.00	0	102	65	134					
Tert-amyl methyl ether	23.740	1.0	25.00	0	95.0	70	130					
Tert-Butanol	96.280	5.0	125.0	0	77.0	70	130					
Toluene	24.700	2.5	25.00	0	98.8	77	122					

**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:** N005544  
**Project:** SFPP-Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPGE**

Sample ID: <b>D110328LCS</b>		SampType: <b>LCS</b>		TestCode: <b>8260_WP_LL</b>		Units: <b>ug/L</b>		Prep Date:		RunNo: <b>79526</b>	
Client ID: <b>LCSW</b>		Batch ID: <b>D11VW041</b>		TestNo: <b>EPA 8260B</b>		Analysis Date: <b>3/28/2011</b>				SeqNo: <b>1253309</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	24.560	1.0	25.00	0	98.2	63	137				
trans-1,3-Dichloropropene	23.950	1.0	25.00	0	95.8	59	135				
Trichloroethene	23.020	1.0	25.00	0	92.1	70	127				
Trichlorofluoromethane	23.550	1.0	25.00	0	94.2	57	129				
Vinyl acetate	239.020	5.0	250.0	0	95.6	70	130				
Vinyl chloride	22.690	1.0	25.00	0	90.8	50	134				
IS: 1,4-Difluorobenzene	25.000	0	25.00	0	100	70	130				
IS: 1,4-Dichlorobenzene-d4	25.000	0	25.00	0	100	70	130				
Surr: Dibromofluoromethane	25.290		25.00		101	85	115				
Surr: Toluene-d8	25.500		25.00		102	81	120				

Sample ID: <b>N005512-001EMS</b>		SampType: <b>MS</b>		TestCode: <b>8260_WP_LL</b>		Units: <b>ug/L</b>		Prep Date:		RunNo: <b>79526</b>	
Client ID: <b>ZZZZZ</b>		Batch ID: <b>D11VW041</b>		TestNo: <b>EPA 8260B</b>		Analysis Date: <b>3/28/2011</b>				SeqNo: <b>1253310</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	25.750	1.0	25.00	0	103	81	129				
1,1,1-Trichloroethane	20.170	1.0	25.00	0	80.7	67	132				
1,1,2,2-Tetrachloroethane	20.280	1.0	25.00	0	81.1	63	128				
1,1,2-Trichloroethane	21.320	1.0	25.00	0	85.3	75	125				
1,1-Dichloroethane	23.690	1.0	25.00	0	94.8	69	133				
1,1-Dichloroethene	25.100	1.0	25.00	0	100	68	130				
1,1-Dichloropropene	23.220	1.0	25.00	0	92.9	73	132				
1,2,3-Trichlorobenzene	25.780	1.0	25.00	0	103	67	137				
1,2,3-Trichloropropane	19.980	1.0	25.00	0	79.9	73	124				
1,2,4-Trichlorobenzene	27.390	1.0	25.00	0	110	66	134				
1,2,4-Trimethylbenzene	25.590	1.0	25.00	0	102	74	132				
1,2-Dibromo-3-chloropropane	20.770	2.0	25.00	0	83.1	50	132				
1,2-Dibromoethane	21.080	1.0	25.00	0	84.3	80	121				
1,2-Dichlorobenzene	24.800	1.0	25.00	0	99.2	71	122				
1,2-Dichloroethane	21.990	1.0	25.00	0	88.0	69	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:** N005544  
**Project:** SFPP-Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPGE**

Sample ID: <b>N005512-001EMS</b>		SampType: <b>MS</b>		TestCode: <b>8260_WP_LL</b>		Units: <b>ug/L</b>		Prep Date:		RunNo: <b>79526</b>	
Client ID: <b>ZZZZZZ</b>		Batch ID: <b>D11VW041</b>		TestNo: <b>EPA 8260B</b>		Analysis Date: <b>3/28/2011</b>				SeqNo: <b>1253310</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloropropane	22.130	1.0	25.00	0	88.5	75	125				
1,3,5-Trimethylbenzene	25.800	1.0	25.00	0	103	74	131				
1,3-Dichlorobenzene	26.050	1.0	25.00	0	104	75	124				
1,3-Dichloropropane	21.280	1.0	25.00	0	85.1	73	126				
1,4-Dichlorobenzene	25.510	1.0	25.00	0	102	74	123				
2,2-Dichloropropane	20.280	1.0	25.00	0	81.1	69	137				
2-Butanone	100.320	10	250.0	0	40.1	49	136				S
2-Chlorotoluene	26.910	1.0	25.00	0	108	73	126				
4-Chlorotoluene	25.980	1.0	25.00	0	104	74	128				
4-Isopropyltoluene	27.110	1.0	25.00	0	108	73	130				
4-Methyl-2-pentanone	188.800	10	250.0	0	75.5	58	134				
Acetone	72.390	10	250.0	0	29.0	40	135				S
Acrolein	207.430	20	250.0	0	83.0	75	125				
Acrylonitrile	207.420	20	250.0	0	83.0	75	125				
Benzene	24.270	1.0	25.00	0	97.1	81	122				
Bromobenzene	24.830	1.0	25.00	0	99.3	76	124				
Bromochloromethane	22.620	1.0	25.00	0	90.5	65	129				
Bromodichloromethane	21.010	1.0	25.00	0	84.0	76	121				
Bromoform	19.720	1.0	25.00	0	78.9	69	128				
Bromomethane	29.790	1.0	25.00	0	119	53	141				
Carbon disulfide	22.310	1.0	25.00	0	89.2	75	125				
Carbon tetrachloride	20.640	1.0	25.00	0	82.6	66	138				
Chlorobenzene	25.470	1.0	25.00	0	102	81	122				
Chloroethane	22.000	1.0	25.00	0	88.0	58	133				
Chloroform	24.360	1.0	25.00	0	97.4	69	128				
Chloromethane	25.120	1.0	25.00	0	100	56	131				
cis-1,2-Dichloroethene	24.730	1.0	25.00	0	98.9	72	126				
cis-1,3-Dichloropropene	22.880	1.0	25.00	0	91.5	69	131				
Dibromochloromethane	21.630	1.0	25.00	0	86.5	66	133				
Dibromomethane	21.450	1.0	25.00	0	85.8	76	125				

**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:** N005544  
**Project:** SFPP-Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPG**

Sample ID: <b>N005512-001EMS</b>	SampType: <b>MS</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>ug/L</b>	Prep Date:	RunNo: <b>79526</b>						
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>D11VW041</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>3/28/2011</b>	SeqNo: <b>1253310</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	25.190	1.0	25.00	0	101	53	153				
Ethylbenzene	25.690	1.0	25.00	0	103	73	127				
Freon-113	21.700	1.0	25.00	0	86.8	75	125				
Hexachlorobutadiene	28.440	1.0	25.00	0	114	67	131				
Isopropylbenzene	27.640	1.0	25.00	0	111	75	127				
m,p-Xylene	53.100	1.0	50.00	0.5000	105	76	128				
Methylene chloride	21.660	5.0	25.00	0	86.6	63	137				
MTBE	20.230	1.0	25.00	0	80.9	65	123				
n-Butylbenzene	27.880	1.0	25.00	0	112	69	137				
n-Propylbenzene	26.560	1.0	25.00	0	106	72	129				
Naphthalene	21.340	1.0	25.00	0	85.4	54	138				
o-Xylene	25.260	1.0	25.00	0	101	80	121				
sec-Butylbenzene	26.640	1.0	25.00	0	107	72	127				
Styrene	22.590	1.0	25.00	0	90.4	65	134				
tert-Butylbenzene	26.100	1.0	25.00	0	104	70	129				
Tetrachloroethene	26.240	1.0	25.00	0	105	66	128				
Toluene	25.150	2.5	25.00	0.8500	97.2	77	122				
trans-1,2-Dichloroethene	24.890	1.0	25.00	0	99.6	63	137				
trans-1,3-Dichloropropene	22.180	1.0	25.00	0	88.7	59	135				
Trichloroethene	24.050	1.0	25.00	0	96.2	70	127				
Trichlorofluoromethane	24.650	1.0	25.00	0	98.6	57	129				
Vinyl chloride	23.080	1.0	25.00	0	92.3	50	134				
Xylenes, Total	78.360	2.0	75.00	0	104	75	125				
Surr: 1,2-Dichloroethane-d4	21.630		25.00		86.5	72	119				
Surr: 4-Bromofluorobenzene	24.930		25.00		99.7	76	119				
Surr: Dibromofluoromethane	24.360		25.00		97.4	85	115				
Surr: Toluene-d8	25.190		25.00		101	81	120				

**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:** N005544  
**Project:** SFPP-Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPGE**

Sample ID: <b>N005512-001EMSD</b>		SampType: <b>MSD</b>		TestCode: <b>8260_WP_LL</b>		Units: <b>ug/L</b>		Prep Date:		RunNo: <b>79526</b>	
Client ID: <b>ZZZZZZ</b>		Batch ID: <b>D11VW041</b>		TestNo: <b>EPA 8260B</b>		Analysis Date: <b>3/28/2011</b>				SeqNo: <b>1253311</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	25.400	1.0	25.00	0	102	81	129	25.75	1.37	20	
1,1,1-Trichloroethane	19.250	1.0	25.00	0	77.0	67	132	20.17	4.67	20	
1,1,2,2-Tetrachloroethane	20.720	1.0	25.00	0	82.9	63	128	20.28	2.15	20	
1,1,2-Trichloroethane	20.970	1.0	25.00	0	83.9	75	125	21.32	1.66	20	
1,1-Dichloroethane	22.900	1.0	25.00	0	91.6	69	133	23.69	3.39	20	
1,1-Dichloroethene	24.000	1.0	25.00	0	96.0	68	130	25.10	4.48	20	
1,1-Dichloropropene	22.180	1.0	25.00	0	88.7	73	132	23.22	4.58	20	
1,2,3-Trichlorobenzene	25.230	1.0	25.00	0	101	67	137	25.78	2.16	20	
1,2,3-Trichloropropane	20.240	1.0	25.00	0	81.0	73	124	19.98	1.29	20	
1,2,4-Trichlorobenzene	26.610	1.0	25.00	0	106	66	134	27.39	2.89	20	
1,2,4-Trimethylbenzene	22.020	1.0	25.00	0	88.1	74	132	25.59	15.0	20	
1,2-Dibromo-3-chloropropane	21.760	2.0	25.00	0	87.0	50	132	20.77	4.66	20	
1,2-Dibromoethane	21.230	1.0	25.00	0	84.9	80	121	21.08	0.709	20	
1,2-Dichlorobenzene	24.090	1.0	25.00	0	96.4	71	122	24.80	2.90	20	
1,2-Dichloroethane	20.950	1.0	25.00	0	83.8	69	132	21.99	4.84	20	
1,2-Dichloropropane	20.910	1.0	25.00	0	83.6	75	125	22.13	5.67	20	
1,3,5-Trimethylbenzene	23.850	1.0	25.00	0	95.4	74	131	25.80	7.85	20	
1,3-Dichlorobenzene	25.160	1.0	25.00	0	101	75	124	26.05	3.48	20	
1,3-Dichloropropane	20.940	1.0	25.00	0	83.8	73	126	21.28	1.61	20	
1,4-Dichlorobenzene	24.930	1.0	25.00	0	99.7	74	123	25.51	2.30	20	
2,2-Dichloropropane	18.990	1.0	25.00	0	76.0	69	137	20.28	6.57	20	
2-Butanone	82.720	10	250.0	0	33.1	49	136	100.3	19.2	20	S
2-Chlorotoluene	25.540	1.0	25.00	0	102	73	126	26.91	5.22	20	
4-Chlorotoluene	24.910	1.0	25.00	0	99.6	74	128	25.98	4.21	20	
4-Isopropyltoluene	25.520	1.0	25.00	0	102	73	130	27.11	6.04	20	
4-Methyl-2-pentanone	179.870	10	250.0	0	71.9	58	134	188.8	4.84	20	
Acetone	52.520	10	250.0	0	21.0	40	135	72.39	31.8	20	SR
Acrolein	166.440	20	250.0	0	66.6	75	125	207.4	21.9	20	SR
Acrylonitrile	163.520	20	250.0	0	65.4	75	125	207.4	23.7	20	SR
Benzene	23.620	1.0	25.00	0	94.5	81	122	24.27	2.71	20	

**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:** N005544  
**Project:** SFPP-Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPGE**

Sample ID: <b>N005512-001EMSD</b>	SampType: <b>MSD</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>ug/L</b>	Prep Date:	RunNo: <b>79526</b>						
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>D11VW041</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>3/28/2011</b>	SeqNo: <b>1253311</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	24.280	1.0	25.00	0	97.1	76	124	24.83	2.24	20	
Bromochloromethane	22.170	1.0	25.00	0	88.7	65	129	22.62	2.01	20	
Bromodichloromethane	20.170	1.0	25.00	0	80.7	76	121	21.01	4.08	20	
Bromoform	19.880	1.0	25.00	0	79.5	69	128	19.72	0.808	20	
Bromomethane	28.930	1.0	25.00	0	116	53	141	29.79	2.93	20	
Carbon disulfide	21.820	1.0	25.00	0	87.3	75	125	22.31	2.22	20	
Carbon tetrachloride	19.930	1.0	25.00	0	79.7	66	138	20.64	3.50	20	
Chlorobenzene	24.980	1.0	25.00	0	99.9	81	122	25.47	1.94	20	
Chloroethane	21.520	1.0	25.00	0	86.1	58	133	22.00	2.21	20	
Chloroform	23.140	1.0	25.00	0	92.6	69	128	24.36	5.14	20	
Chloromethane	24.920	1.0	25.00	0	99.7	56	131	25.12	0.799	20	
cis-1,2-Dichloroethene	23.510	1.0	25.00	0	94.0	72	126	24.73	5.06	20	
cis-1,3-Dichloropropene	22.180	1.0	25.00	0	88.7	69	131	22.88	3.11	20	
Dibromochloromethane	20.960	1.0	25.00	0	83.8	66	133	21.63	3.15	20	
Dibromomethane	21.480	1.0	25.00	0	85.9	76	125	21.45	0.140	20	
Dichlorodifluoromethane	24.800	1.0	25.00	0	99.2	53	153	25.19	1.56	20	
Ethylbenzene	25.350	1.0	25.00	0	101	73	127	25.69	1.33	20	
Freon-113	20.410	1.0	25.00	0	81.6	75	125	21.70	6.13	20	
Hexachlorobutadiene	26.690	1.0	25.00	0	107	67	131	28.44	6.35	20	
Isopropylbenzene	25.430	1.0	25.00	0	102	75	127	27.64	8.33	20	
m,p-Xylene	51.060	1.0	50.00	0.5000	101	76	128	53.10	3.92	20	
Methylene chloride	21.300	5.0	25.00	0	85.2	63	137	21.66	1.68	20	
MTBE	19.240	1.0	25.00	0	77.0	65	123	20.23	5.02	20	
n-Butylbenzene	26.880	1.0	25.00	0	108	69	137	27.88	3.65	20	
n-Propylbenzene	25.690	1.0	25.00	0	103	72	129	26.56	3.33	20	
Naphthalene	20.790	1.0	25.00	0	83.2	54	138	21.34	2.61	20	
o-Xylene	24.550	1.0	25.00	0	98.2	80	121	25.26	2.85	20	
sec-Butylbenzene	25.570	1.0	25.00	0	102	72	127	26.64	4.10	20	
Styrene	17.770	1.0	25.00	0	71.1	65	134	22.59	23.9	20	R
tert-Butylbenzene	25.000	1.0	25.00	0	100	70	129	26.10	4.31	20	

**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:** N005544  
**Project:** SFPP-Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPGE**

Sample ID: <b>N005512-001EMSD</b>		SampType: <b>MSD</b>		TestCode: <b>8260_WP_LL</b>		Units: <b>ug/L</b>		Prep Date:		RunNo: <b>79526</b>	
Client ID: <b>ZZZZZZ</b>		Batch ID: <b>D11VW041</b>		TestNo: <b>EPA 8260B</b>		Analysis Date: <b>3/28/2011</b>				SeqNo: <b>1253311</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tetrachloroethene	26.100	1.0	25.00	0	104	66	128	26.24	0.535	20	
Toluene	24.820	2.5	25.00	0.8500	95.9	77	122	25.15	1.32	20	
trans-1,2-Dichloroethene	23.540	1.0	25.00	0	94.2	63	137	24.89	5.58	20	
trans-1,3-Dichloropropene	21.720	1.0	25.00	0	86.9	59	135	22.18	2.10	20	
Trichloroethene	23.310	1.0	25.00	0	93.2	70	127	24.05	3.13	20	
Trichlorofluoromethane	24.340	1.0	25.00	0	97.4	57	129	24.65	1.27	20	
Vinyl chloride	22.880	1.0	25.00	0	91.5	50	134	23.08	0.870	20	
Xylenes, Total	75.610	2.0	75.00	0	101	75	125	78.36	3.57	20	
Surr: 1,2-Dichloroethane-d4	20.820		25.00		83.3	72	119		0		
Surr: 4-Bromofluorobenzene	24.860		25.00		99.4	76	119		0		
Surr: Dibromofluoromethane	23.880		25.00		95.5	85	115		0		
Surr: Toluene-d8	25.140		25.00		101	81	120		0		

Sample ID: <b>D110328MB2</b>		SampType: <b>MBLK</b>		TestCode: <b>8260_WP_LL</b>		Units: <b>ug/L</b>		Prep Date:		RunNo: <b>79526</b>	
Client ID: <b>PBW</b>		Batch ID: <b>D11VW041</b>		TestNo: <b>EPA 8260B</b>		Analysis Date: <b>3/28/2011</b>				SeqNo: <b>1253312</b>	
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	1.0									
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									

**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:** N005544  
**Project:** SFPP-Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPGE**

Sample ID: <b>D110328MB2</b>	SampType: <b>MBLK</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>ug/L</b>	Prep Date:	RunNo: <b>79526</b>						
Client ID: <b>PBW</b>	Batch ID: <b>D11VW041</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>3/28/2011</b>	SeqNo: <b>1253312</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

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

**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:** N005544  
**Project:** SFPP-Norwalk Site

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260\_WP\_LLPGE**

Sample ID: <b>D110328MB2</b>	SampType: <b>MBLK</b>	TestCode: <b>8260_WP_LL</b>	Units: <b>ug/L</b>	Prep Date:	RunNo: <b>79526</b>
Client ID: <b>PBW</b>	Batch ID: <b>D11VW041</b>	TestNo: <b>EPA 8260B</b>		Analysis Date: <b>3/28/2011</b>	SeqNo: <b>1253312</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	1.0									
Dibromomethane	ND	1.0									
Dichlorodifluoromethane	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	5.0									
MTBE	ND	1.0									
n-Butylbenzene	ND	1.0									
n-Propylbenzene	ND	1.0									
Naphthalene	ND	1.0									
o-Xylene	ND	1.0									
sec-Butylbenzene	ND	1.0									
Styrene	ND	1.0									
tert-Butylbenzene	ND	1.0									
Tetrachloroethene	ND	1.0									
Toluene	ND	2.5									
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	22.090		25.00		88.4	72	119				
Surr: 4-Bromofluorobenzene	26.380		25.00		106	76	119				
Surr: Dibromofluoromethane	22.210		25.00		88.8	85	115				
Surr: Toluene-d8	27.190		25.00		109	81	120				

**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   |  |



CHAIN OF CUSTODY RECORD

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]

DATE: 03-25-11  
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: [mary.defibaugh@kemp.com](mailto:mary.defibaugh@kemp.com)  
 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.

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

LAB USE ONLY	SAMPLE ID	LOCATION/DESCRIPTION	SAMPLING		NO. OF CONT.	MATERIAL	DATE	TIME	MAT. RIX	PH - g (8015M)	VOCs, Full List (8260B)	PH - p (8015M)	Temperature* = 1.90C (0.5 10.45)	Comments
			DATE	TIME										
	INF-03-25-	Influent	03-25-11	13:20	7	WW				X	X	X		(Temp. as sampled*)

REQUSTED ANALYSIS

Received by (Signature): *[Signature]* Date: 3/25/11 Time: 1335  
 Received by (Signature): *[Signature]* Date: 3/25/11 Time: 1400  
 Received by (Signature): *[Signature]* Date: 3/26/11 Time: 0920

Reinquired by (Signature): *[Signature]*  
 Reinquired by (Signature): *[Signature]*  
 Reinquired by (Signature): *[Signature]*

Revised: 01/11/11

# CHAIN OF CUSTODY RECORD

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]

DATE: 03-25-11  
 PAGE: 1 OF 1

LABORATORY CLIENT: <b>Kinder Morgan Energy Partners, Attn: Steve Defibaugh</b> ADDRESS: <b>1100 Town &amp; Country Road</b> CITY: <b>Orange, CA 92868</b> TEL: <b>714-560-4802</b> FAX: <b>714-560-4601</b> E-MAIL: <b>(ATTN: sdef@kempd.com)</b>		CLIENT PROJECT NAME / NUMBER: <b>SFPP - Norwalk Site</b> PROJECT CONTACT: <b>James Dye</b> SAMPLER(S): (SIGNATURE)		P.O. NO.: QUOTE NO.: LAB USE ONLY: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
REQUESTED ANALYSIS							
SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY) <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48HR <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> 5 DAYS <input type="checkbox"/> 10 DAYS <input type="checkbox"/> RWQCB REPORTING <input type="checkbox"/> ARCHIVE SAMPLES UNTIL <u>  /  /  </u>							
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.							
	SAMPLE ID	LOCATION/ DESCRIPTION	DATE	TIME	MATERIAL	NO. OF CONT.	
LAB USE ONLY	INF-03-25-	Influent	03-25-11	13:20	WW	7	Comments Temperature* = <u>1.9°C</u> <u>ICE (P#)</u> (Temp. as sampled)  Monthly
Relinquished by (Signature)							Date: <u>3/25/11</u> Time: <u>1335</u>
Relinquished by (Signature)							Date: <u>3/25/11</u> Time: <u>1400</u>
Relinquished by (Signature)							Date: <u>3/24/11</u> Time: <u>0920</u>
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.

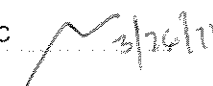
If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

## Sample Receipt Checklist

Cooler Received/Opened On: 3/26/2011 Workorder: N005544  
 Rep sample Temp (Deg C): 1.9 IR Gun ID: 1  
 Temp Blank:  Yes  No  
 Carrier name: OnTrac  
 Last 4 digits of Tracking No.: 8910 Packing Material Used: Bubble Wrap  
 Cooling process:  Ice  Ice Pack  Dry Ice  Other  None

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

Comments:

Checklist Completed By MBC  3/26/11

Reviewed By:  3/29/11

Account Number **B10241808910**

Date **09.25.11**



**800-334-5000**  
Call For A Pickup!

**OnTrac**  
FRONT (Company)

ENVIRO TREATMENT & TECHNOLOGY\*

Street Address  
16101 WILLOW AVE Suite

City  
STANFORD

State  
CA

Zip Code (Required)  
94304

Phone Number

**PLEASE PRINT IN BLOCK LETTERS with Blue/Black Ink.**

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

Street Address  
ATL

Suite #  
1515 W POCT RD

City  
LAS VEGAS

State  
NV

Zip Code (Required)  
89118

Phone Number  
702 707 7647

Recipient's Name  
TAPCO

Shipper's Ref. #  
CPA WILL 07511

<b>Service Options</b> We list selected Service Options to be applied. *Minimum charge weight 12.50 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.	<b>Billing Information</b> It may be selected; shipper will be notified.	<b>Weight</b>
SUNRISE - BY 10:30 AM* 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)	Bill Shipper's Account <input checked="" type="checkbox"/> Bill Other Acct # <input type="checkbox"/>	8 oz. Letter or Weight lbs. (Subject to verification)
C.O.D. Amount \$, Limit \$10,000 (enter C.O.D. up to package)	Secured Payment (Money Order or Certified Check) Unsecured Payment (Company Check or Personal Check)	Dim weight charge if greater than actual weight L in. X W in. X H in. +225 =
Delivery	Pick-up Time	Shipper's Signature
Driver's Initials	Shipper's Name	



April 07, 2011

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

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

RE: SFPP-Norwalk

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

Workorder No.: N005556

Attention: Daniel Jablonski

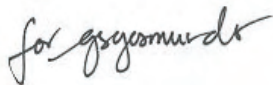
Enclosed are the results for sample(s) received on March 29, 2011 by Advanced Technology Laboratories, Inc. . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

The attached report is the final hard copy pertaining to the subcontracted tests for the above project.

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,



Jose Tenorio Jr.  
Laboratory Director

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



*Advanced Technology  
Laboratories, Inc.*

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

---

**CLIENT:** CH2M HILL  
**Project:** SFPP-Norwalk  
**Lab Order:** N005556

---

**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 .



**CLIENT:** CH2M HILL  
**Project:** SFPP-Norwalk  
**Lab Order:** N005556  
**Contract No:**

**Work Order Sample Summary**

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N005556-001A	VINF-03-29	Air	3/29/2011 1:20:00 PM	3/29/2011	
N005556-001B	VINF-03-29	Air	3/29/2011 1:20:00 PM	3/29/2011	



CHAIN OF CUSTODY RECORD

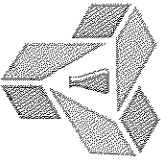
Advanced Technology Laboratories  
 3151 W. Post Road  
 Las Vegas, NV 89118  
 Tel: 702-307-2659 Fax: 702-307-2691  
 Marlon Cartin [marlon@atl-labs.com]

DATE: 3/29/11

PAGE: 1 OF 1

LABORATORY CLIENT: Kinder Morgan Energy Partners, Attn: Steve Definaugh ADDRESS: 1100 Town & Country Road CITY: Orange, CA 92868 TEL: 714-560-4802 FAC: 714-560-4601 E-MAIL: james.definaugh@kmes.com TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> 5 DAYS <input type="checkbox"/> 10 DAYS SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): <input type="checkbox"/> RWOCB REPORTING <input type="checkbox"/> ARCHIVE SAMPLES UNTIL: / / SPECIAL INSTRUCTIONS: Report to D. Jablonski@CH2M HILL, cc: KMEP Direct Bill KMEP/SFPP - Steve Definaugh-ref. AFE# 81195 *J* flags required/Use lowest possible detection limit - all methods.		CLIENT PROJECT NAME/NUMBER: SFPP - Norwalk Site PROJECT CONTRACT: James Dye SAMPLES: (SIGNATURE)	P.O. NO.: QUOTE NO.: LAB USE ONLY: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
REQUESTED ANALYSIS				
SAMPLE ID VINP-03-29	LOCATION DESCRIPTION Header	SAMPLING DATE: 3/29/11 TIME: 1320 MAT-RIX: Air NO. OF CONT: 4	ANALYSIS TO 18 X TO 2 (P-H) X APTM-1846 (O2, Argon, CO2, CH4) X	COMMENTS Monthly sample 100556
RECEIVED BY: (Signature)  DATE: 3/29/11 TIME: 1328			RECEIVED BY: (Signature)  DATE: 3/29/11 TIME: 1352	
RECEIVED BY: (Signature)			RECEIVED BY: (Signature)	

Revised: 01/11/2011



# 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) 989-4645  
Acct #: ~8807

Field Sampler: J. DYE

29-Mar-11

Sample ID	Matrix	Date Collected	Bottle Type	EPA TO15	Requested Tests
N005556-001A / VINP-03-29	Air	3/29/2011 1:20:00 PM	BAG	1	EPA TO3 1

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

Please use PO#: N005556

Please fax results by: Normal TAT

Relinquished by:

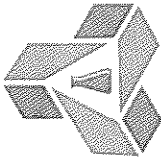
Date/Time

3/29/11

Received by:

Received by:

Date/Time



**Advanced Technology Laboratories**  
 3151-3153 W Post Rd., Las Vegas, NV 89118  
 www.atglobal.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: J. DYE

29-Mar-11

**Requested Tests**

Sample ID	Matrix	Date Collected	Bottle Type	ASTM D1946
N005556-001B / VINF-03-29	Air	3/29/2011 1:20:00 PM	BAG	1

General Comments: Please email sample receipt acknowledgement to the PM.  
 Please use PO#: N005556 Please fax results by: Normal TAT

for Argon/O<sub>2</sub>/CO<sub>2</sub>/CH<sub>4</sub>

Relinquished by:	Date/Time	Received by:	Date/Time
	3/29/11		
Relinquished by:		Received by:	

April 05, 2011



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

ELAP No.: 1838  
NELAP No.: 02107CA  
CSDLAC No.: 10196  
ORELAP No.: CA300003  
Workorder No.: 117104

RE:

Attention: Marlon Cartin

Enclosed are the results for sample(s) received on March 29, 2011 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

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

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

A handwritten signature in black ink, appearing to read "E. Rodriguez".

Eddie F. Rodriguez  
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.



**CLIENT:** Advanced Technology Laboratory-Las Vega

**Project:**

**Lab Order:** 117104

**CASE NARRATIVE**

---

Analytical Comments for EPA TO15

Sample 117104-001A, dilution was necessary due to high concentration of unknown compounds in the sample.





# Advanced Technology Laboratories

# ANALYTICAL RESULTS

Print Date: 05-Apr-11

**CLIENT:** Advanced Technology Laboratory-Las Vega    **Client Sample ID:** N005556-001A / VINP-03-29  
**Lab Order:** 117104    **Collection Date:** 3/29/2011 1:20:00 PM  
**Project:**    **Matrix:** AIR  
**Lab ID:** 117104-001A

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
----------	--------	-----	------	-------	----	---------------

## VOCS IN AIR BY GCMS

## EPA TO15

RunID: MS14_110330A	QC Batch: W11A029	PrepDate:	Analyst: DMP		
1,1,1-Trichloroethane	ND	2.5	ppbv	10	3/30/2011 04:13 PM
1,1,1,2-Tetrachloroethane	ND	2.5	ppbv	10	3/30/2011 04:13 PM
1,1,2-Trichloroethane	ND	2.5	ppbv	10	3/30/2011 04:13 PM
1,1-Dichloroethane	ND	2.5	ppbv	10	3/30/2011 04:13 PM
1,1-Dichloroethene	ND	2.5	ppbv	10	3/30/2011 04:13 PM
1,2,4-Trichlorobenzene	ND	2.5	ppbv	10	3/30/2011 04:13 PM
1,2,4-Trimethylbenzene	7.4	2.5	ppbv	10	3/30/2011 04:13 PM
1,2-Dibromoethane	ND	2.5	ppbv	10	3/30/2011 04:13 PM
1,2-Dichlorobenzene	ND	2.5	ppbv	10	3/30/2011 04:13 PM
1,2-Dichloroethane	ND	2.5	ppbv	10	3/30/2011 04:13 PM
1,2-Dichloropropane	ND	2.5	ppbv	10	3/30/2011 04:13 PM
1,3,5-Trimethylbenzene	4.4	2.5	ppbv	10	3/30/2011 04:13 PM
1,3-Dichlorobenzene	ND	2.5	ppbv	10	3/30/2011 04:13 PM
1,4-Dichlorobenzene	ND	2.5	ppbv	10	3/30/2011 04:13 PM
2-Butanone	ND	2.5	ppbv	10	3/30/2011 04:13 PM
2-Hexanone	ND	2.5	ppbv	10	3/30/2011 04:13 PM
4-Ethyl Toluene	3.4	2.5	ppbv	10	3/30/2011 04:13 PM
4-Methyl-2-pentanone	ND	2.5	ppbv	10	3/30/2011 04:13 PM
Acetone	ND	2.5	ppbv	10	3/30/2011 04:13 PM
Benzene	170	2.5	ppbv	10	3/30/2011 04:13 PM
Benzyl chloride	ND	2.5	ppbv	10	3/30/2011 04:13 PM
Bromodichloromethane	ND	2.5	ppbv	10	3/30/2011 04:13 PM
Bromoform	ND	2.5	ppbv	10	3/30/2011 04:13 PM
Bromomethane	ND	2.5	ppbv	10	3/30/2011 04:13 PM
Carbon disulfide	ND	2.5	ppbv	10	3/30/2011 04:13 PM
Carbon tetrachloride	ND	2.5	ppbv	10	3/30/2011 04:13 PM
Chlorobenzene	ND	2.5	ppbv	10	3/30/2011 04:13 PM
Chloroethane	ND	2.5	ppbv	10	3/30/2011 04:13 PM
Chloroform	ND	2.5	ppbv	10	3/30/2011 04:13 PM
Chloromethane	ND	2.5	ppbv	10	3/30/2011 04:13 PM
cis-1,2-Dichloroethene	ND	2.5	ppbv	10	3/30/2011 04:13 PM
cis-1,3-Dichloropropene	ND	2.5	ppbv	10	3/30/2011 04:13 PM
Dibromochloromethane	ND	2.5	ppbv	10	3/30/2011 04:13 PM
Dichlorodifluoromethane	ND	2.5	ppbv	10	3/30/2011 04:13 PM
Dichlorotetrafluoroethane	ND	2.5	ppbv	10	3/30/2011 04:13 PM

**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



Advanced Technology  
Laboratories

3275 Walnut Avenue, Signal Hill, CA 90755    Tel: 562.989.4045    Fax: 562.989.4040

**Advanced Technology Laboratories**

**ANALYTICAL RESULTS**  
 Print Date: 05-Apr-11

**CLIENT:** Advanced Technology Laboratory-Las Vega **Client Sample ID:** N005556-001A / VINP-03-29  
**Lab Order:** 117104 **Collection Date:** 3/29/2011 1:20:00 PM  
**Project:** **Matrix:** AIR  
**Lab ID:** 117104-001A

**Analyses Result PQL Qual Units DF Date Analyzed**

**VOCS IN AIR BY GCMS**

**EPA TO15**

RunID: MS14_110330A	QC Batch: W11A029	PrepDate:	Analyst: DMP
Ethylbenzene	15	2.5	ppbv 10 3/30/2011 04:13 PM
Freon-113	ND	2.5	ppbv 10 3/30/2011 04:13 PM
Hexachlorobutadiene	ND	2.5	ppbv 10 3/30/2011 04:13 PM
m,p-Xylene	32	2.5	ppbv 10 3/30/2011 04:13 PM
MTBE	ND	2.5	ppbv 10 3/30/2011 04:13 PM
Methylene chloride	ND	2.5	ppbv 10 3/30/2011 04:13 PM
o-Xylene	9.5	2.5	ppbv 10 3/30/2011 04:13 PM
Styrene	ND	2.5	ppbv 10 3/30/2011 04:13 PM
Tetrachloroethene	ND	2.5	ppbv 10 3/30/2011 04:13 PM
Toluene	18	2.5	ppbv 10 3/30/2011 04:13 PM
trans-1,2-Dichloroethene	ND	2.5	ppbv 10 3/30/2011 04:13 PM
trans-1,3-Dichloropropene	ND	2.5	ppbv 10 3/30/2011 04:13 PM
Trichloroethene	ND	2.5	ppbv 10 3/30/2011 04:13 PM
Trichlorofluoromethane	ND	2.5	ppbv 10 3/30/2011 04:13 PM
Vinyl acetate	ND	2.5	ppbv 10 3/30/2011 04:13 PM
Vinyl chloride	ND	2.5	ppbv 10 3/30/2011 04:13 PM
Surr: 4-Bromofluorobenzene	110	70-130	%REC 10 3/30/2011 04:13 PM

**GASOLINE RANGE ORGANICS BY GC-MS**

**EPA TO3**

RunID: MS14_110330A	QC Batch: W11A029	PrepDate:	Analyst: DMP
Gasoline	5000	0.20	ppmv 10 3/30/2011 04:13 PM
Surr: 4-Bromofluorobenzene	114	70-130	%REC 10 3/30/2011 04:13 PM

**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



Advanced Technology  
 Laboratories

3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Advanced Technology Laboratory-Las Vegas  
**Work Order:** 117104  
**Project:**

**ANALYTICAL QC SUMMARY REPORT**

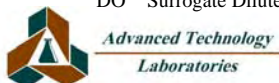
**TestCode: TO15\_CH2**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	2.000	0.25	2.000	0	100	70	130				
Benzene	1.940	0.25	2.000	0	97.0	70	130				
Chloroform	2.130	0.25	2.000	0	106	70	130				
m,p-Xylene	4.490	0.25	4.000	0	112	70	130				
o-Xylene	2.310	0.25	2.000	0	116	70	130				
Tetrachloroethene	2.140	0.25	2.000	0	107	70	130				
Toluene	1.990	0.25	2.000	0	99.5	70	130				
Trichloroethene	2.070	0.25	2.000	0	104	70	130				
Vinyl chloride	1.890	0.25	2.000	0	94.5	70	130				
Surr: 4-Bromofluorobenzene	2.730		2.500		109	70	130				

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	1.980	0.25	2.000	0	99.0	70	130	2.000	1.01	20	
Benzene	1.980	0.25	2.000	0	99.0	70	130	1.940	2.04	20	
Chloroform	2.030	0.25	2.000	0	102	70	130	2.130	4.81	20	
m,p-Xylene	4.540	0.25	4.000	0	114	70	130	4.490	1.11	20	
o-Xylene	2.390	0.25	2.000	0	120	70	130	2.310	3.40	20	
Tetrachloroethene	2.220	0.25	2.000	0	111	70	130	2.140	3.67	20	
Toluene	2.040	0.25	2.000	0	102	70	130	1.990	2.48	20	
Trichloroethene	2.060	0.25	2.000	0	103	70	130	2.070	0.484	20	
Vinyl chloride	2.060	0.25	2.000	0	103	70	130	1.890	8.61	20	
Surr: 4-Bromofluorobenzene	2.750		2.500		110	70	130		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:** Advanced Technology Laboratory-Las Vegas  
**Work Order:** 117104  
**Project:**

## ANALYTICAL QC SUMMARY REPORT

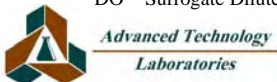
**TestCode: TO15\_CH2**

Sample ID: <b>MB-W11A029</b>	SampType: <b>MBLK</b>	TestCode: <b>TO15_CH2</b>	Units: <b>ppbv</b>	Prep Date:	RunNo: <b>131641</b>
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>W11A029</b>	TestNo: <b>EPA TO15</b>		Analysis Date: <b>3/31/2011</b>	SeqNo: <b>2143530</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.25									
1,1,2,2-Tetrachloroethane	ND	0.25									
1,1,2-Trichloroethane	ND	0.25									
1,1-Dichloroethane	ND	0.25									
1,1-Dichloroethene	ND	0.25									
1,2,4-Trichlorobenzene	ND	0.25									
1,2,4-Trimethylbenzene	ND	0.25									
1,2-Dibromoethane	ND	0.25									
1,2-Dichlorobenzene	ND	0.25									
1,2-Dichloroethane	ND	0.25									
1,2-Dichloropropane	ND	0.25									
1,3,5-Trimethylbenzene	ND	0.25									
1,3-Dichlorobenzene	ND	0.25									
1,4-Dichlorobenzene	ND	0.25									
2-Butanone	ND	0.25									
2-Hexanone	ND	0.25									
4-Ethyl Toluene	ND	0.25									
4-Methyl-2-pentanone	ND	0.25									
Acetone	ND	0.25									
Benzene	ND	0.25									
Benzyl chloride	ND	0.25									
Bromodichloromethane	ND	0.25									
Bromoform	ND	0.25									
Bromomethane	ND	0.25									
Carbon disulfide	ND	0.25									
Carbon tetrachloride	ND	0.25									
Chlorobenzene	ND	0.25									
Chloroethane	ND	0.25									
Chloroform	ND	0.25									
Chloromethane	ND	0.25									

**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: Advanced Technology Laboratory-Las Vegas

Work Order: 117104

Project:

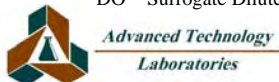
# ANALYTICAL QC SUMMARY REPORT

TestCode: TO15\_CH2

Sample ID: <b>MB-W11A029</b>	SampType: <b>MBLK</b>	TestCode: <b>TO15_CH2</b>	Units: <b>ppbv</b>	Prep Date:	RunNo: <b>131641</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>W11A029</b>	TestNo: <b>EPA TO15</b>		Analysis Date: <b>3/31/2011</b>	SeqNo: <b>2143530</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	ND	0.25									
cis-1,3-Dichloropropene	ND	0.25									
Dibromochloromethane	ND	0.25									
Dichlorodifluoromethane	ND	0.25									
Dichlorotetrafluoroethane	ND	0.25									
Ethylbenzene	ND	0.25									
Freon-113	ND	0.25									
Hexachlorobutadiene	ND	0.25									
m,p-Xylene	ND	0.25									
MTBE	ND	0.25									
Methylene chloride	ND	0.25									
o-Xylene	ND	0.25									
Styrene	ND	0.25									
Tetrachloroethene	ND	0.25									
Toluene	ND	0.25									
trans-1,2-Dichloroethene	ND	0.25									
trans-1,3-Dichloropropene	ND	0.25									
Trichloroethene	ND	0.25									
Trichlorofluoromethane	ND	0.25									
Vinyl acetate	ND	0.25									
Vinyl chloride	ND	0.25									
Surr: 4-Bromofluorobenzene	2.760		2.500		110	70	130				

**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: Advanced Technology Laboratory-Las Vegas

Work Order: 117104

Project:

# ANALYTICAL QC SUMMARY REPORT

TestCode: TO3\_GAS\_CH2

Sample ID: <b>MB-W11A029</b>	SampType: <b>MBLK</b>	TestCode: <b>TO3_GAS_C</b>	Units: <b>ppmv</b>	Prep Date:	RunNo: <b>131641</b>						
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>W11A029</b>	TestNo: <b>EPA TO3</b>		Analysis Date: <b>3/30/2011</b>	SeqNo: <b>2143531</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	0.020									
Surr: 4-Bromofluorobenzene	2.540		2.500		102	70	130				

Sample ID: <b>LCS-W11A029</b>	SampType: <b>LCS</b>	TestCode: <b>TO3_GAS_C</b>	Units: <b>ppmv</b>	Prep Date:	RunNo: <b>131641</b>						
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>W11A029</b>	TestNo: <b>EPA TO3</b>		Analysis Date: <b>3/30/2011</b>	SeqNo: <b>2143532</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

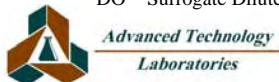
Gasoline	194.830	0.020	200.0	0	97.4	70	130				
Surr: 4-Bromofluorobenzene	2.800		2.500		112	70	130				

Sample ID: <b>LCSD-W11A029</b>	SampType: <b>LCSD</b>	TestCode: <b>TO3_GAS_C</b>	Units: <b>ppmv</b>	Prep Date:	RunNo: <b>131641</b>						
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>W11A029</b>	TestNo: <b>EPA TO3</b>		Analysis Date: <b>3/30/2011</b>	SeqNo: <b>2143533</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual


Gasoline	197.180	0.020	200.0	0	98.6	70	130	194.8	1.20	20	
Surr: 4-Bromofluorobenzene	2.760		2.500		110	70	130		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



# CHAIN OF CUSTODY RECORD

 <p><b>ADVANCED TECHNOLOGY LABORATORIES</b></p> <p>3275 Walnut Ave., Signal Hill, CA 90755 Tel: (562) 989-4045 • Fax: (562) 989-4040</p>		<p>P.O. #: _____ Quote #: _____</p> <p>Logged By: _____ Date: _____</p> <p><b>NOTE: Please include your Quote No. to ensure proper pricing of your project.</b></p>		<p><b>FOR LABORATORY USE ONLY</b></p> <p><b>Method of Transport</b></p> <p><input type="checkbox"/> Client <input type="checkbox"/> ATL <input type="checkbox"/> OnTrac</p> <p><input type="checkbox"/> FedEX <input type="checkbox"/> GSO <input type="checkbox"/> Other: _____</p> <p><b>Sample Condition Upon Receipt</b></p> <p>1. CHILLED Y <input type="checkbox"/> N <input type="checkbox"/> 4. SEALED Y <input type="checkbox"/> N <input type="checkbox"/></p> <p>2. HEADSPACE (VOA) Y <input type="checkbox"/> N <input type="checkbox"/> 5. # OF SPLS MATCH COC Y <input type="checkbox"/> N <input type="checkbox"/></p> <p>3. CONTAINER INTACT Y <input type="checkbox"/> N <input type="checkbox"/> 6. PRESERVED Y <input type="checkbox"/> N <input type="checkbox"/></p>																																	
<p>Client: Advanced Technology Laboratory Attention: _____ Project Name: CH2M Hill -Norwalk</p>		<p>Address: 3151 W Post Rd. City: Las Vegas State: NV Zip Code: 89118</p>		<p>Sampler: _____ Tel: (702) 307-2659 Fax: _____ (Signature)</p>																																	
<p>Relinquished by: (Signature and Printed Name) Date: _____ Time: _____</p>		<p>Received by: (Signature and Printed Name) Date: _____ Time: _____</p>		<p>Relinquished by: (Signature and Printed Name) Date: _____ Time: _____</p>																																	
<p>I hereby authorize ATL to perform the work indicated below:</p> <p>Project Mgr /Submitter: _____</p> <p>Print Name _____ Date _____</p> <p>Signature _____</p>		<p>Send Report To: Attn: _____ Co: _____ Addr: _____ City: _____ State: _____ Zip: _____</p>		<p>Special Instructions/Comments: 24 hr composite Canceled set up</p>																																	
<p><b>LAB USE ONLY:</b></p> <p>Batch #: _____ Lab No. _____</p>		<p>Sample ID / Location _____ Date _____ Time _____</p>		<p>Sample Description _____</p>																																	
<p><b>Sample/Records - Archival &amp; Disposal</b> Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.</p> <p><b>Storage Fees (applies when storage is requested):</b></p> <ul style="list-style-type: none"> <li>Sample: \$2.00 / sample /mo (after 45 days)</li> <li>Records: \$1 /ATL workorder /mo (after 1 year)</li> </ul>		<p>Circle or Add Analysis(es) Requested</p> <p>8081A (Pesticides) <input type="checkbox"/></p> <p>8082 (PCB) <input type="checkbox"/></p> <p>8209 (Volatiles) <input type="checkbox"/></p> <p>8270C (BNA) <input type="checkbox"/></p> <p>80108 (Total Metal) <input type="checkbox"/></p> <p>80158 (GRO) / 8021 (BTEX) <input type="checkbox"/></p> <p>80158 (DRO) <input type="checkbox"/></p> <p>TITLE 22 / CAM 17 (6010 / 7000) <input type="checkbox"/></p> <p>24 hr composite <input type="checkbox"/></p>		<p><b>SPECIFY APPROPRIATE MATRIX</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th></th> <th>Container(s)</th> <th>TAT #</th> <th>Type</th> </tr> <tr> <td>SEDIMENT</td> <td></td> <td></td> <td></td> </tr> <tr> <td>SOIL</td> <td></td> <td></td> <td></td> </tr> <tr> <td>DRINKING WATER</td> <td></td> <td></td> <td></td> </tr> <tr> <td>GROUND WATER</td> <td></td> <td></td> <td></td> </tr> <tr> <td>WASTEWATER</td> <td></td> <td></td> <td></td> </tr> <tr> <td>STORMWATER</td> <td></td> <td></td> <td></td> </tr> <tr> <td>AQUEOUS</td> <td></td> <td></td> <td></td> </tr> </table>			Container(s)	TAT #	Type	SEDIMENT				SOIL				DRINKING WATER				GROUND WATER				WASTEWATER				STORMWATER				AQUEOUS			
	Container(s)	TAT #	Type																																		
SEDIMENT																																					
SOIL																																					
DRINKING WATER																																					
GROUND WATER																																					
WASTEWATER																																					
STORMWATER																																					
AQUEOUS																																					
<p>TAT: <input type="checkbox"/> A = Overnight ≤ 24 hrs <input type="checkbox"/> B = Emergency Next Workday <input type="checkbox"/> C = Critical 2 Workdays <input type="checkbox"/> D = Urgent 3 Workdays <input type="checkbox"/> E = Routine 7 Workdays</p>		<p>Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass M=Metal</p>		<p><b>QA/QC</b></p> <p>RTNE <input type="checkbox"/> CT <input type="checkbox"/> Legal <input type="checkbox"/></p> <p>SWRCB Logcode <input type="checkbox"/> OTHER _____</p> <p>REMARKS _____</p>																																	
<p>■ TAT starts 8AM the following day if samples received after 5 PM</p>		<p>Preservatives: H=HCl N=HNO<sub>3</sub> S=H<sub>2</sub>SO<sub>4</sub> C=4°C Z=Zn(AC)<sub>2</sub> O=NaOH T=Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub></p>																																			





# CHAIN-OF-CUSTODY RECORD

**Advanced Technology Laboratories**

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

www.atlglobal.com

TEL: 7023072659

FAX: 7023072691



QC Level: RTNE

**Subcontractor:**

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

TEL: (562) 989-4045  
FAX: (562) 989-4045  
Acct #: -8827

Field Sampler: J. DYE

29-Mar-11

Sample ID	Matrix	Date Collected	Bottle Type	EPA TO15	Requested Tests
N005556-001A / VINP-03-29	Air	3/29/2011 1:20:00 PM	BAG	1	EPA TO3 1

117104-657

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

Please use PO#: N005556

Please fax results by: Normal TAT

Date/Time

3/29/11

Received by:

Received by:

Date/Time

3/29/11 16:10

April 6, 2011

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



**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

### LABORATORY TEST RESULTS

Project Reference: SFPP-Norwalk Site  
ATL Project Reference: N005556  
Lab Number: C033003-01

Enclosed are results for sample(s) received 3/30/11 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,

A handwritten signature in black ink that appears to read 'Mark Johnson'.

Mark Johnson  
Operations Manager  
MJohnson@AirTechLabs.com

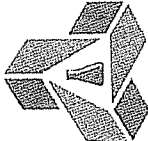
Note: The cover letter is an integral part of this analytical report.

CO33003

# CHAIN-OF-CUSTODY RECORD

## Advanced Technology Laboratories

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



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: J. DYE

29-Mar-11

Sample ID	Matrix	Date Collected	Bottle Type	ASTM D1946	Requested Tests
N005556-001B / VINP-03-29	Air	3/29/2011 1:20:00 PM	BAG	1	

General Comments: Please email sample receipt acknowledgement to the PM.  
Please use PO#: N005556 Please fax results by: Normal TAT

for Argon/O<sub>2</sub>, CO<sub>2</sub>, CH<sub>4</sub>

Date/Time

3/29/11

Received by: *Juan De la Ossa*

Received by:

3/29/11

*[Signature]*

Relinquished by:



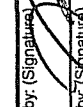

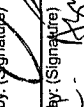


Relinquished by:

033003-01

CHAIN OF CUSTODY RECORD

DATE: 3/29/11  
 PAGE: 1 OF 1

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]

LABORATORY CLIENT: <b>Kinder Morgan Energy Partners, Attn: Steve Definbough</b> ADDRESS: <b>1100 Town &amp; Country Road</b> CITY: <b>Orange, CA 92868</b> TEL: <b>714-560-4802</b> FAX: <b>714-560-4601</b> E-MAIL: <b>James.Dye@kindermorgan.com</b>		CLIENT PROJECT NAME/NUMBER: <b>SFPP - Norwalk Site</b> PROJECT CONTACT: <b>James Dye</b> SAMPLER(S): (SIGNATURE) 		P.O. NO.: QUOTE NO.:	
TURNAROUND TIME <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48HR <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> 5 DAYS <input type="checkbox"/> 10 DAYS SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY) <input type="checkbox"/> RWQCB REPORTING <input type="checkbox"/> ARCHIVE SAMPLES UNTIL / /		REQUESTED ANALYSIS X ASTM-1946 (O2/Argon, CO2, CH4) X H2S X H2S PH			
SPECIAL INSTRUCTIONS <b>Report to D. Jablonski/CH2M HILL, cc: KMEP          Direct Bill KMEP/SFPP - Steve Definbough-ref. AFE# 81195          "J" flags required/Use lowest possible detection limit - all methods.</b>		NO. OF CONT. SAMPLE ID: <b>VINF-03-29</b> LOCATION/DESCRIPTION: <b>Header</b> DATE: <b>3/29/11 1320</b> MAT-RX: <b>Air</b> NO. OF CONT.: <b>4</b>			
LAB USE ONLY		COMMENTS Monthly sample			
Relinquished by: (Signature) 		Received by: (Signature) 		Date: <b>3/29/11</b> Time: <b>1328</b>	
Relinquished by: (Signature) 		Received by: (Signature) 		Date: <b>3/29/11</b> Time: <b>1352</b>	
Relinquished by: (Signature) 		Received by: (Signature) 		Date: <b>3/30/11</b> Time: <b>1159</b>	
Revised: 01/11/2011					

Client: ATL-Las Vegas  
 Attn: Marlon Cartin  
 Project Name: Kinder Morgan Energy Partners  
 Project No.: SFPP - Norwalk Site  
 Date Received: 03/30/11  
 Matrix: Air  
 Reporting Units: % v/v

ASTM D1946							
Lab No.:	C033003-01						
Client Sample I.D.:	VINF- 03-29						
Date Sampled:	03/29/11						
Date Analyzed:	03/30/11						
QC Batch No.:	110330GC8A1						
Analyst Initials:	ZK						
Dilution Factor:	1.0						
ANALYTE	Result % v/v	RL % v/v					
Carbon Dioxide	0.13	0.010					
Oxygen/Argon	20	0.50					
Methane	0.013	0.0010					

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

Reviewed/Approved By:   
 Mark Johnson  
 Operations Manager

Date 4-6-11

The cover letter is an integral part of this analytical report




QC Batch No.: 110330GC8A1  
 Matrix: Air  
 Units: % v/v

QC for ASTM D1946

Lab No.:	Method Blank			LCS		LCSD			
Date Analyzed:	03/30/11			03/29/11		03/29/11			
Analyst Initials:	ZK			ZK		ZK			
Datafile:	30mar001			29mar053		29mar054			
Dilution Factor:	1.0			1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Oxygen/Argon	0.50	0.50	ND	93	70-130%	93	70-130%	0.4	<30
Methane	0.0010	0.0010	ND	127	70-130%	128	70-130%	0.4	<30
Carbon Dioxide	0.010	0.010	ND	95	70-130%	96	70-130%	0.6	<30

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

Reviewed/Approved By:  Date: 4-6-11  
 Mark J. Johnson  
 Operations Manager

The cover letter is an integral part of this analytical report

