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Alameda County
Environmental Health



February 14, 2012
Cardno ERI 2780C.R03

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License A/C10-611383

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SUBJECT **Soil Vapor Assessment**
Former Exxon Service Station 74121
10605 Foothill Boulevard, Oakland, California

Alameda County No. RO0002635

Mr. Wickham:

At the request of ExxonMobil Environmental Services (EMES), on behalf of Exxon Mobil Corporation, Cardno ERI prepared this report detailing soil vapor assessment at the subject site. The purpose of the work was to install replacement wells and further characterize soil vapor conditions at the subject site. The work consisted of installing soil vapor sampling wells VW3R, VW4R, VW11R, and VW12R, to replace those that were previously saturated with perched groundwater, and the sampling of the soil vapor sampling wells at the subject site. The work was proposed in Cardno ERI's *Soil Vapor Assessment*, dated October 28, 2011 (Cardno ERI, 2011), which was approved by the Alameda County Health Services Agency, Environmental Health Services – Environmental Protection Department (the County), in a letter dated November 10, 2011 (Appendix A).

SITE DESCRIPTION

Former Exxon Service Station 74121 is located at 10605 Foothill Boulevard in Oakland, California (Plate 1). The surrounding area consists of commercial and residential properties. The subject site is a former Exxon service station. Currently the site is an undeveloped, landscaped area on the south corner of the intersection of Foothill Boulevard and 106th Avenue. The site is bordered by residential properties and a shopping center. The

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USTs were removed from the site prior to 1998. In February 2010, ETIC Engineering, Inc. (ETIC) oversaw the excavation and removal of 1,751 tons of soil from the site (ETIC, 2010a). Select site features are shown on Plate 2.

Additional site details are provided in ETIC's *Post-Remedial Excavation Report*, dated June 30, 2010 (ETIC, 2010a), and ETIC's *Vapor Sampling Report*, dated December 10, 2010 (ETIC, 2010b).

GEOLOGY AND HYDROGEOLOGY

The site lies at an elevation of 85 feet above msl, and the local topography slopes to the west toward San Francisco Bay (Plate 1). The site is approximately 1,000 feet west of the active Hayward Fault Zone near the base of the Diablo Range. Bedrock near the site consists of the Jurassic-Cretaceous Franciscan Formation (Braymer, 2000). The nearest body of surface water is San Leandro Creek located approximately 1 mile south of the site (Plate 1).

The site is primarily underlain by clay and silt to approximately 17 feet bgs. A layer of silty sand extends from approximately 17 to 21 feet bgs. A coarse-grained water-bearing zone of sand and gravel extends from approximately 21 feet to 26 feet bgs, the maximum depth explored.

PREVIOUS WORK

Cumulative groundwater monitoring and sampling data is included on Table 1. Well construction details are included on Table 2. Cumulative soil analytical results are included on Tables 3A and 3B. Soil vapor sampling data is included on Table 4.

Fueling System Activities

Details of the UST and dispenser removal are unknown and not specified in available site records. In December 1998, AEI Consultants (AEI) performed a geophysical survey at the site to locate remaining USTs; USTs were not discovered (AEI, 2004). Correspondence from the County indicated that the UST system was removed from the site prior to December 1998 (ETIC, 2010a).

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Site Assessment Activities

Assessment activities have been conducted at the site since 2004 including the drilling of soil borings SB1 through SB20 and V1 through V10 (AEI, 2004; ETIC, 2005; ETIC, 2006), the installation of groundwater monitoring wells MW1 through MW3 and MW5 (ETIC, 2007), and the installation soil vapor sampling wells VW1 through VW12 (ETIC, 2007; ETIC, 2009).

Remediation Activities

In February 2010, ETIC oversaw the excavation and removal of 1,751 tons of soil from the area of the former USTs (ETIC, 2010a). The area was excavated to approximately 20 feet bgs, and confirmation soil samples were collected. Based on the results of the confirmation soil samples, ETIC concluded that the majority of the petroleum hydrocarbons in soil had been removed from the site.

Groundwater Monitoring Activities

Groundwater monitoring was implemented at the site in 2007. Measurable NAPL has not been observed during the monitoring program (Table 1). Maximum concentrations of dissolved-phase TPHg (2,120 µg/L) and benzene (22 µg/L) were reported in samples collected from well MW2 in July and December 2007, respectively (Table 1). Samples collected during the most recent sampling event (March 2010) contained a maximum concentration of 520 µg/L TPHg in well MW2. Benzene was not present above reporting limits in samples collected during the March 2010 sampling event.

Soil Vapor Monitoring Activities

In May 2006, ETIC collected soil vapor samples from direct-push soil borings V1, V3, V6, V7, V9, and V10 (ETIC, 2006). Maximum vapor-phase TPHg (17,000,000 micrograms per cubic meter [µg/m³]) and benzene (1,900 µg/m³) concentrations were reported from boring V10, located near the former USTs. The location of boring V10 was subsequently removed during the 2010 excavation (ETIC, 2010a).

In April 2007, ETIC installed soil vapor sampling wells VW1 through VW5 (ETIC, 2007). In April 2007, vapor samples were collected from wells VW1 and VW5. Wells VW2, VW3, and VW4 contained water and were not sampled. Concentrations of TPHg were not present above reporting limits in the samples collected in 2007. Benzene was reported in the sample collected from well VW5 at a concentration of 4.4 µg/m³.

Soil vapor sampling wells VW6 through VW12 were installed by ETIC in 2009 (ETIC, 2009).

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The soil vapor sampling wells at the site have been sampled periodically since their installation with the exception of wells VW3 and VW4 (near the site boundary) which have always contained water. Wells VW7 and VW8 were destroyed as part of the remedial excavation in 2010 (ETIC, 2010a).

Since the February 2010 remedial excavation, samples have been collected from select wells. Maximum post-excavation concentrations of TPHg and benzene were reported in well VW11 located in the vicinity of the former dispensers at concentrations of 420,000 µg/m³ and 45 µg/m³, respectively.

WELL INSTALLATION

Based on the results of Cardno ERI's *Soil Vapor Assessment*, dated October 28, 2011 (Cardno ERI, 2011), which was approved by the County in a letter dated November 10, 2011, Cardno ERI installed four soil vapor sampling wells to replace those with persistent perched water present. Field work was conducted in accordance with the protocol included in Appendix B.

Pre-Field Activities

Prior to field activities, Cardno ERI obtained drilling permits from the Alameda County Public Works Agency (Appendix C), notified Underground Service Alert, and contracted a private utility-locating company to locate underground utilities at the site.

Soil Vapor Sampling Well Installation

On December 19, 2011, Cardno ERI observed Cascade Drilling install soil vapor sampling wells VW3R, VW4R, VW11R, and VW12R. The borings were advanced to 5 feet bgs using 3.25-inch diameter hand augers. The wells were constructed using 0.25-inch diameter stainless steel wells with 0.75-inch diameter, 0.010-inch slotted PVC screens installed at 4.5 feet bgs. Well construction details are included on the boring logs in Appendix D and in Table 2. Field procedures were conducted in accordance with the field protocol, included in Appendix B.

Waste Disposal

The drill cuttings were temporarily stored on site in DOT-approved, sealed 55-gallon drums, and transported to Soil Safe of California in Adelanto, California, for recycling. Copies of the non-hazardous waste manifests are included in Appendix E.

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SOIL VAPOR ASSESSMENT

In a letter dated November 10, 2011 (Appendix A), the County requested that the soil vapor sampling wells be resampled once the replacement wells were installed.

Purging and Sampling Soil Vapor Sampling Wells

Prior to purging and sampling, a purging and sampling manifold was connected to each well, and the tubing and fittings downstream from the wellhead valves were vacuum tested at approximately 27 to 28 inches of mercury (in Hg). The sampling manifold and tubing held the applied vacuum for five minutes at each soil vapor sampling well, indicating there were no leaks in the above-grade apparatus.

Prior to purging and sampling, a leak test was performed on the sampling apparatus, the annular well seal, and the Summa™ canister and associated valves and fittings. To assess the potential for leaks, a plastic shroud was placed over the well and Summa™ canister and helium was introduced into the shroud to produce a constant concentration of helium (approximately 20%); the helium concentration was continuously monitored using a meter. The wellhead valve was then opened and the vacuum applied to the well. Real-time leak detection is performed in the field by diverting extracted soil gas from the well into a Tedlar bag via a lung-box and analyzing the helium concentration within the Tedlar bag with a helium meter. The concentration of helium in the sample divided by the concentration of helium in the shroud provides a measure of the proportion of the sample attributable to leakage. Leaked air comprising less than 5% of the sample is insignificant. Helium screening is also performed using laboratory analysis of the contents of the Summa™ canister collected under the shroud.

On December 29 and 30, 2011, Cardno ERI purged and collected soil vapor samples from wells VW2, VW3R, VW4R, VW5, VW6, VW10, and VW11R. Perched groundwater was present in wells VW1, VW9, and VW12R, which prevented collection of soil vapor samples. Duplicate samples were collected from well VW2.

Cardno ERI collected soil vapor samples using a manifold consisting of airtight valves, a flow regulator, pressure gauges, and a vacuum pump capable of producing a vacuum of approximately 29 in Hg. The manifold also includes a port that connects sample collection vessels (Summa™ canisters). One vapor sample was collected from each of the wells over a period of approximately five minutes. Sampling was completed when the Summa™ canister reading reached -5 in Hg.

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Soil vapor analytical results are presented in Table 4. Select soil vapor analytical results are illustrated on Plate 2. A summary of sampling times, Summa™ canister vacuum readings, and average flow rate data during sample collection is presented in Appendix F.

Laboratory Analytical Methods – Soil Vapor Samples

Cardno ERI collected and submitted soil vapor samples for laboratory analysis to H&P Mobile Geochemistry, Inc. (H&P), of Carlsbad, California, a California state-certified laboratory, under COC protocol. The samples were analyzed for:

- TPHg (reported as TPHv) using EPA Method TO-15.
- Full-scan VOCs, including BTEX, fuel oxygenates, lead scavengers, naphthalene, and additional VOCs using EPA Method TO-15.
- Oxygen and carbon dioxide using American Society for Testing and Materials (ASTM) Method 1945-96.
- Helium using ASTM D1945M.
- Methane using EPA Method 8015M.
- Vacuum measured using a vacuum gauge.

The laboratory analytical report and COC record are provided in Appendix G.

RESULTS OF INVESTIGATION

The concentration of TPHg ($220,000 \mu\text{g}/\text{m}^3$) reported in the sample collected from well VW11R exceeded the commercial/industrial ESL and the concentration of TPHg ($27,000 \mu\text{g}/\text{m}^3$) reported in the sample collected from well VW5 exceeded the residential ESL, established by the California Regional Water Quality Control Board, San Francisco Bay Region (CRWQCB-SFB, 2008). The reporting limit for EDB exceeded the residential ESL in each of the samples collected; however, EDB was not detected above the reporting limit in the samples collected during this sampling event. Concentrations of other reported analytes did not exceed commercial/industrial ESLs.

DISCUSSION

Replacement well VW12R and wells VW1 and VW9 were submerged during the sampling event. Wells VW1 and VW9 have not been sampled since October 2010 due to the presence of water.

Well VW5, located in the vicinity of the former USTs, and well VW11R, located in the vicinity of the former dispenser islands, contained concentrations of TPHg exceeding residential and commercial ESLs, respectively.

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The wells located along the southwestern boundary of the site, adjacent to the residential properties, including replacement wells VW3 and VW4, did not contain concentrations above residential ESLs.

Samples collected since the February 2010 excavation have exhibited reductions in TPHg, with the exception of samples collected from wells VW5 and VW11/VW11R. Concentrations in wells VW2 and VW10 exceeded commercial ESLs for TPHg prior to the excavation and are now below residential ESLs. Concentrations in well VW6 are below ESLs and show decreasing trends.

CONCLUSIONS

TPHg exceeds select ESLs in the central portion of the site near the former fueling installations. Some of the soil vapor wells at the site remain saturated with perched water. The recently installed well network provides adequate lateral delineation of soil vapor toward the residential properties southwest of the site.

RECOMMENDATIONS

Cardno ERI recommends that, based on residential delineation and our understanding that the proposed development will be commercial, the subject site be evaluated for No Further Action.

CONTACT INFORMATION

The responsible party contact is Ms. Jennifer C. Sedlachek, ExxonMobil Environmental Services, 4096 Piedmont Avenue #194, Oakland, California, 94611. The consultant contact is Ms. Paula Sime, Cardno ERI, 601 North McDowell Boulevard, Petaluma, California, 94954. The agency contact is Mr. Jerry Wickham, Alameda County Health Care Services Agency, Environmental Health Services, 1131 Harbor Bay Parkway, Suite 250, Alameda, California, 94502-6577.

LIMITATIONS

For any documents cited that were not generated by Cardno ERI, the data taken from those documents is used "as is" and is assumed to be accurate. Cardno ERI does not guarantee the accuracy of this data and makes no warranties for the referenced work performed nor the inferences or conclusions stated in these documents.

This document was prepared in accordance with generally accepted standards of environmental, geological, and engineering practices in California at the time of investigation. No soil engineering or geotechnical references are implied or should be inferred. The evaluation of the geologic conditions at the site for this

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investigation is made from a limited number of data points. Subsurface conditions may vary away from these data points.

Please contact Ms. Paula Sime, Cardno ERI's project manager for this site, at paula.sime@cardno.com or at (707) 766-2000 with any questions or comments concerning this report.

Sincerely,

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Enclosures:

References

Acronym List

Plate 1 Site Vicinity Map

Plate 2 Select Soil Vapor Analytical Results

Table 1 Cumulative Groundwater Monitoring and Sampling Data

Table 2 Well Construction Details

Table 3A Cumulative Soil Analytical Results

Table 3B Additional Cumulative Soil Analytical Results

Table 4 Soil Vapor Analytical Results

Appendix A Correspondence

Appendix B Field Protocol

Appendix C Permits

Appendix D Boring Logs

Appendix E Disposal Documentation

Appendix F Field Data Forms

Appendix G Laboratory Analytical Reports and Chain-of-Custody Records

cc: Ms. Jennifer C. Sedlachek, ExxonMobil Environmental Services, 4096 Piedmont Avenue #194, Oakland, California, 94611

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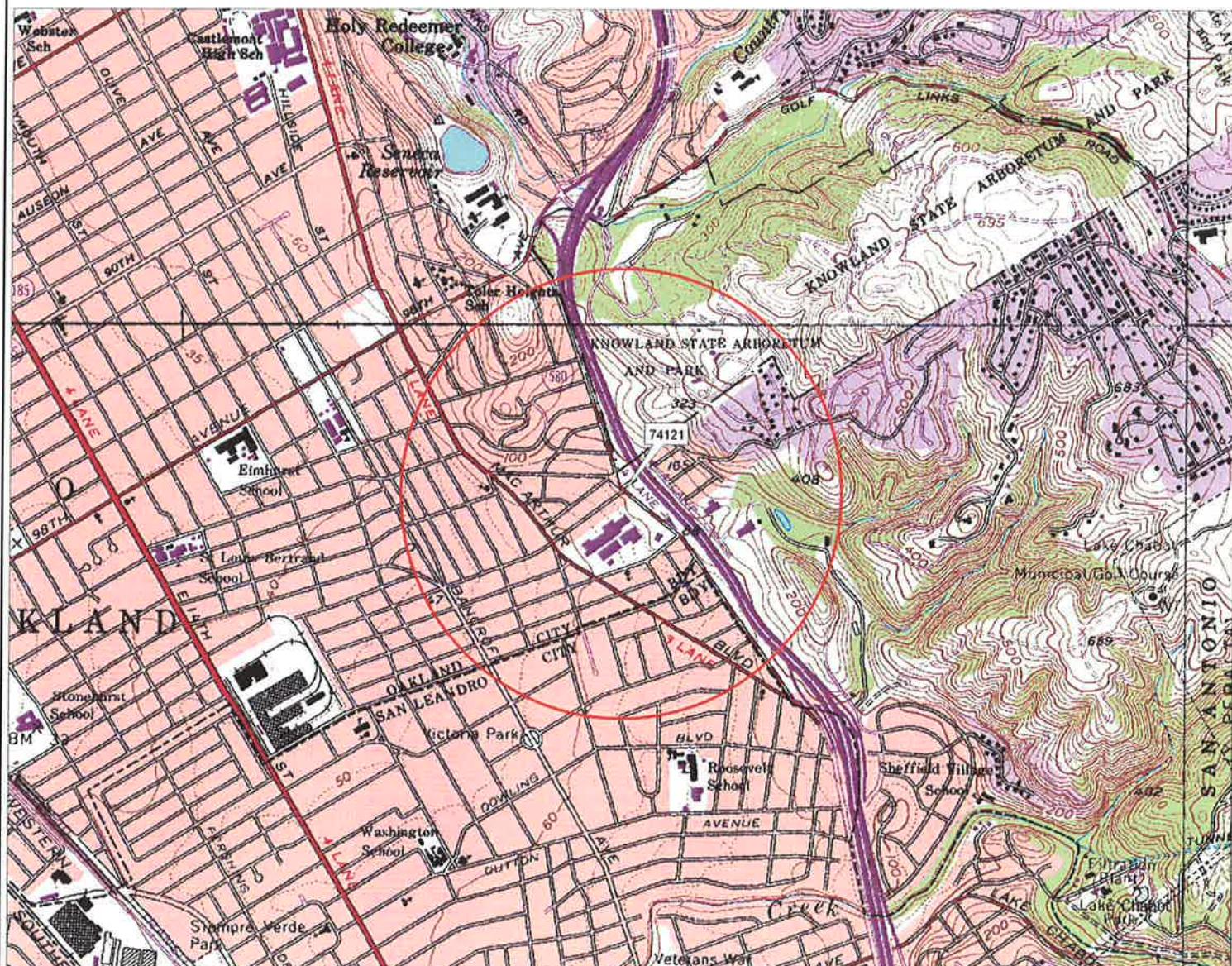
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ACRONYM LIST

$\mu\text{g/L}$	Micrograms per liter	NEPA	National Environmental Policy Act
μs	Microsiemens	NGVD	National Geodetic Vertical Datum
1,2-DCA	1,2-dichloroethane	NPDES	National Pollutant Discharge Elimination System
acf m	Actual cubic feet per minute	O&M	Operations and Maintenance
AS	Air sparge	ORP	Oxidation-reduction potential
bgs	Below ground surface	OSHA	Occupational Safety and Health Administration
BTEX	Benzene, toluene, ethylbenzene, and total xylenes	OVA	Organic vapor analyzer
CEQA	California Environmental Quality Act	P&ID	Process & Instrumentation Diagram
cfm	Cubic feet per minute	PAH	Polycyclic aromatic hydrocarbon
COC	Chain of Custody	PCB	Polychlorinated biphenyl
CPT	Cone Penetration (Penetrometer) Test	PCE	Tetrachloroethene or perchloroethylene
DIPE	Di-isopropyl ether	PID	Photo-ionization detector
DO	Dissolved oxygen	PLC	Programmable logic control
DOT	Department of Transportation	POTW	Publicly owned treatment works
DPE	Dual-phase extraction	ppmv	Parts per million by volume
DTW	Depth to water	PQL	Practical quantitation limit
EDB	1,2-dibromoethane	psi	Pounds per square inch
EPA	Environmental Protection Agency	PVC	Polyvinyl chloride
ESL	Environmental screening level	QA/QC	Quality assurance/quality control
ETBE	Ethyl tertiary butyl ether	RBSL	Risk-based screening levels
FID	Flame-ionization detector	RCRA	Resource Conservation and Recovery Act
fpm	Feet per minute	RL	Reporting limit
GAC	Granular activated carbon	scfm	Standard cubic feet per minute
gpd	Gallons per day	SSTL	Site-specific target level
gpm	Gallons per minute	STLC	Soluble threshold limit concentration
GWPTS	Groundwater pump and treat system	SVE	Soil vapor extraction
HVOC	Halogenated volatile organic compound	SVOC	Semivolatile organic compound
J	Estimated value between MDL and PQL (RL)	TAME	Tertiary amyl methyl ether
LEL	Lower explosive limit	TBA	Tertiary butyl alcohol
LPC	Liquid-phase carbon	TCE	Trichloroethene
LRP	Liquid-ring pump	TOC	Top of well casing elevation; datum is msl
LUFT	Leaking underground fuel tank	TOG	Total oil and grease
LUST	Leaking underground storage tank	TPHd	Total petroleum hydrocarbons as diesel
MCL	Maximum contaminant level	TPHg	Total petroleum hydrocarbons as gasoline
MDL	Method detection limit	TPHmo	Total petroleum hydrocarbons as motor oil
mg/kg	Milligrams per kilogram	TPHs	Total petroleum hydrocarbons as stoddard solvent
mg/L	Milligrams per liter	TRPH	Total recoverable petroleum hydrocarbons
mg/m ³	Milligrams per cubic meter	UCL	Upper confidence level
MPE	Multi-phase extraction	USCS	Unified Soil Classification System
MRL	Method reporting limit	USGS	United States Geologic Survey
msl	Mean sea level	UST	Underground storage tank
MTBE	Methyl tertiary butyl ether	VCP	Voluntary Cleanup Program
MTCA	Model Toxics Control Act	VOC	Volatile organic compound
NAI	Natural attenuation indicators	VPC	Vapor-phase carbon
NAPL	Non-aqueous phase liquid		



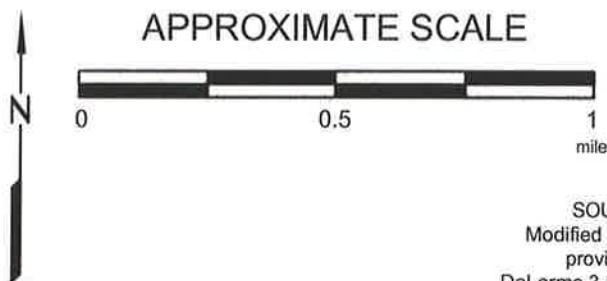
FN 2780 TOPO

EXPLANATION



1/2-mile radius circle

APPROXIMATE SCALE



SOURCE:
Modified from a map
provided by
DeLorme 3-D TopoQuads



Shaping the Future

SITE VICINITY MAP

FORMER EXXON SERVICE STATION 74121
10605 Foothill Boulevard
Oakland, California

PROJECT NO.

2780

PLATE

1

Analyte Concentrations in ug/m³
Sampled December 29 and 30, 2011

Sample Depth
Total Petroleum Hydrocarbons as gasoline
Benzene

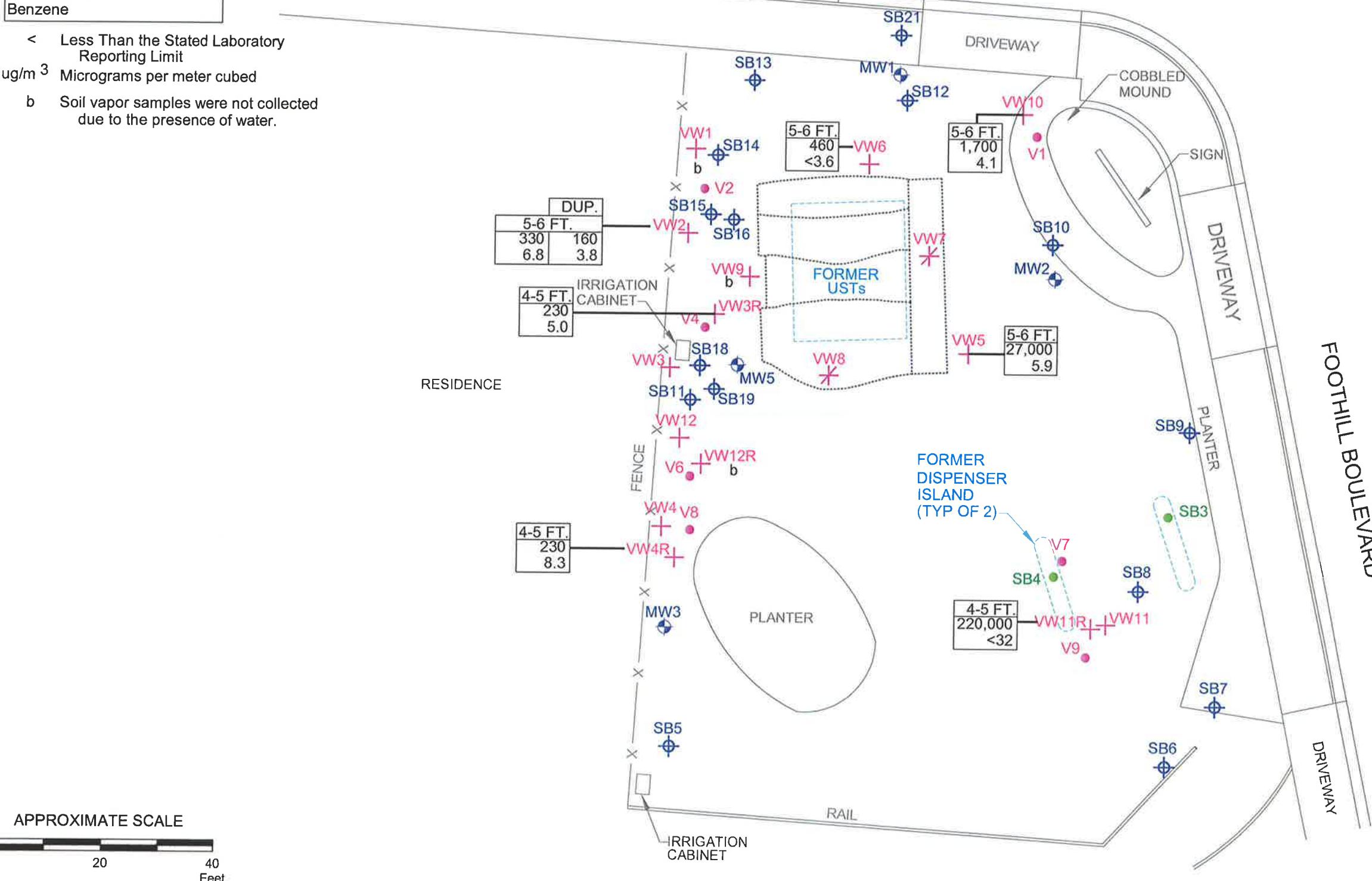
< Less Than the Stated Laboratory Reporting Limit

ug/m³ Micrograms per meter cubed

b Soil vapor samples were not collected due to the presence of water.

106th AVENUE

FOOTHILL BOULEVARD



FN 2780 12 R03 GSP_RPT



SELECT SOIL VAPOR ANALYTICAL RESULTS

FORMER EXXON SERVICE STATION 74121
10605 Foothill Boulevard
Oakland, California

EXPLANATION
MW5
Groundwater Monitoring Well
VW12
Soil Vapor Sampling Well
V9
Soil Vapor Probe

SB21
Direct Push Boring
SB4
Soil Boring
VW8
Destroyed Soil Vapor Sampling Well
V9
Soil Vapor Probe

PROJECT NO.
2780
PLATE
2

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 74121
10605 Foothill Boulevard
Oakland, California
(Page 1 of 2)

Well ID	Sampling Date	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	1,2-DCA (µg/L)	TAME (µg/L)	EDB (µg/L)
MW1	03/08/07	82.47	15.10	67.37	No	119	440	1.91	<1.00	1.21	<1.00	<3.00	<10.0	<0.500	<0.500	<0.500	0.560	<0.500
MW1	06/08/07	82.47	16.47	66.00	No	<47.6	127	0.880	<0.50	<0.50	<0.50	<10.0a,b	<0.500	<0.500	<0.500	<0.500	<0.500	
MW1	09/06/07	82.47	17.47	65.00	No	<47.2	78.0	0.590	<0.50	<0.50	<0.50	<10.0a,b	<0.500	<0.500	<0.500	<0.500	<0.500	
MW1	12/03/07	82.47	18.10	64.37	No	<47	<50	<0.50	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	
MW1	03/19/08	82.47	16.20	66.27	No	61e	51.3	3.08	<0.50	<0.50	<0.50	<10.0	<0.500	<0.500	<0.500	0.930	<0.500	
MW1	06/11/08	82.47	17.24	65.23	No	<47	<50	0.99	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	
MW1	09/16/08	82.47	18.37	64.10	No	<47	<50	<0.50	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	
MW1	12/01/08	82.47	18.85	63.62	No	<47	<50	<0.50	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	
MW1	03/12/09	82.47	16.92	65.55	No	<50	68	0.80	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	
MW1	08/12/09	82.47	18.50	63.97	No	<50	<50	0.46f	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	0.130f	
MW1	03/16/10	82.47	16.77	65.70	No	<50	<50	0.72	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	0.150f	
MW2	03/08/07	84.40	16.97	67.43	No	550	1,620	<0.500	1.33	3.52	2.41	<3.00	<10.0	<0.500	<0.500	<0.500	<0.500	
MW2	06/08/07	84.40	18.34	66.06	No	395	2,120	<0.500	21.8	2.45	0.66	<0.50	10.0c	<0.500	<0.500	<0.500	<0.500	
MW2	09/06/07	84.40	19.33	65.07	No	208	470	<0.500	4.66	0.70	<0.50	1.25	<10.0a,c	<0.500	<0.500	<0.500	<0.500	
MW2	12/03/07	84.40	19.97	64.43	No	120e	560	<0.50	22d	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	
MW2	03/19/08	84.40	18.07	66.33	No	200e	630	<0.500	5.33	<0.50	<0.50	0.82	<10.0	<0.500	<0.500	<0.500	<0.500	
MW2	06/11/08	84.40	19.13	65.27	No	110e	430	<0.50	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	
MW2	09/16/08	84.40	20.25	64.15	No	63e	230	<0.50	8.1d	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	
MW2	12/01/08	84.40	20.75	63.65	No	58e	250	<0.50	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	
MW2	03/12/09	84.40	18.85	65.55	No	<50	940	<0.50	<0.50	<0.50	<0.50	0.75f	<10	<0.50	<0.50	<0.50	<0.50	
MW2	08/12/09	84.40	20.43	63.97	No	<50	500	<0.50	<0.50	0.56	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	
MW2	03/16/10	84.40	18.68	65.72	No	<50	520	<0.50	<0.50	1.3	1.3	<1.0	<10	<0.50	<0.50	<0.50	<0.50	
MW3	03/08/07	83.25	15.49	67.76	No	52.9	<100	<0.500	<1.00	<1.00	<1.00	<3.00	<10.0	<0.500	<0.500	<0.500	<0.500	
MW3	06/08/07	83.25	17.02	66.23	No	<47.6	<50.0	<0.500	<0.50	<0.50	<0.50	<10.0a,b	<0.500	<0.500	<0.500	<0.500	<0.500	
MW3	09/06/07	83.25	18.07	65.18	No	<47.2	<50.0	<0.500	<0.50	<0.50	<0.50	<10.0a,b	<0.500	<0.500	<0.500	<0.500	<0.500	
MW3	12/03/07	83.25	18.89	64.56	No	<47	<50	<0.50	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	
MW3	03/19/08	83.25	16.79	66.46	No	<47	<50.0	<0.500	<0.50	<0.50	<0.50	<10.0	<0.500	<0.500	<0.500	<0.500	<0.500	
MW3	06/11/08	83.25	17.82	65.43	No	<47	<50	<0.50	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	
MW3	09/16/08	83.25	18.99	64.26	No	<47	<50	<0.50	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	
MW3	12/01/08	83.25	19.46	63.79	No	<47	<50	<0.50	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	
MW3	03/12/09	83.25	17.53	65.72	No	<50	<50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	
MW3	08/12/09	83.25	19.11	64.14	No	<50	<50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	
MW3	03/16/10	83.25	17.4	65.85	No	<50	<50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	
MW5	03/08/07	82.65	14.31	68.34	No	59.2	187	<0.500	<1.00	<1.00	<1.00	<3.00	<10.0	<0.500	<0.500	<0.500	<0.500	
MW5	06/08/07	82.65	16.64	66.01	No	90.3	780	<0.500	4.38	0.72	<0.50	<0.50	<10.0a,b	<0.500	<0.500	<0.500	<0.500	
MW5	09/06/07	82.65	17.62	65.03	No	121	<50.0	<0.500	<0.50	<0.50	<0.50	<10.0a,b	<0.500	<0.500	<0.500	<0.500	<0.500	
MW5	12/03/07	82.65	18.27	64.38	No	65e	100	<0.50	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	
MW5	03/19/08	82.65	16.37	66.28	No	110e	237	<0.500	0.69	<0.50	<0.50	0.87	<10.0	<0.500	<0.500	<0.500	<0.500	
MW5	06/11/08	82.65	17.40	65.25	No	77e	83	<0.50	<0.50	<0.50	<0.50	0.65	<20	<0.50	<0.50	<0.50	<0.50	
MW5	09/16/08	82.65	18.54	64.11	No	<47	120	<0.50	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	
MW5	12/01/08	82.65	19.00	63.65	No	<47	140	<0.50	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	
MW5	03/12/09	82.65	17.09	65.56	No	<50	410	<0.50	0.21f	<0.50	<0.50	0.85f	<10	<0.50	<0.50	<0.50	<0.50	
MW5	08/12/09	82.65	18.71	63.94	No	<50	110	<0.50	0.56g	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	0.19f	
MW5	03/26/10	82.65	16.96	65.69	No	<50	210	<0.50	<0.50	0.46f	0.42f	<1.0	<10	<0.50	<0.50	<0.50	<0.50	

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
 Former Exxon Service Station 74121
 10605 Foothill Boulevard
 Oakland, California
 (Page 2 of 2)

Notes:

TOC	=	Top of well casing elevation.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation. Groundwater elevations adjusted for NAPL, when present, using an average specific gravity of 0.75 for gasoline.
NAPL	=	Non-aqueous phase liquid.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B.
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8260B.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8260B; prior to February 2009, analyzed using EPA Method 8020/8021B.
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
TAME	=	Tertiary amyl methyl ether analyzed using EPA Method 8260B.
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 8260B.
EDB	=	1,2-dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	=	1,2-dichloroethane analyzed using EPA Method 8260B.
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.
Ethanol	=	Ethanol analyzed using EPA Method 8260B.
µg/L	=	Micrograms per liter.
ND	=	Not detected at or above the laboratory reporting limit.
--	=	Not measured/Not sampled/Not analyzed.
<	=	Less than stated laboratory reporting limit.
a	=	Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
b	=	Laboratory control sample and/or laboratory control sample duplicate recovery was above the acceptance limits. Analyte not detected, data not impacted.
c	=	Initial analysis within holding time. Reanalysis for the required dilution or confirmation was past holding time.
d	=	The relative percent difference between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the higher value was reported.
e	=	The chromatographic pattern does not match the specified standard.
f	=	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
g	=	Analyte presence was not confirmed by second column or gas chromatograph/mass spectrometer analysis.

TABLE 2
WELL CONSTRUCTION DETAILS
Former Exxon Service Station 74121
10605 Foothill Boulevard
Oakland, California
(Page 1 of 1)

Well ID	Well Installation Date	Well Destruction Date	TOC Elevation (feet)	Well Casing Material	Total Depth (feet)	Well Depth (feet)	Borehole Diameter (inches)	Casing Diameter (inches)	Screened Interval (feet)	Slot Size (inches)	Filter Pack Interval (feet)	Filter Pack Material
MW1	01/23/07	---	82.47	PVC	26.5	25	8	2	10 - 25	0.010	8 - 25	#2/12 Sand
MW2	01/23/07	---	84.40	PVC	26.5	25	8	2	10 - 25	0.010	8 - 25	#2/12 Sand
MW3	01/24/07	---	83.25	PVC	26.5	25	8	2	10 - 25	0.010	8 - 25	#2/12 Sand
MW5	01/23/07	---	82.65	PVC	26.5	25	8	2	10 - 25	0.010	8 - 25	#2/12 Sand
VW1	01/22/07	---	---	Stainless Steel	6	6	6	0.25	5.25 - 5.75	0.0057	5 - 6	#2/12 Sand
VW2	01/22/07	---	---	Stainless Steel	6	6	6	0.25	5.25 - 5.75	0.0057	5 - 6	#2/12 Sand
VW3	01/22/07	---	---	Stainless Steel	6	6	6	0.25	5.25 - 5.75	0.0057	5 - 6	#2/12 Sand
VW3R	12/19/11	---	---	Stainless Steel	5	5	3.25	0.25	4.50 - 4.75	0.010	4 - 5	#2 Sand
VW4	01/22/07	---	---	Stainless Steel	6	6	6	0.25	5.25 - 5.75	0.0057	5 - 6	#2/12 Sand
VW4R	12/19/11	---	---	Stainless Steel	5	5	3.25	0.25	4.50 - 4.75	0.010	4 - 5	#2 Sand
VW5	01/22/07	---	---	Stainless Steel	6	6	6	0.25	5.25 - 5.75	0.0057	5 - 6	#2/12 Sand
VW6	03/23/09	---	---	Stainless Steel	6	6	6	0.25	5.25 - 5.75	0.0057	5 - 6	#2/12 Sand
VW7	03/23/09	Feb-10	---	Stainless Steel	6	6	6	0.25	5.25 - 5.75	0.0057	5 - 6	#2/12 Sand
VW8	03/23/09	Feb-10	---	Stainless Steel	6	6	6	0.25	5.25 - 5.75	0.0057	5 - 6	#2/12 Sand
VW9	03/23/09	---	---	Stainless Steel	6	6	6	0.25	5.25 - 5.75	0.0057	5 - 6	#2/12 Sand
VW10	03/23/09	---	---	Stainless Steel	6	6	6	0.25	5.25 - 5.75	0.0057	5 - 6	#2/12 Sand
VW11	03/23/09	---	---	Stainless Steel	6	6	6	0.25	5.25 - 5.75	0.0057	5 - 6	#2/12 Sand
VW11R	12/19/11	---	---	Stainless Steel	5	5	3.25	0.25	4.50 - 4.75	0.010	4 - 5	#2 Sand
VW12	03/23/09	---	---	Stainless Steel	6	6	6	0.25	5.25 - 5.75	0.0057	5 - 6	#2/12 Sand
VW12R	12/19/11	---	---	Stainless Steel	5	5	3.25	0.25	4.50 - 4.75	0.010	4 - 5	#2 Sand

Notes:

TOC = Top of well casing elevation. Elevation based on City of San Jose datum.
PVC = Polyvinyl chloride.
--- = Not applicable.

TABLE 3A
CUMULATIVE SOIL ANALYTICAL RESULTS
Former Exxon Service Station 74121
10605 Foothill Boulevard
Oakland, California
(Page 1 of 6)

Sampling ID	Sampling Date	Depth (feet bgs)	TPHd (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)
SB1	03/19/04	11	590	1,000	<2.5	0.55	11	0.92	2.6
SB2	03/19/04	18	37	65	<0.5	<0.05	0.39	0.40	0.13
SB3	03/19/04	5	<1.0	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005
SB4	03/19/04	5	2.1	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005
SB5	05/26/05	5-5.5	<10.1	<4.98	<0.002	<0.001	<0.005	<0.005	<0.005
SB5	05/26/05	17.5-18	<9.92	<4.97	<0.002	<0.001	<0.005	<0.005	<0.005
SB5	05/26/05	24.5-25	10.6	<4.99	<0.002	<0.001	<0.005	<0.005	<0.005
SB6	05/26/05	5-5.5	10.2	<5.03	<0.002	<0.001	<0.005	<0.005	<0.005
SB6	05/26/05	19.5-20	<10.1	<5.03	<0.002	<0.001	<0.005	<0.005	<0.005
SB6	05/26/05	21.5-22	<10	<4.96	<0.002	<0.001	<0.005	<0.005	<0.005
SB6	05/26/05	24.5-25	<10	<4.98	<0.002	<0.001	<0.005	<0.005	<0.005
SB7	05/26/05	5-5.5	<10.2	<5.02	<0.002	<0.001	<0.005	<0.005	<0.005
SB7	05/26/05	18-18.5	<10	<5	<0.002	<0.001	<0.005	<0.005	<0.005
SB7	05/26/05	22.5-23	<10	<4.96	<0.002	<0.001	<0.005	<0.005	<0.005
SB7	05/26/05	24.5-25	<10.2	<5.02	<0.002	<0.001	<0.005	<0.005	<0.005
SB8	05/26/05	5-5.5	<9.92	<4.97	<0.002	<0.001	<0.005	<0.005	<0.005
SB8	05/26/05	17.5-18	<9.92	<4.96	<0.002	0.0010b	<0.005	<0.005	<0.005
SB8	05/26/05	21.5-22	<10	11.2	<0.002	0.0307	<0.005	0.0120	0.0205
SB8	05/26/05	24.5-25	<10	10.2	<0.002	0.0414	0.0153	0.0184	0.0197
SB9	05/27/05	5-5.5	<9.80	<5.02	<0.002	<0.001	<0.005	<0.005	<0.005
SB9	05/27/05	18-18.5	<10	<5	<0.002	<0.001	<0.005	<0.005	<0.005
SB9	05/27/05	19.5-20	<10	<4.96	<0.002	<0.001	<0.005	<0.005	<0.005
SB9	05/27/05	24.5-25	<9.88	279	<0.002	1.58	1.10	0.400	1.72
SB10	05/27/05	5-5.5	<9.92	<5.01	<0.002	<0.001	<0.005	<0.005	<0.005
SB10	05/27/05	17.5-18	<10	<5.03	<0.002	<0.001	<0.005	<0.005	<0.005
SB10	05/27/05	24.5-25	<10	<5.01	<0.002	<0.001	<0.005	<0.005	<0.005
SB11	05/27/05	5-5.5	<10.2	<4.99	<0.002	<0.001	<0.005	<0.005	<0.005
SB11	05/27/05	18.5-19	<10	<4.95	<0.002	<0.001	<0.005	<0.005	<0.005
SB11	05/27/05	24.5-25	<10	<4.98	<0.002	0.0082	<0.005	<0.005	0.0053

TABLE 3A
CUMULATIVE SOIL ANALYTICAL RESULTS
Former Exxon Service Station 74121
10605 Foothill Boulevard
Oakland, California
(Page 2 of 6)

Sampling ID	Sampling Date	Depth (feet bgs)	TPHd (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)
SB12	05/27/05	5-5.5	<10	<4.97	<0.002	<0.001	<0.005	<0.005	<0.005
SB12	05/27/05	16.5-17	<9.88	<5.05	<0.002	<0.001	<0.0051	<0.0051	<0.0051
SB12	05/27/05	25.5-26	<9.96	<4.98	<0.002	<0.001	<0.005	<0.005	<0.005
SB13	05/27/05	5-5.5	<9.92	<5.02	<0.002	<0.001	<0.005	<0.005	<0.005
SB13	05/27/05	18.5-19	<9.92	<5.05	<0.002	<0.001	<0.0051	<0.0051	<0.0051
SB13	05/27/05	24.5-25	<9.92	<4.95	<0.002	0.0011	<0.005	<0.005	<0.005
SB14	05/02/06	5-5.5	3.2	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
SB14	05/02/06	10-10.5	6.5	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
SB14	05/02/06	15-15.5	2.1	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
SB14	05/02/06	20-20.5	2.8	1.300	<0.005	<0.001	<0.001	<0.001	0.0088
SB14	05/02/06	24.5-25	2.2	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
SB15	05/02/06	5-5.5	3.1	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
SB15	05/02/06	15-15.5	8.7	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
SB15	05/02/06	20-20.5	2.5	0.160	<0.005	<0.001	<0.001	0.0016	<0.001
SB15	05/02/06	24.5-25	1.3	0.270	<0.005	<0.001	<0.001	0.0069	<0.001
SB16	05/02/06	5-5.5	14	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
SB16	05/02/06	10-10.5	5.2	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
SB16	05/02/06	15-15.5	4.2	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
SB16	05/02/06	20-20.5	9.3	14	<0.005	0.120	0.052	0.043	0.060
SB16	05/02/06	24.5-25	<1.0	<0.1	<0.005	<0.001	<0.001	0.0018	<0.001
SB17	05/02/06	5.5-6	18	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
SB17	05/02/06	10-10.5	260	38	<0.12	<0.01	0.030	0.310	<0.01
SB17	05/02/06	15-15.5	3.5	0.700	<0.005	0.018	0.0028	0.017	0.0040
SB17	05/02/06	19.5-20	18	320	<1.2	3.2	2.0	8.8	31
SB17	05/02/06	24.5-25	1.1	<0.1	<0.005	<0.001	<0.001	<0.001	0.0011
SB18	05/03/06	5-5.5	<1.0	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
SB18	05/03/06	10-10.5	<1.0	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
SB18	05/03/06	15-15.5	<1.0	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
SB18	05/03/06	19.5-20	14	29	<0.005	<0.10	<0.10	<0.10	<0.10
SB18	05/03/06	24.5-25	<1.0	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001

TABLE 3A
CUMULATIVE SOIL ANALYTICAL RESULTS
Former Exxon Service Station 74121
10605 Foothill Boulevard
Oakland, California
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Sampling ID	Sampling Date	Depth (feet bgs)	TPHd (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)
SB19	05/02/06	5-5.5	1.4	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
SB19	05/02/06	10-10.5	4.8	0.230	<0.005	<0.001	<0.001	<0.001	0.0015
SB19	05/02/06	15-15.5	1.2	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
SB19	05/02/06	20-20.5	5.8	19	<0.005	<0.10	<0.10	<0.10	0.15
SB19	05/02/06	24.5-25	1.7	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
SB20	05/02/06	5.5-6	14	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
SB20	05/02/06	10-10.5	98	76	<0.051	0.58	0.60	0.80	0.72
SB20	05/02/06	15-15.5	270	1,300	<0.12	26	39	24	12
SB20	05/02/06	19.5-20	250	2,700	<2.5	20	18	66	280
SB20	05/02/06	23.5-24	7.0	0.610	<0.005	0.013	0.0047	0.023	0.0082
SB21	05/02/06	8-8.5	1.4	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
SB21	05/02/06	13-13.5	<1.0	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
SB21	05/02/06	18-18.5	1.7	<0.1	0.0088	<0.001	<0.001	<0.001	<0.001
SB21	05/02/06	19.5-20	2.4	<1	0.012	<0.001	<0.001	<0.001	0.014
SB21	05/02/06	23-23.5	<1.0	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
SB21	05/02/06	24.5-25	<1.0	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
V3	05/03/06	9.5-10	<1.0	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
V4	05/03/06	5-5.5	<1.0	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
V4	05/03/06	7.5-8	<1.0	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
V5	05/03/06	5-5.5	<1.0	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
V5	05/03/06	7.5-8	<1.0	0.240	<0.005	<0.001	<0.001	<0.001	<0.001
V8	05/03/06	5-5.5	<1.0	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
V8	05/03/06	7.5-8	1.0	<0.1	<0.005	<0.001	<0.001	<0.001	<0.001
MW1	01/23/07	6-6.5	<3.95	<0.0992	<0.00200	<0.000992/<0.00200a	<0.000992/<0.00200a	<0.000992/<0.00200a	<0.00298/<0.00500a
MW1	01/23/07	8-8.5	<3.91	<0.0994	<0.00200	<0.000994/<0.00200a	<0.000994/<0.00200a	<0.000994/<0.00200a	<0.00298/<0.00500a
MW1	01/23/07	10-10.5	<3.88	<0.100	<0.00200	<0.00100/<0.00200a	<0.00100/<0.00200a	<0.00100/<0.00200a	<0.00300/<0.00500a
MW1	01/23/07	11.5-12	<3.91	<0.0994	<0.00200	<0.000994/<0.00200a	<0.000994/<0.00200a	<0.000994/<0.00200a	<0.00298/<0.00500a
MW1	01/23/07	12-12.5	<3.93	<0.0996	<0.00200	<0.000996/<0.00200a	<0.000996/0.00211a	<0.000996/<0.00200a	<0.00299/<0.00500a
MW1	01/23/07	14-14.5	<3.89	<0.101	<0.00200	<0.00101/<0.00200a	<0.00101/<0.00200a	<0.00101/<0.00200a	<0.00302/<0.00500a
MW1	01/23/07	15.5-16	<3.96	<0.100	<0.00200	<0.00100/<0.00200a	<0.00100/<0.00200a	<0.00100/<0.00200a	<0.00300/<0.00500a
MW1	01/23/07	16-16.5	<3.92	<0.0990	<0.00200	<0.000990/<0.00200a	0.00121/<0.00200a	<0.000990/<0.00200a	<0.00297/<0.00500a
MW1	01/23/07	17.5-18	<3.97	0.720	<0.00200,c	0.00857/<0.00200a	0.00493/0.00221a	0.00126/<0.00200a	0.00459/<0.00500a

TABLE 3A
CUMULATIVE SOIL ANALYTICAL RESULTS
Former Exxon Service Station 74121
10605 Foothill Boulevard
Oakland, California
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Sampling ID	Sampling Date	Depth (feet bgs)	TPHd (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)
MW1	01/23/07	18-18.5	<3.88	<0.100	<0.00200	<0.00100/<0.00200a	0.00128/<0.00200a	<0.00100/<0.00200a	<0.00301/<0.00500a
MW1	01/23/07	19.5-20	<3.92	0.454	<0.00200	<0.00101/<0.00200a	<0.00101/<0.00200a	<0.00101/<0.00200a	0.00413/<0.00500a
MW1	01/23/07	20-20.5	<3.85	1.38	<0.00200	0.00128/<0.00200a	0.00387/0.00403a	0.0022/0.00202a	0.0120/0.00546a
MW1	01/23/07	22-22.5	<3.91	3.92	<0.00200	0.00539/<0.00200a	0.00651/<0.00200a	0.00471/<0.00200a	0.0336/<0.00500a
MW2	01/23/07	6-6.5	<4.00	<0.100	<0.00200	<0.00100/<0.00200a	<0.00100/<0.00200a	<0.00100/<0.00200a	<0.00301/<0.00500a
MW2	01/23/07	8-8.5	<3.87	<0.101	<0.00200	0.00104/<0.00200a	0.00112/<0.00200a	<0.00101/<0.00200a	<0.00302/<0.00500a
MW2	01/23/07	10-10.5	<3.93	<0.101	<0.00200	<0.00101/<0.00200a	0.00110/<0.00200a	<0.00101/<0.00200a	<0.00302/<0.00500a
MW2	01/23/07	12-12.5	<3.84	<0.101	<0.00200	<0.00101/<0.00200a	<0.00101/<0.00200a	<0.00101/<0.00200a	<0.00303/<0.00500a
MW2	01/23/07	14-14.5	<3.94	<0.0990	<0.00200	<0.000990/<0.00200a	<0.000990/<0.00200a	<0.000990/<0.00200a	<0.00297/<0.00500a
MW2	01/23/07	15.5-16	<3.86	<0.0994	<0.00200	<0.000994/<0.00200a	<0.000994/<0.00200a	<0.000994/<0.00200a	<0.00298/<0.00500a
MW2	01/23/07	16-16.5	<3.97	<0.101	<0.00200	0.00133/<0.00200a	<0.00101/<0.00200a	<0.00101/<0.00200a	<0.00303/<0.00500a
MW2	01/23/07	18-18.5	<3.91	0.508	<0.00200	0.00492/<0.00200a	<0.000992/<0.00200a	<0.000992/<0.00200a	<0.00298/<0.00500a
MW2	01/23/07	19.5-20	<3.74	<0.0992	<0.00200	<0.000992/<0.00200a	<0.000992/<0.00200a	<0.000992/<0.00200a	<0.00298/<0.00500a
MW2	01/23/07	20-20.5	<3.83	0.672	<0.00200	0.00633/<0.00200a	<0.00101/<0.00200a	0.00128/<0.00200a	<0.00303/<0.00500a
MW2	01/23/07	21.5-22	<3.86	2.85	<0.00200	0.00369/<0.00200a	<0.00100/<0.00200a	0.00235/<0.00200a	0.0105/<0.00500a
MW2	01/23/07	22-22.5	<3.81	3.32	<0.00200	0.00643/<0.00200a	<0.000996/<0.00200a	0.00299/<0.00200a	0.0138/<0.00500a
MW2	01/23/07	23.5-24	<3.76	0.591	<0.00200	0.00185/<0.00200a	<0.00101/<0.00200a	<0.00101/<0.00200a	<0.00302/<0.00500a
MW2	01/23/07	24-24.5	<3.73	18.7	<0.00200	0.00136/<0.00200a	0.00678/<0.00200a	0.01410/<0.00200a	0.0891/<0.00500a
MW2	01/23/07	26-26.5	10.6	964	<0.00200	4.40/<0.00200a	2.12/0.00944a	2.29/<0.00200a	3.79/0.256a
MW3	01/24/07	6-6.5	<3.82	<0.101	<0.00200	<0.00101/<0.00200a	<0.00101/<0.00200a	<0.00101/<0.00200a	<0.00302/<0.00500a
MW3	01/24/07	8-8.5	<3.79	<0.0992	<0.00200	<0.000992/<0.00200a	<0.000992/<0.00200a	<0.000992/<0.00200a	<0.00298/<0.00500a
MW3	01/24/07	10-10.5	<3.70	0.141	<0.00200	0.00231/<0.00200a	0.00114/<0.00200a	<0.00101/<0.00200a	<0.00302/<0.00500a
MW3	01/24/07	12-12.5	<3.99	<0.101	<0.00200	0.00102/<0.00200a	<0.00101/<0.00200a	<0.00101/<0.00200a	<0.00302/<0.00500a
MW3	01/24/07	14-14.5	<3.80	0.363	<0.00200	0.00484/<0.00200a	0.00206/<0.00200a	<0.00101/<0.00200a	<0.00301/<0.00500a
MW3	01/24/07	16-16.5	<3.95	<0.101	<0.00200	<0.00101/<0.00200a	<0.00101/<0.00200a	<0.00101/<0.00200a	<0.00303/<0.00500a
MW3	01/24/07	18-18.5	<3.71	0.794	<0.00200	0.00917/<0.00200a	0.00404/<0.00200a	0.00151/<0.00200a	<0.00301/<0.00500a
MW3	01/24/07	20-20.5	<3.96	<0.101	<0.00200	<0.00101/<0.00200a	<0.00101/<0.00200a	<0.00101/<0.00200a	<0.00303/<0.00500a
MW3	01/24/07	22-22.5	<3.71	<0.0990	<0.00200	0.00174/<0.00200a	<0.000990/<0.00200a	<0.000990/<0.00200a	<0.00297/<0.00500a
MW3	01/24/07	24-24.5	<3.76	<0.0996	<0.00200	<0.000996/<0.00200a	<0.000996/<0.00200a	<0.000996/<0.00200a	<0.00299/<0.00500a
MW3	01/24/07	26-26.5	<3.89	<0.0992	<0.00200	<0.000992/<0.00200a	<0.000992/<0.00200a	<0.000992/<0.00200a	<0.00298/<0.00500a
MW5	01/23/07	6-6.5	<3.79	<0.100	<0.00200	<0.00100/<0.00200a	<0.00100/<0.00200a	<0.00100/<0.00200a	<0.00301/<0.00500a
MW5	01/23/07	8-8.5	<3.76	<0.100	<0.00200	<0.00100/<0.00200a	<0.00100/<0.00200a	<0.00100/<0.00200a	<0.00301/<0.00500a
MW5	01/23/07	10-10.5	<3.94	0.274	<0.00200	0.00265/<0.00200a	<0.000996/<0.00200a	<0.000996/<0.00200a	<0.00299/<0.00500a
MW5	01/23/07	12-12.5	<3.82	<0.0998	<0.00200	<0.000998/<0.00200a	<0.000998/<0.00200a	<0.000998/<0.00200a	<0.00299/<0.00500a
MW5	01/23/07	14-14.5	<3.92	<0.100	<0.00200	<0.00100/<0.00200a	<0.00100/<0.00200a	<0.00100/<0.00200a	<0.00301/<0.00500a
MW5	01/23/07	16-16.5	<3.98	<0.100	<0.00200	<0.00100/<0.00200a	<0.00100/<0.00200a	<0.00100/<0.00200a	<0.00301/<0.00500a

TABLE 3A
CUMULATIVE SOIL ANALYTICAL RESULTS
Former Exxon Service Station 74121
10605 Foothill Boulevard
Oakland, California
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Sampling ID	Sampling Date	Depth (feet bgs)	TPHd (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)
MW5	01/23/07	18-18.5	<3.90	0.385	<0.00200	0.00189/<0.00200a	<0.000994/0.00229a	<0.000994/0.00217a	<0.00298/0.00878a
MW5	01/23/07	19.5-20	<3.83	2.01	<0.00200	0.0102/<0.00200a	0.00149/<0.00200a	0.00211/<0.00200a	0.0125/0.00562a
MW5	01/23/07	20-20.5	<3.98	2.66	<0.00200	0.0138/<0.00200a	<0.000994/<0.00200a	0.00279/<0.00200a	0.0104/<0.00500a
MW5	01/23/07	22-22.5	<3.80	0.603	<0.00200	0.00111/<0.00200a	<0.00100/<0.00200a	<0.00100/<0.00200a	<0.00301/<0.00500a
MW5	01/23/07	24-24.5	<3.81	0.138	<0.00200	0.00666/0.00517a	<0.000996/<0.00200a	<0.000996/<0.00200a	<0.00299/<0.00500a
MW5	01/23/07	26-26.5	<3.74	<0.0992	<0.00200	0.00288/<0.00200a	<0.000992/<0.00200a	<0.000992/<0.00200a	<0.00298/<0.00500a
VW1	01/22/07	5.5-6	<3.96	<0.101	<0.00200	<0.00101/<0.00200a	<0.00101/<0.00200a	<0.00101/<0.00200a	<0.00303/<0.00500a
VW2	01/22/07	5.5-6	<3.91	<0.0990	<0.00200	<0.000990/<0.00200a	<0.000990	<0.000990/<0.00200a	<0.00297/<0.00500a
VW3	01/22/07	5.5-6	<3.87	<0.101	<0.00200	<0.00101/<0.00200a	<0.00101	<0.00101/<0.00200a	<0.00302/<0.00500a
VW4	01/22/07	5.5-6	8.73	<0.101	<0.00200	<0.00101/<0.00200a	<0.00101	<0.00101/<0.00200a	<0.00303/<0.00500a
VW5	01/22/07	5.5-6	<3.86	<0.0990	<0.00200	<0.000990/<0.00200a	<0.000990	<0.000990/<0.00200a	<0.00297/<0.00500a
VW6	03/23/09	5.5-6	<5.0	<0.50	<0.0050	<0.0050a	<0.0050a	0.00032a,b	0.0015a,b
VW7	03/23/09	5.5-6	<5.0	<0.50	<0.0050	<0.0050a	<0.0050a	<0.0050a	<0.0050a
VW8	03/23/09	5.5-6	<5.0	<0.50	<0.0050	<0.0050a	<0.0050a	0.00018a,b	<0.0050a
VW9	03/23/09	5.5-6	<5.0	<0.50	<0.0050	<0.0050a	<0.0050a	<0.0050a	<0.0050a
VW10	03/23/09	5.5-6	<5.0	<0.50	<0.0050	<0.0050a	<0.0050a	<0.0050a	<0.0050a
VW11	03/23/09	5.5-6	<5.0	<0.50	<0.0050	<0.0050a	0.00051a,b	0.00071a,b	0.0032a,b
VW12	03/23/09	5.5-6	<5.0	<0.50	<0.0050	<0.0050a	<0.0050a	<0.0050a	0.00033a,b
PB1	01/26/10	19.5-20	<5.0	<0.50	<0.0050	<0.0050a	<0.0050a	<0.0050a	<0.0050a
PB2	01/26/10	19.5-20	<5.0	6.6	<0.50	0.029a	<0.50a	0.34a,b	<0.50a
PB3	01/26/10	19.5-20	<5.0	4.9	<0.0050	0.0059a	<0.0050a	0.0098a	0.0070a
PB4	01/26/10	19.5-20	<5.0	<0.50	<0.0050	0.00079a,b	<0.0050a	0.00045a,b	<0.0050a

TABLE 3A
CUMULATIVE SOIL ANALYTICAL RESULTS
Former Exxon Service Station 74121
10605 Foothill Boulevard
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Sampling ID	Sampling Date	Depth (feet bgs)	TPHd (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)
S1-E	02/16/10	15	<5.0	<0.50	<0.0050	<0.0050a	0.0015a,b	<0.0050a	<0.010a
S1-W	02/16/10	15	<5.0	<0.50	<0.0050	0.0012a,b	0.0018a,b	<0.0050a	<0.010a
S2-E	02/17/10	15	<5.0	<0.50	<0.0050	<0.0050a	<0.0050a	<0.0050a	<0.010a
S2-W	02/17/10	15	<5.0	<0.50	<0.0050	<0.0050a	<0.0050a	<0.0050a	<0.010a
S3-E	02/18/10	15	200	590	<0.50	0.034a	0.069a	0.13a	<0.010a
S3-W	02/18/10	15	<5.0	<0.50	<0.0050	<0.0050a	<0.0050a	<0.0050a	<0.010a
S4-E	02/19/10	15	27	1,300	<1.0	<0.040a	1.4a	15a	49a
S4-W	02/19/10	15	<5.0	1.5	<0.0050	<0.0050a	0.0030a,b	0.0050a	0.012a
S5-NE	02/26/10	15	<5.0	<0.50	<0.0050	<0.0050a	<0.0050a	<0.0050a	<0.0050a
S5-SE	02/26/10	15	<5.0	<0.50	<0.0050	<0.0050a	<0.0050a	0.00022a,b	<0.0050a
Soil Stockpile Samples									
S-SP1 (1-4)	12/19/11	---	<5.0	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Notes:

- TPHd = Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B; prior to 2010, analyzed using EPA Method 8021B.
- TPHg = Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B; prior to 2010, analyzed using EPA Method 8021B.
- MTBE = Methyl tertiary butyl ether analyzed using EPA Method 8015B; prior to April 2005, analyzed using EPA Method 8260B.
- BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B, unless otherwise noted.
- DIPE = Di-isopropyl ether analyzed using EPA Method 8260B.
- ETBE = Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
- TAME = Tertiary amyl methyl ether analyzed using EPA Method 8260B.
- TBA = Tertiary butyl alcohol analyzed using EPA Method 8260B.
- 1,2-DCA = 1,2-dichloroethane analyzed using EPA Method 8260B.
- EDB = 1,2-dibromoethane analyzed using EPA Method 8260B.
- Lead = Lead analyzed using EPA Method 6010B.
- mg/kg = Milligrams per kilogram.
- < = Less than the stated laboratory reporting limit.
- = Not measured/Not sampled/Not analyzed.
- a = Analyzed by EPA Method by 8260B.
- b = Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
- c = Secondary ion abundances were outside method requirements. Identification based on analytical judgment.

TABLE 3B
ADDITIONAL CUMULATIVE SOIL ANALYTICAL RESULTS
Former Exxon Service Station 74121
10605 Foothill Boulevard
Oakland, California
(Page 1 of 6)

Sampling ID	Sampling Date	Depth (feet bgs)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	1,2-DCA (mg/kg)	TAME (mg/kg)	EDB (mg/kg)	Lead (mg/kg)
SB1	03/19/04	11	---	---	---	---	---	---	---
SB2	03/19/04	18	---	---	---	---	---	---	---
SB3	03/19/04	5	---	---	---	---	---	---	---
SB4	03/19/04	5	---	---	---	---	---	---	---
SB5	05/26/05	5-5.5	---	---	---	---	---	---	---
SB5	05/26/05	17.5-18	---	---	---	---	---	---	---
SB5	05/26/05	24.5-25	---	---	---	---	---	---	---
SB6	05/26/05	5-5.5	---	---	---	---	---	---	---
SB6	05/26/05	19.5-20	---	---	---	---	---	---	---
SB6	05/26/05	21.5-22	---	---	---	---	---	---	---
SB6	05/26/05	24.5-25	---	---	---	---	---	---	---
SB7	05/26/05	5-5.5	---	---	---	---	---	---	---
SB7	05/26/05	18-18.5	---	---	---	---	---	---	---
SB7	05/26/05	22.5-23	---	---	---	---	---	---	---
SB7	05/26/05	24.5-25	---	---	---	---	---	---	---
SB8	05/26/05	5-5.5	---	---	---	---	---	---	---
SB8	05/26/05	17.5-18	---	---	---	---	---	---	---
SB8	05/26/05	21.5-22	---	---	---	---	---	---	---
SB8	05/26/05	24.5-25	---	---	---	---	---	---	---
SB9	05/27/05	5-5.5	---	---	---	---	---	---	---
SB9	05/27/05	18-18.5	---	---	---	---	---	---	---
SB9	05/27/05	19.5-20	---	---	---	---	---	---	---
SB9	05/27/05	24.5-25	---	---	---	---	---	---	---
SB10	05/27/05	5-5.5	---	---	---	---	---	---	---
SB10	05/27/05	17.5-18	---	---	---	---	---	---	---
SB10	05/27/05	24.5-25	---	---	---	---	---	---	---
SB11	05/27/05	5-5.5	---	---	---	---	---	---	---
SB11	05/27/05	18.5-19	---	---	---	---	---	---	---
SB11	05/27/05	24.5-25	---	---	---	---	---	---	---

TABLE 3B
ADDITIONAL CUMULATIVE SOIL ANALYTICAL RESULTS
Former Exxon Service Station 74121
10605 Foothill Boulevard
Oakland, California
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Sampling ID	Sampling Date	Depth (feet bgs)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	1,2-DCA (mg/kg)	TAME (mg/kg)	EDB (mg/kg)	Lead (mg/kg)
SB12	05/27/05	5-5.5	--	--	--	--	--	--	--
SB12	05/27/05	16.5-17	--	--	--	--	--	--	--
SB12	05/27/05	25.5-26	--	--	--	--	--	--	--
SB13	05/27/05	5-5.5	--	--	--	--	--	--	--
SB13	05/27/05	18.5-19	--	--	--	--	--	--	--
SB13	05/27/05	24.5-25	--	--	--	--	--	--	--
SB14	05/02/06	5-5.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB14	05/02/06	10-10.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB14	05/02/06	15-15.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB14	05/02/06	20-20.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB14	05/02/06	24.5-25	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB15	05/02/06	5-5.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB15	05/02/06	15-15.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB15	05/02/06	20-20.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB15	05/02/06	24.5-25	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB16	05/02/06	5-5.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB16	05/02/06	10-10.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB16	05/02/06	15-15.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB16	05/02/06	20-20.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB16	05/02/06	24.5-25	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB17	05/02/06	5.5-6	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB17	05/02/06	10-10.5	<25	<0.12	<0.12	<0.12	<0.12	<0.12	--
SB17	05/02/06	15-15.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB17	05/02/06	19.5-20	<250	<1.2	<1.2	<1.2	<1.2	<1.2	--
SB17	05/02/06	24.5-25	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB18	05/03/06	5-5.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB18	05/03/06	10-10.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB18	05/03/06	15-15.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB18	05/03/06	19.5-20	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB18	05/03/06	24.5-25	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB19	05/02/06	5-5.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB19	05/02/06	10-10.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
SB19	05/02/06	15-15.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--

TABLE 3B
ADDITIONAL CUMULATIVE SOIL ANALYTICAL RESULTS
Former Exxon Service Station 74121
10605 Foothill Boulevard
Oakland, California
(Page 3 of 6)

Sampling ID	Sampling Date	Depth (feet bgs)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	1,2-DCA (mg/kg)	TAME (mg/kg)	EDB (mg/kg)	Lead (mg/kg)
SB19	05/02/06	20-20.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
SB19	05/02/06	24.5-25	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
SB20	05/02/06	5.5-6	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
SB20	05/02/06	10-10.5	<0.200	<0.051	<0.051	<0.051	<0.051	<0.051	---
SB20	05/02/06	15-15.5	<25	<0.12	<0.12	<0.12	<0.12	<0.12	---
SB20	05/02/06	19.5-20	<500	<2.5	<2.5	<2.5	<2.5	<2.5	---
SB20	05/02/06	23.5-24	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
SB21	05/02/06	8-8.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
SB21	05/02/06	13-13.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
SB21	05/02/06	18-18.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
SB21	05/02/06	19.5-20	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
SB21	05/02/06	23-23.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
SB21	05/02/06	24.5-25	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
V3	05/03/06	9.5-10	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
V4	05/03/06	5-5.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
V4	05/03/06	7.5-8	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
V5	05/03/06	5-5.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
V5	05/03/06	7.5-8	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
V8	05/03/06	5-5.5	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
V8	05/03/06	7.5-8	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
VW1	01/22/07	5.5-6	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
VW2	01/22/07	5.5-6	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
VW3	01/22/07	5.5-6	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
VW4	01/22/07	5.5-6	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
VW5	01/22/07	5.5-6	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
VW6	03/23/09	5.5-6	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050	---
VW7	03/23/09	5.5-6	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050	---

TABLE 3B
ADDITIONAL CUMULATIVE SOIL ANALYTICAL RESULTS
Former Exxon Service Station 74121
10605 Foothill Boulevard
Oakland, California
(Page 4 of 6)

Sampling ID	Sampling Date	Depth (feet bgs)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	1,2-DCA (mg/kg)	TAME (mg/kg)	EDB (mg/kg)	Lead (mg/kg)
VW8	03/23/09	5.5-6	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050	---
VW9	03/23/09	5.5-6	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050	---
VW10	03/23/09	5.5-6	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050	---
VW11	03/23/09	5.5-6	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050	---
VW12	03/23/09	5.5-6	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050	---
MW1	01/23/07	6-6.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW1	01/23/07	8-8.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW1	01/23/07	10-10.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW1	01/23/07	11.5-12	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW1	01/23/07	12-12.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW1	01/23/07	14-14.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW1	01/23/07	15.5-16	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW1	01/23/07	16-16.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW1	01/23/07	17.5-18	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW1	01/23/07	18-18.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW1	01/23/07	19.5-20	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW1	01/23/07	20-20.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW1	01/23/07	22-22.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW2	01/23/07	6-6.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW2	01/23/07	8-8.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW2	01/23/07	10-10.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW2	01/23/07	12-12.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW2	01/23/07	14-14.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW2	01/23/07	15.5-16	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW2	01/23/07	16-16.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW2	01/23/07	18-18.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW2	01/23/07	19.5-20	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW2	01/23/07	20-20.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW2	01/23/07	21.5-22	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW2	01/23/07	22-22.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW2	01/23/07	23.5-24	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW2	01/23/07	24-24.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW2	01/23/07	26-26.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---

TABLE 3B
ADDITIONAL CUMULATIVE SOIL ANALYTICAL RESULTS
Former Exxon Service Station 74121
10605 Foothill Boulevard
Oakland, California
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Sampling ID	Sampling Date	Depth (feet bgs)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	1,2-DCA (mg/kg)	TAME (mg/kg)	EDB (mg/kg)	Lead (mg/kg)
MW3	01/24/07	6-6.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW3	01/24/07	8-8.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW3	01/24/07	10-10.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW3	01/24/07	12-12.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW3	01/24/07	14-14.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW3	01/24/07	16-16.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW3	01/24/07	18-18.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW3	01/24/07	20-20.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW3	01/24/07	22-22.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW3	01/24/07	24-24.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW3	01/24/07	26-26.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW5	01/23/07	6-6.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW5	01/23/07	8-8.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW5	01/23/07	10-10.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW5	01/23/07	12-12.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW5	01/23/07	14-14.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW5	01/23/07	16-16.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW5	01/23/07	18-18.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW5	01/23/07	19.5-20	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW5	01/23/07	20-20.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW5	01/23/07	22-22.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW5	01/23/07	24-24.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
MW5	01/23/07	26-26.5	<0.0500	<0.00200	<0.00500	<0.00200	<0.00200	<0.00200	---
PB1	01/26/10	19.5-20	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050	---
PB2	01/26/10	19.5-20	<5.0	<1.0	<1.0	<0.50	<1.0	<0.50	---
PB3	01/26/10	19.5-20	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050	---
PB4	01/26/10	19.5-20	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050	---
S1-E	02/16/10	15	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050	---
S1-W	02/16/10	15	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050	---
S2-E	02/17/10	15	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050	---
S2-W	02/17/10	15	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050	---

TABLE 3B
ADDITIONAL CUMULATIVE SOIL ANALYTICAL RESULTS
Former Exxon Service Station 74121
10605 Foothill Boulevard
Oakland, California
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Sampling ID	Sampling Date	Depth (feet bgs)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	1,2-DCA (mg/kg)	TAME (mg/kg)	EDB (mg/kg)	Lead (mg/kg)
S3-E	02/18/10	15	<5.0	<1.0	<1.0	<0.50	<1.0	<0.50	---
S3-W	02/18/10	15	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050	---
S4-E	02/19/10	15	<10	<2.0	<2.0	<1.0	<2.0	<1.0	---
S4-W	02/19/10	15	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050	---
S5-NE	02/26/10	15	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050	---
S5-SE	02/26/10	15	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050	---
Soil Stockpile Samples									
S-SP1 (1-4)	12/19/11	---	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050	9.04

Notes:

TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B; prior to 2010, analyzed using EPA Method 8021B.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B; prior to 2010, analyzed using EPA Method 8021B.
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8015B; prior to April 2005, analyzed using EPA Method 8260B.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B, unless otherwise noted.
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
TAME	=	Tertiary amyl methyl ether analyzed using EPA Method 8260B.
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 8260B.
1,2-DCA	=	1,2-dichloroethane analyzed using EPA Method 8260B.
EDB	=	1,2-dibromoethane analyzed using EPA Method 8260B.
Lead	=	Lead analyzed using EPA Method 6010B.
mg/kg	=	Milligrams per kilogram.
<	=	Less than the stated laboratory reporting limit.
---	=	Not measured/Not sampled/Not analyzed.
a	=	Analyzed by EPA Method by 8260B.
b	=	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
c	=	Secondary ion abundances were outside method requirements. Identification based on analytical judgment.

TABLE 4
SOIL VAPOR SAMPLE ANALYTICAL RESULTS
 Former Exxon Service Station 74121
 10605 Foothill Boulevard
 Oakland, California
 (Page 1 of 3)

TABLE 4
SOIL VAPOR SAMPLE ANALYTICAL RESULTS

Former Exxon Service Station 74121
10605 Foothill Boulevard
Oakland, California
(Page 2 of 3)

TABLE 4
SOIL VAPOR SAMPLE ANALYTICAL RESULTS
Former Exxon Service Station 74121
10605 Foothill Boulevard
Oakland, California
(Page 3 of 3)

Notes:

Bold	= Greater than or equal to the most stringent, applicable, commercial environmental screening level.
TPHg	= Total petroleum hydrocarbons as gasoline analyzed using EPA Method TO-3M.
MTBE	= Methyl tertiary butyl ether analyzed using EPA Method TO-15.
BTEX	= Benzene, toluene, ethylbenzene, o-xylanes, and p-m-xylanes analyzed using EPA Method TO-15.
1,1-DFA	= 1,1-difluoroethane analyzed using EPA Method TO-15.
Methane	= Methane analyzed using EPA Method 8015M; prior to 2011, analyzed using ASTMD-1946.
O ₂ + Ar	= Oxygen plus argon analyzed using ASTM Method D- 1946.
EDB	= 1,2-dibromoethane analyzed using EPA Method TO-15.
1,2-DCA	= 1,2-dichloroethane analyzed usng EPA Method TO-15.
TAME	= Tertiary amyl methyl ether analyzed using EPA Method TO-15.
TBA	= Tertiary butyl alcohol analyzed using EPA Method TO-15.
ETBE	= Ethyl tertiary butyl ether analyzed using EPA Method TO-15.
DlPE	= Di-isopropyl ether analyzed using EPA Method TO-15.
Ethanol	= Ethanol analyzed using EPA Method TO-15.
Add1 VOCs	= Additional volatile organic compounds analyzed using EPA Method TO-15.
O ₂	= Oxygen analyzed using ASTM 1945-46.
Vacuum	= Vacuum measured using a vacuum gauge.
in Hg	= Inches of mercury.
µg/m ³	= Micrograms per meter cubed.
ND	= Not detected.
<	= Less than the stated laboratory reporting limit.
---	= Not applicable/Not specified.
a	= Soil vapor samples were collected without purging.
b	= Soil vapor samples were not collected due to the presence of water.
c	= Trimethylbenzene
d	= 1,2,4 Trimethylbenzene
e	= Chloroform
f	= 1,3,5 Trimethylbenzene
g	= Acetone.
h	= Carbon disulfide.

APPENDIX A

CORRESPONDENCE



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November 10, 2011

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4096 Piedmont, #194
Oakland, CA 94611

MacArthur Boulevard Associates
c/o Mr. John Jay, Management Agent (*Sent via E-mail to: johnjay@jayphares.com*)
10700 MacArthur Boulevard, Suite 200
Oakland, CA 94605

Subject: Review of Soil Vapor Assessment for Fuel Leak Case No. RO0002635 and GeoTracker
Global ID T0600120383, Exxon #7-4121, 10605 Foothill Boulevard, Oakland, CA 94605

Dear Ms. Sedlachek and Mr. Jay:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site, including the most recently submitted document entitled, "Soil Vapor Assessment," dated October 28, 2011 (Report). The Report, which was prepared by Cardno ERI, presents the results from sampling of four soil vapor wells. Several soil vapor probes that were proposed for sampling could not be sampled due to water in the tubing. The Report proposes the installation and sampling of replacement wells near existing vapor wells VW3, VW4, and VW12.

The proposed scope of work is conditionally approved and may be implemented provided that the technical comments below are incorporated during the site assessment. Submittal of a revised Work Plan is not required unless an alternate scope of work outside that described in the Report and technical comments below is proposed. We request that you address the following technical comments, perform the proposed work, and send us the reports described below

TECHNICAL COMMENTS

- 1. Additional Replacement Soil Vapor Well.** In addition to the installation and sampling of replacement wells near existing wells VW3, VW4, and VW12, we request that you also install and sample an additional replacement vapor well near VW11. Soil vapor sampling results are to be used to evaluate the potential for vapor intrusion to existing adjacent residential properties and future commercial on-site properties. Please present results in the Site Assessment Report requested below.

- 2. Re-sampling of Soil Vapor Probes.** During sampling of the replacement wells, we request that you also collect soil vapor samples from existing vapor well VW-5. Please present results from sampling of VW-5 in the Site Assessment Report requested below.

Jennifer Sedlachek
John Jay
RO0002635
November 10, 2011
Page 2

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **February 17, 2012 – Soil Vapor Assessment Report**

If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at jerry.wickham@acgov.org.

Sincerely,



Digitally signed by Jerry Wickham
DN: cn=Jerry Wickham, o=Alameda County Environmental
Health, ou, email=jerry.wickham@acgov.org, c=US
Date: 2011.11.10 11:12:24 -08'00"

Jerry Wickham, California PG 3766, CEG 1177, and CHG 297
Senior Hazardous Materials Specialist

Attachment: Responsible Party(ies) Legal Requirements/Obligations

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA 94612-2032 (*Sent via E-mail to: lgriffin@oaklandnet.com*)

Cardno ERI, Attn: Paula Sime, 601 North McDowell, Petaluma, CA 94954 (*Sent via E-mail to: paula.sime@cardno.com*)

Peter McIntyre, AEI Consultants, 2500 Camino Diablo, Suite 200, Walnut Creek, CA 94597
(*Sent via E-mail to: pmcintyre@aeiconsultants.com*)

Donna Drogos, ACEH (*Sent via E-mail to: donna.drogos@acgov.org*)
Jerry Wickham, ACEH (*Sent via E-mail to: jerry.wickham@acgov.org*)

GeoTracker, eFile

APPENDIX B

FIELD PROTOCOL

Cardno ERI
Soil Vapor Sampling Well Installation and Sampling
Field Protocol

Preliminary Activities

Prior to the onset of field activities at the site, Cardno ERI obtains the appropriate permit(s) from the governing agency(s). Advance notification is made as required by the agency(s) prior to the start of work. Cardno ERI marks the borehole locations and contacts the local one call utility locating service at least 48 hours prior to the start of work to mark buried utilities. Borehole locations may also be checked for buried utilities by a private geophysical surveyor. Prior to drilling, the borehole location is cleared in accordance with the client's procedures. Fieldwork is conducted under the advisement of a registered professional geologist and in accordance with an updated site-specific safety plan prepared for the project, which is available at the job site during field activities.

Well Construction

The borehole is advanced to the desired depth using either a direct-push rig, hand auger, or air vacuum rig. Lithologic conditions are recorded on a boring log during borehole advancement, and select soil matrix sampling may be conducted based on soil characteristics.

Each soil vapor sampling (SVS) well is constructed using inert screen material attached to $\frac{1}{8}$ - to $\frac{1}{4}$ -inch outer diameter inert tubing. A gas-tight vacuum fitting or valve is attached to the top of each length of tubing using a female compression fitting. Each screen is set within a minimum of a 12-inch thick appropriately sized sand pack, with a minimum of 3 inches of sand pack above the top of the screen. A minimum of 4 inches of dry granular bentonite is set above each screen and associated sand pack. In SVS wells with multiple and separate casings and screens, the annular space between the top of the dry granular bentonite above the deep screen and the bottom of the sand pack associated with the shallow screen is sealed with a minimum of 18 inches of hydrated bentonite. The remainder of the annular space of the well is sealed with hydrated bentonite to 1 foot below ground surface. Wellheads are finished with traffic-rated well boxes set in concrete flush with the surrounding grade. No glues, chemical cements, or solvents are used in well construction.

A boring log is completed with the construction details for each well, including the materials of construction, depth of the borehole, screen length, and annular seal thickness.

Soil Vapor Sampling

Samples are collected using a soil vapor purging and sampling manifold consisting of a flow regulator, vacuum gauges, vacuum pump, and laboratory-prepared, gas-tight, opaque containers such as Summa™ canisters. Samples may also be collected using a syringe and analyzed by a mobile laboratory. Prior to use, Summa™ canisters are checked to ensure they are under the laboratory induced vacuum between 31 and 25 inches of mercury (in. Hg). New inert tubing is used to purge and sample each well. Prior to purging and sampling each SVS well, the sampling manifold is connected to the gas-tight vacuum fitting or valve at the wellhead, and the downstream tubing and fittings are vacuum tested at approximately 24 to 28 in. Hg. Purging and sampling are conducted only on SVS wells when the tubing and fittings hold the applied vacuum for 10 minutes per vacuum gauge reading.

When required, Cardno ERI conducts a purge volume versus constituent concentration test on at least one SVS well prior to purging and sampling activities. The purge volume test well is selected based on the location of the anticipated source of chemical constituents at the site and on the location of anticipated maximum soil vapor concentrations based on lithologic conditions. If the SVS well has been in place for more than 1 week, it is assumed that soil vapor in the sand pack has equilibrated with the surrounding soil, and only the screen and tubing volumes are included in the purge volume calculation. If the SVS well has been in place for less than 1 week, the volume of the sand pack around the screen is included in the purge volume calculation. A photoionization detector (PID) or on-site mobile laboratory is used to evaluate concentrations of chemical constituents in the vapor stream after 1, 3, and 7 volumes of vapor have been purged from the SVS well. Purging is

conducted at a rate of 100 to 200 milliliters per minute (ml/min). The purge volume exhibiting the highest concentration is the volume of vapor purged from each SVS well prior to sampling.

During sampling, a leak test is performed at each SVS wellhead valve and fitting to check for leaks in the sampling manifold and bentonite seal. An agency approved leak detection compound (such as 1,1-difluoroethane) is applied around the wellhead, or gauze strips soaked in isopropyl alcohol are applied to the down-hole side of the wellhead valve, and a shroud is placed over the system downstream of the sampling container. The soil vapor sample is collected in the sample container while the shroud is in place. Sampling is conducted at approximately the same rate of purging, at 100 to 200 ml/min. Soil vapor samples are submitted under chain-of-custody protocol for the specified laboratory analyses.

At a minimum, weather conditions (temperature, barometric pressure and precipitation), the sampling flow rate, the purge volume, the leak detection chemical, the sample canister identification number, the method of sample collection, and the vacuum of the sampling canister at the start and end of sample collection (if applicable) are recorded on a log for each SVS well purged and sampled.

Decontamination Procedures

If soil samples are collected, Cardno ERI or the contracted driller decontaminates the soil sampling equipment between each sampling interval using a non-phosphate solution, followed by a minimum of two tap water rinses. De-ionized water may be used for the final rinse. Downhole drilling equipment is steam-cleaned or triple-rinsed prior to advancing each borehole.

Waste Treatment and Disposal

Soil cuttings generated from the well installation are stored on site in labeled, Department of Transportation-approved, 55-gallon drums or other appropriate storage container. The soil is removed from the site and transported under manifest to a client- and regulatory-approved facility for recycling or disposal. Decontamination water is stored on site in labeled, regulatory-approved storage containers, and is subsequently transported under manifest to a client- and regulatory-approved facility for disposal or treated with a permitted mobile or fixed-base carbon treatment system.

APPENDIX C

PERMITS

Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 12/08/2011 By jamesy

Permit Numbers: W2011-0752
Permits Valid from 12/19/2011 to 12/19/2011

Application Id: 1323286522665
Site Location: 10605 Foothill Blvd, Oakland, CA
Project Start Date: 12/19/2011
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

City of Project Site:Oakland
Completion Date:12/19/2011

Applicant: Cardno ERI - Alex Snyder
601 N McDowell Blvd, Petaluma, CA 94954
Property Owner: MacArthur Blvd. Assoc.
10700 MacArthur Blvd., Oakland, CA 94612
Client: ExxonMobil Envr. Services
4096 Piedmont Ave., Oakland, CA 94611

Phone: 707-766-2000
Phone: 510-562-9500
Phone: 510-547-8196

Receipt Number: WR2011-0366	Total Due:	\$265.00
Payer Name : Environmental Solutions, Inc.	Total Amount Paid:	\$265.00
	Paid By:	CHECK

PAID IN FULL

Works Requesting Permits:

Well Construction-Vapor monitoring well-Vapor monitoring well - 4 Wells

Driller: Cascade - Lic #: 938110 - Method: hstem

Work Total: \$265.00

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2011-0752	12/08/2011	03/18/2012	VW11R	6.00 in.	0.25 in.	5.00 ft	6.00 ft
W2011-0752	12/08/2011	03/18/2012	VW12R	6.00 in.	0.25 in.	5.00 ft	6.00 ft
W2011-0752	12/08/2011	03/18/2012	VW3R	6.00 in.	0.25 in.	5.00 ft	6.00 ft
W2011-0752	12/08/2011	03/18/2012	VW4R	6.00 in.	0.25 in.	5.00 ft	6.00 ft

Specific Work Permit Conditions

1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibility to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.
2. Compliance with the above well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate state reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days, including permit number and site map.
3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

Alameda County Public Works Agency - Water Resources Well Permit

4. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
5. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.
6. No changes in construction procedures or well type shall change, as described on this permit application. This permit may be voided if it contains incorrect information.
7. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.
8. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
9. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.
10. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.
11. Vapor monitoring wells above water level constructed with tubing maybe be backfilled with pancake-batter consistency bentonite. Minimum surface seal thickness is two inches of cement grout around well box.

Vapor monitoring wells above water level constructed with pvc pipe shall have a minimum seal depth (Neat Cement Seal) of 2 feet below ground surface (BGS). Minimum surface seal thickness is two inches of cement grout around well box. All other conditions for monitoring well construction shall apply.

APPENDIX D

BORING LOGS

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS		LTR	DESCRIPTION	MAJOR DIVISIONS		LTR	DESCRIPTION
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	GW	Well-graded gravels or gravel sand mixtures, little or no fines	FINE GRAINED SOILS	SILTS AND CLAYS LL<50	ML	Inorganic silts and very fine-grained sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
		GP	Poorly-graded gravels or gravel sand mixture, little or no fines			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		GM	Silty gravels, gravel-sand-clay mixtures			OL	Organic silts and organic silt-clays of low plasticity
		GC	Clayey gravels, gravel-sand-clay mixtures			MH	Inorganic silts, micaceous or diatomaceous fine-grained sandy or silty soils, elastic silts
	SAND AND SANDY SOILS	SW	Well-graded sands or gravelly sands, little or no fines	SILTS AND CLAYS LL>50	HIGHLY ORGANIC SOILS	CH	Inorganic clays of high plasticity, fat clays
		SP	Poorly-graded sands or gravelly sands, little or no fines			OH	Organic clays of medium to high plasticity
		SM	Silty sands, sand-silt mixtures			Pt	Peat and other highly organic soils
		SC	Clayey sands, sand-clay mixtures				

SAMPLE CONDITION

 NO RECOVERY

 SAMPLED INTERVAL

 DESCRIBED SAMPLE

 PRESERVED SAMPLE

 GROUNDWATER LEVEL
OBSERVED FROM FIRST WET
SOIL SAMPLE IN BORING

 STATIC GROUNDWATER LEVEL

OVM ORGANIC VAPOR METER READING
IN PARTS PER MILLION BY VOLUME

PID PHOTO-IONIZATION DETECTOR READING
IN PARTS PER MILLION BY VOLUME

BLOW/FT. REPRESENTS THE NUMBER OF BLOWS OF
A 140-POUND HAMMER FALLING 30 INCHES
TO DRIVE THE SAMPLER THROUGH THE LAST
12 INCHES OF AN 18-INCH OR 24-INCH PENETRATION.

WELL DESIGN

 SAND PACK

 BENTONITE ANNULAR SEAL

 NEAT CEMENT ANNULAR SEAL

 BLANK CASING

 SLOTTED CASING

NR NOT RECORDED

NA NOT ANALYZED

DASHED LINES SEPARATING UNITS ON THE LOG
REPRESENT APPROXIMATE BOUNDARIES ONLY.
ACTUAL BOUNDARIES MAY BE GRADUAL. LOGS
REPRESENT SUBSURFACE CONDITIONS AT THE
BORING LOCATION AT THE TIME OF DRILLING
ONLY.



Cardno
ERI

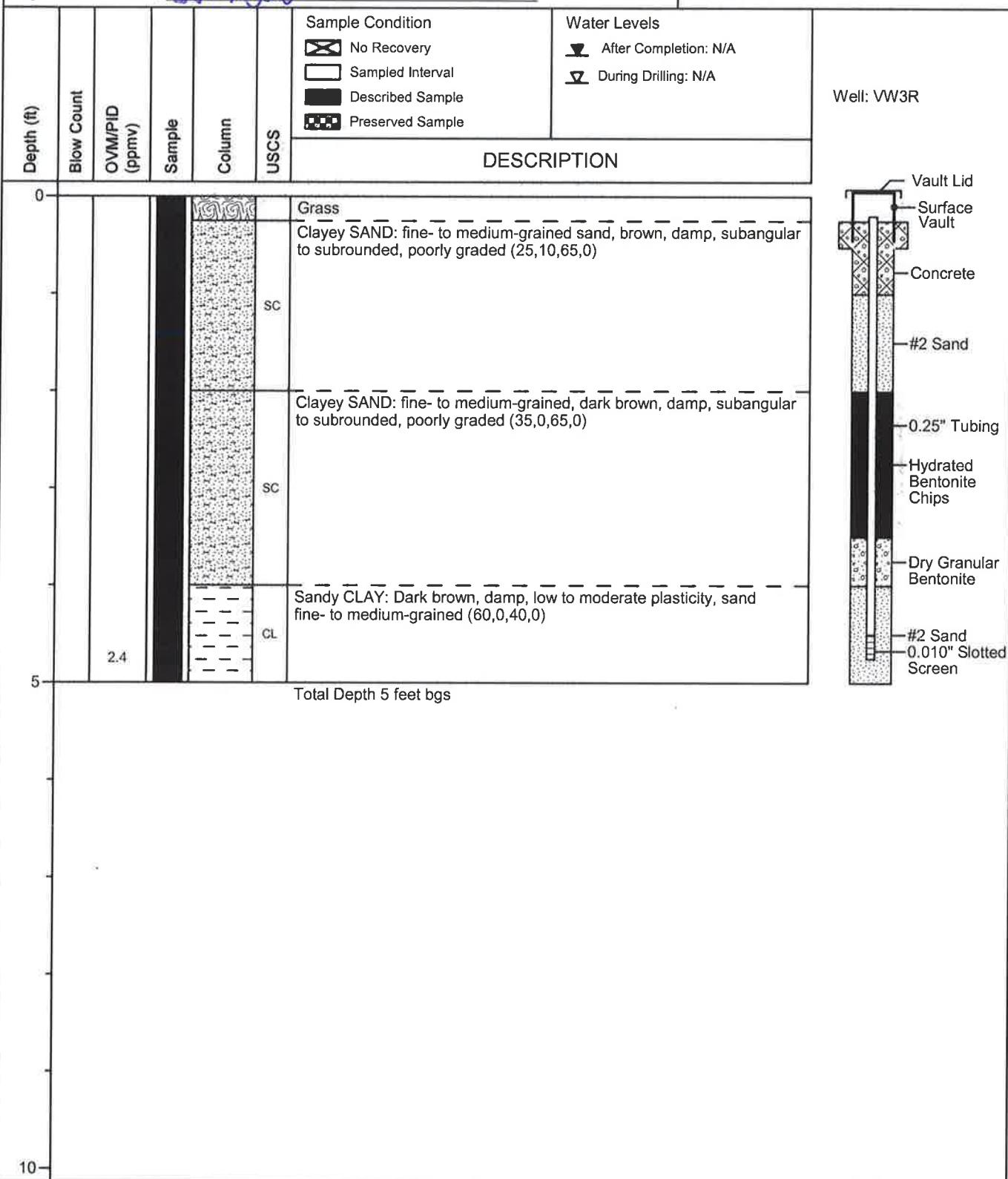
Shaping the Future

BORING LOG VW3R

(Page 1 of 1)

Project No.: : Former Exxon Service Station 74121
 Site: : 10605 Foothill Boulevard, Oakland, CA
 Logged By: : Alex Snyder
 Reviewed By: : David Daniels, P.G. 8737
 Signature: : *[Signature]*

Date Drilled: : 12/19/2011
 Drilling Co.: : Cascade Drilling L.P.
 Drilling Method: : Hand Auger
 Sampling Method: : Hand Auger
 Borehole Diameter: : 3.25"
 Casing Diameter: : 0.25"
 Location N-S : 13' North of VW3
 Location E-W : 0.5' West of VW3
 Total Depth: : 5 ft. bgs
 First GW Depth: : N/A



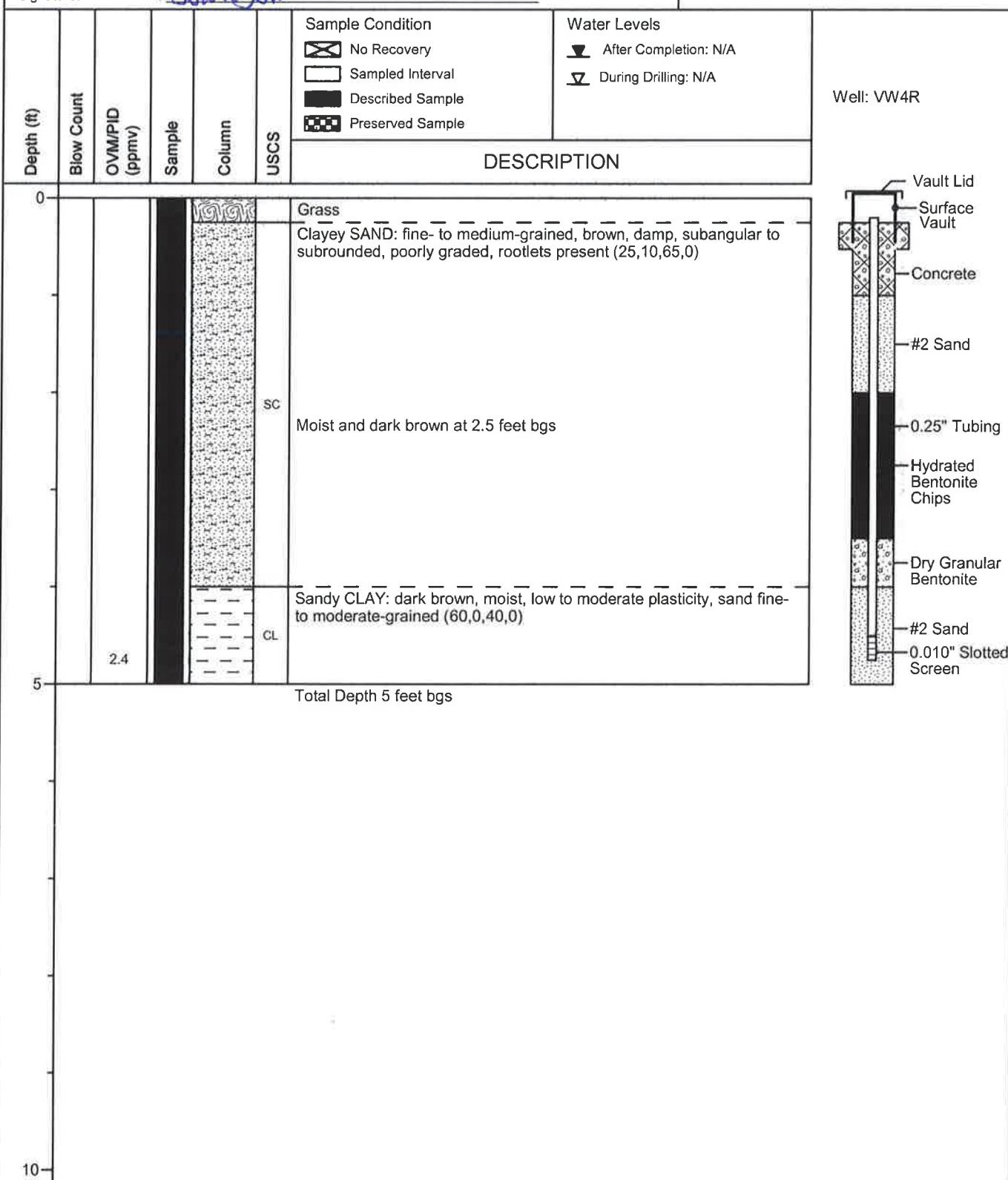


BORING LOG VW4R

(Page 1 of 1)

Project No.: : Former Exxon Service Station 74121
 Site: : 10605 Foothill Boulevard, Oakland, CA
 Logged By: : Alex Snyder
 Reviewed By: : David Daniels, P.G. 8737
 Signature: : *[Signature]*

Date Drilled: : 12/19/2011
 Drilling Co.: : Cascade Drilling L.P.
 Drilling Method: : Hand Auger
 Sampling Method: : Hand Auger
 Borehole Diameter: : 3.25"
 Casing Diameter: : 0.25"
 Location N-S : 1.5' South of VW4
 Location E-W : 4' East of VW4
 Total Depth: : 5 ft, bgs
 First GW Depth: : N/A





Cardno
ERI

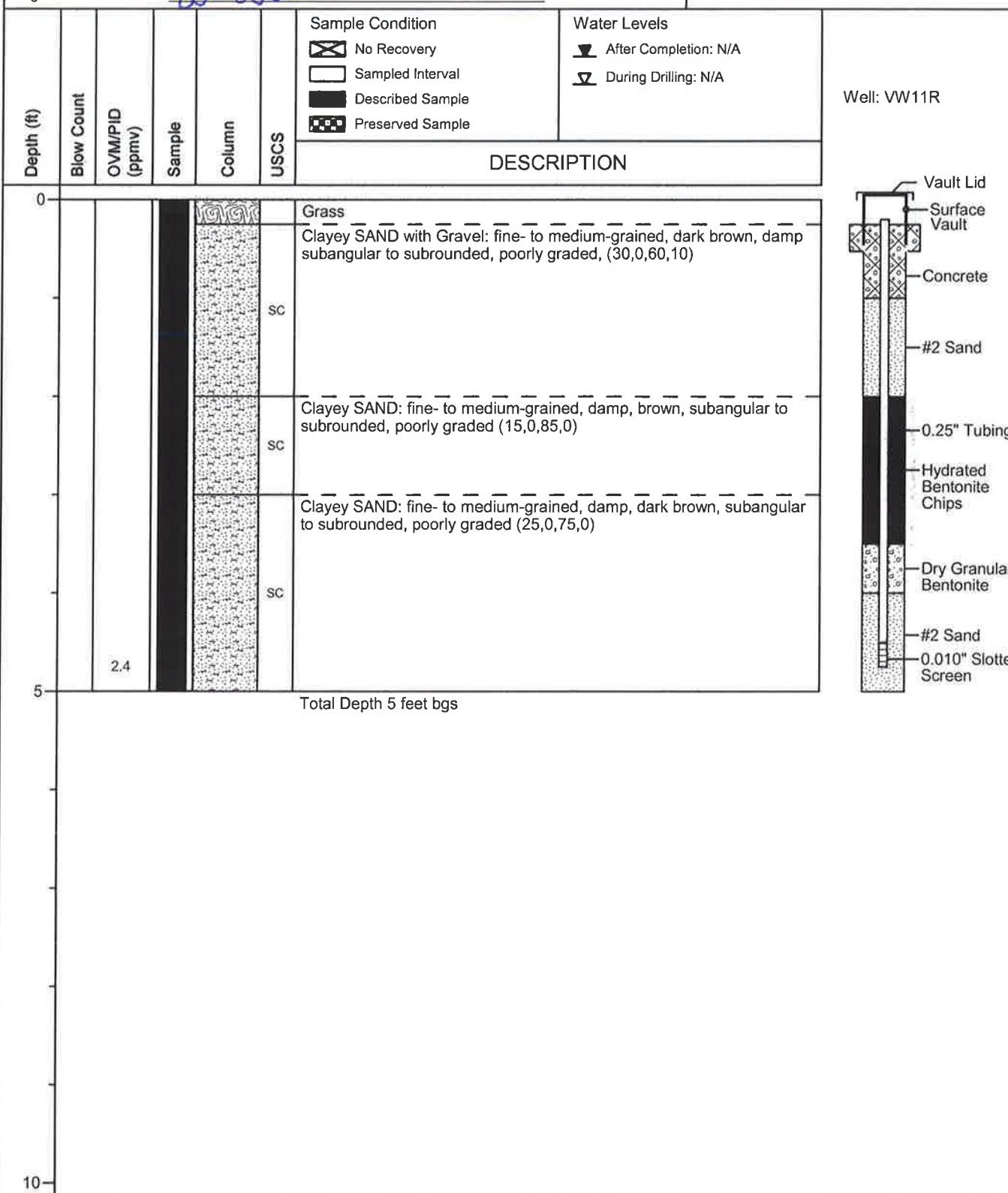
Shaping the Future

BORING LOG VW11R

(Page 1 of 1)

Project No.: : Former Exxon Service Station 74121
 Site: : 10605 Foothill Boulevard, Oakland, CA
 Logged By: : Alex Snyder
 Reviewed By: : David Daniels, P.G. 8737
 Signature: : *Snyder*

Date Drilled: : 12/19/2011
 Drilling Co.: : Cascade Drilling L.P.
 Drilling Method: : Hand Auger
 Sampling Method: : Hand Auger
 Borehole Diameter: : 3.25"
 Casing Diameter: : 0.25"
 Location N-S : 2' South of VW11
 Location E-W : 0.5' West of VW11
 Total Depth: : 5 ft. bgs
 First GW Depth: : N/A



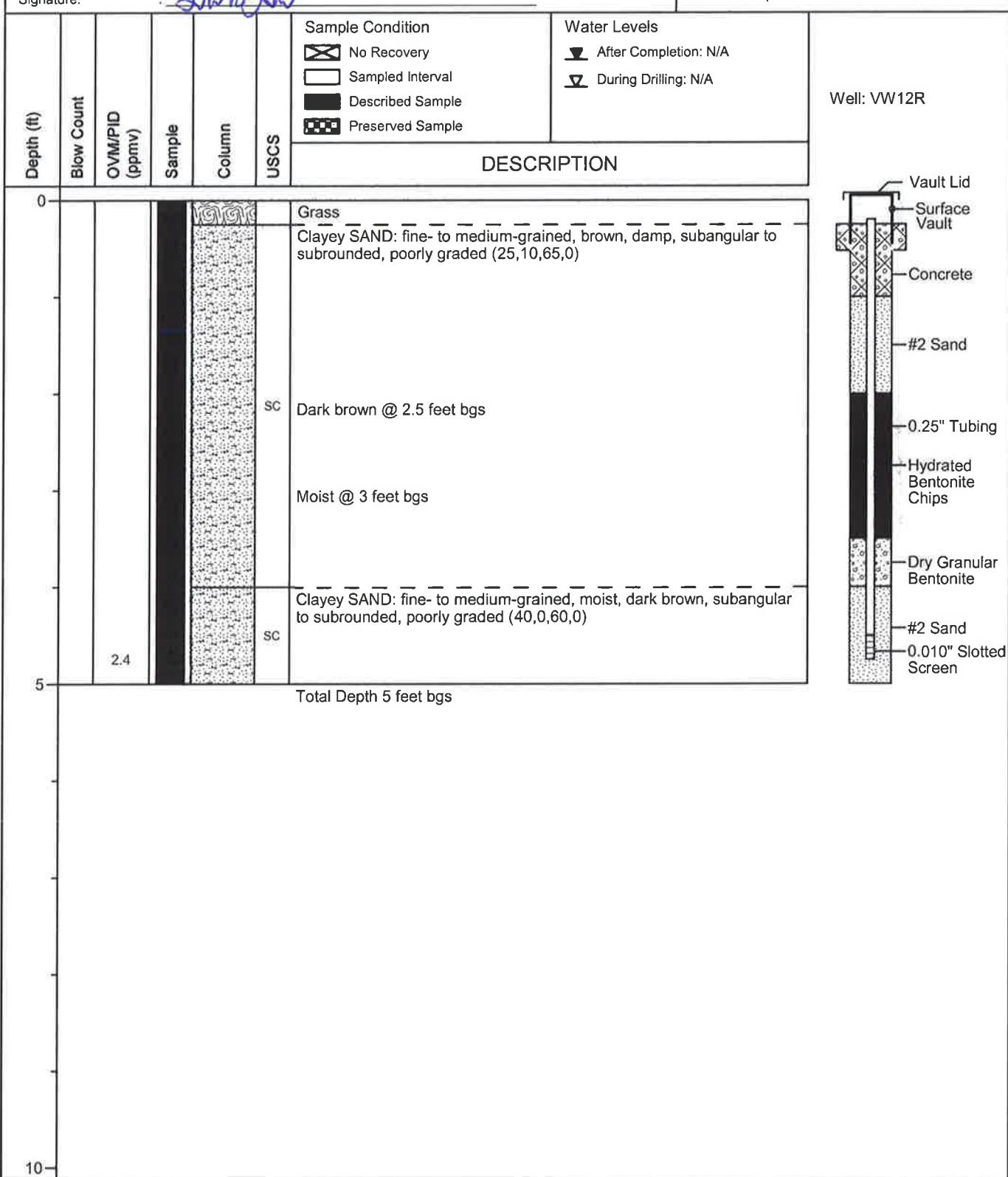


BORING LOG VW12R

(Page 1 of 1)

Project No.: : Former Exxon Service Station 74121
 Site: : 10605 Foothill Boulevard, Oakland, CA
 Logged By: : Alex Snyder
 Reviewed By: : David Daniels, P.G. 8737
 Signature: : *[Handwritten signature]*

Date Drilled: : 12/19/2011
 Drilling Co.: : Cascade Drilling L.P.
 Drilling Method: : Hand Auger
 Sampling Method: : Hand Auger
 Borehole Diameter: : 3.25"
 Casing Diameter: : 0.25"
 Location N-S : 0.5' North of VW12
 Location E-W : 5' East of VW12
 Total Depth: : 5 ft. bgs
 First GW Depth: : N/A



APPENDIX E

DISPOSAL DOCUMENTATION

SOIL SAFE OF CA - TPST

Non-Hazardous Soils

Manifest

↓ Manifest # ↓

Date of Shipment: 130112	Responsible for Payment:	Transport Truck #: 313 1476	Facility #: A07	Approval Number: 38614	Load # 1001
-----------------------------	--------------------------	--------------------------------	--------------------	---------------------------	----------------

Generator's Name and Billing Address:

EXXONMOBIL OIL CORP.
ATTN: EMES ADMINISTRATOR
2665 W. 180TH ST. #1106
TORRANCE, CA 90504

Generator's Phone #:
310-212-2038Consultant's Name and Billing Address:
Cardno ERI - Petaluma

Person to Contact:

Customer Account Number

FAX#:

Generation Site (Transport from): (name & address)

EXXONMOBIL 74121
10805 FOOTHILL BOULEVARD
OAKLAND, CA

Site Phone #:

Person to Contact:

FAX#:

Designated Facility (Transport to): (name & address)

SOIL SAFE
12328 HIBISCUS AVENUE
ADELANTO, CA 92301

Facility Phone #:
(800) 862-8001Person to Contact:
DELLENA JEFFREYFAX#:
(760) 248-8004

Transporter Name and Mailing Address:

BELSHIRE
26971 TOWNE CENTRE DRIVE
FOOTHILL RANCH, CA 92610

Transporter's Phone #:
949-460-5200

CAR000183813

Person to Contact:
LARRY MOOTHART

450647

FAX#:
949-460-5210

Customer Account Number

Description of Soil	Moisture Content	Contaminated by:	Approx. Qty:	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Sand <input type="checkbox"/> Organic <input type="checkbox"/> Clay <input type="checkbox"/> Other <input type="checkbox"/>	0 - 10% <input type="checkbox"/> 10 - 20% <input type="checkbox"/> 20% - over <input type="checkbox"/>	Gas <input type="checkbox"/> Diesel <input type="checkbox"/> Other <input type="checkbox"/>	1	Soil	37960	37410	560
Sand <input type="checkbox"/> Organic <input type="checkbox"/> Clay <input type="checkbox"/> Other <input type="checkbox"/>	0 - 10% <input type="checkbox"/> 10 - 20% <input type="checkbox"/> 20% - over <input type="checkbox"/>	Gas <input type="checkbox"/> Diesel <input type="checkbox"/> Other <input type="checkbox"/>					.28

List any exception to items listed above:

Scale Ticket # 99538

Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils described in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.

Print or Type Name: Generator Consultant
Signature and date: On Behalf of ExxonMobil: Month Day Year
Paula Sane / Cardno ERI

Transporter's certification: I/We acknowledge receipt of the soil referenced above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that the soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.

Print or Type Name: Ron Gillon
Signature and date: 1/19/12

Discrepancies:
74121
715310

Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:

Print or Type Name: D. JEFFREY/J. PROVANSAL
Signature and date: 1/20/12

Generator and/or Consultant

Transporter

Recycling Facility

Please print or type.

TRANSPORTER COPY

APPENDIX F

FIELD DATA FORMS

Former Exxon Service Station 74121
10605 Foothill Blvd., Oakland, CA CA

SVS Point Sampling

SVS Point

VW1

Date
Sampler

12/28/11
Alex S.

a	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test	1325	1330	27/27	—	—
(2nd Vac Test)					
Purge	1330		WET		
Sample					

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

b	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test					
(2nd Vac Test)					
Purge					
Sample					

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

Duplicate	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test					
(2nd Vac Test)					
Purge					
Sample					

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

Former Exxon Service Station 74121
10605 Foothill Blvd., Oakland, CA CA

SVS Point Sampling

SVS Point VW2

Date
Sampler

12/28/11
Alex

a	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test	1338	1343	26.5/26.5	—	—
(2nd Vac Test)	—	—	—	—	—
Purge	1350	1418	—	200 cc/min	20%./0%.
Sample	1421	1427	27/5	—	20%.

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

b	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test	—	—	—	—	—
(2nd Vac Test)	—	—	—	—	—
Purge	—	—	—	—	—
Sample	—	—	—	—	—

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

Duplicate	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test	—	—	—	—	—
(2nd Vac Test)	—	—	—	—	—
Purge	—	—	—	—	—
Sample	1428	1437	27/5	—	20%.

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

Former Exxon Service Station 74121
10605 Foothill Blvd., Oakland, CA CA

SVS Point Sampling

SVS Point

VW3R

Date
12-30-11
Sampler
A/G/S

a	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test	1020	1025	250/14.5		
(2nd Vac Test)					
Purge	1038	1044	—	200 cc/min	20%/0%
Sample	1042	1050	28/5	—	20%

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

b	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test					
(2nd Vac Test)					
Purge					
Sample					

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

Duplicate	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test					
(2nd Vac Test)					
Purge					
Sample					

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

Former Exxon Service Station 74121
10605 Foothill Blvd., Oakland, CA CA

SVS Point Sampling

SVS Point VW4R Date 12-30-11
Sampler AGS

a	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test	1305	1310	25.5/24.5	-	-
(2nd Vac Test)					
Purge	1317	1323	-	200 cc/min	207./07.
Sample	1325	1331	27.0		

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

b	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test					
(2nd Vac Test)					
Purge					
Sample					

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

Duplicate	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test					
(2nd Vac Test)					
Purge					
Sample					

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

Former Exxon Service Station 74121
10605 Foothill Blvd., Oakland, CA CA

SVS Point Sampling

SVS Point

VW5

Date
Sampler

12/28/11

VTB

a	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test	1045	1050	26/24	—	—
(2nd Vac Test)	—	—	—	—	—
Purge	1057	1125.5	—	200 cc/min	20% / 0%
Sample	1125.5	1130	27/5	—	20%

#131
1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

b	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test					
(2nd Vac Test)					
Purge					
Sample					

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

Duplicate	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test					
(2nd Vac Test)					
Purge					
Sample					

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

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10605 Foothill Blvd., Oakland, CA CA

SVS Point Sampling

SVS Point VW6

Date 12.29.11
Sampler AGS

a	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test	1233	1238	27.5/26.5	-	-
(2nd Vac Test)					
Purge	1246	1314		200 cc/min	20%/0%
Sample	1315	1319	26.5/5	-	20%

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

b	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test					
(2nd Vac Test)					
Purge					
Sample					

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

Duplicate	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test					
(2nd Vac Test)					
Purge					
Sample					

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

Former Exxon Service Station 74121
10605 Foothill Blvd., Oakland, CA CA

SVS Point Sampling

SVS Point

VW9

Date
Sampler

12/28/11

Alex

a	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test	1450	1455	27/27	—	—
(2nd Vac Test)	—	—	—	—	—
Purge	1455	—	—	—	—
Sample	—	—	—	—	—

WET

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

b	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test	—	—	—	—	—
(2nd Vac Test)	—	—	—	—	—
Purge	—	—	—	—	—
Sample	—	—	—	—	—

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

Duplicate	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test	—	—	—	—	—
(2nd Vac Test)	—	—	—	—	—
Purge	—	—	—	—	—
Sample	—	—	—	—	—

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

Former Exxon Service Station 74121
10605 Foothill Blvd., Oakland, CA CA

SVS Point Sampling

SVS Point

VW10

**Date
Sampler**

12/29/11

VTB

a	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test	1137	1142	-27.0 / 27.0	-	-
(2nd Vac Test)					
Purge	1153	1121		200 cc/min	20% / 0%
Sample	1122	1125	26 / 5	-	20%

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

b	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test					
(2nd Vac Test)					
Purge					
Sample					

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

Duplicate	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test					
(2nd Vac Test)					
Purge					
Sample					

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

Former Exxon Service Station 74121
10605 Foothill Blvd., Oakland, CA CA

SVS Point Sampling

SVS Point VW11R

Date 12-30-11
Sampler AERS

a	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test	1345	1350	25.5 / 24.5	-	~ -
(2nd Vac Test)					
Purge	1352	1358	-	200 cc/min	20% / 0.
Sample	1359	1400	27.5 /	~ 0 -	207.

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

b	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test					
(2nd Vac Test)					
Purge					
Sample					

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

Duplicate	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test					
(2nd Vac Test)					
Purge					
Sample					

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.

1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.

For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

Former Exxon Service Station 74121
10605 Foothill Blvd., Oakland, CA CA

SVS Point Sampling

SVS Point

VW12R

Date
Sampler

12-30-11
AGS

a	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test	112	1125	25/24	-	-
(2nd Vac Test)					
Purge	130				
Sample					

→ Tested
w/ strobe
inlet off filter
→ no vent

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.
1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.
For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

b

b	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test					
(2nd Vac Test)					
Purge					
Sample					

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.
1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.
For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

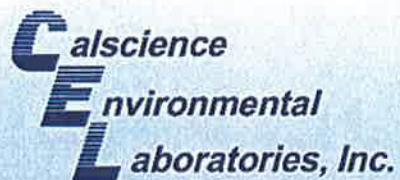
Duplicate

Duplicate	Start	End	Inches Hg	Flow Setting	He (ppm)
Vac Test					
(2nd Vac Test)					
Purge					
Sample					

1 purge volume(@ 100cc/min)= 19 minutes; 3 purge volumes = 57 minutes; 7 purge volumes = 133 mins.
1 purge volume(@ 200cc/min)= 9.5 minutes; 3 purge volumes = 28.5 minutes; 7 purge volumes = 66.5 min.
For VW3R, VW4R, VW11R & VW12R 1 purge volume(@ 200 cc/min)= 3 minutes, 3 purge volumes=6 min.

APPENDIX G

LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY RECORDS



CALSCIENCE

WORK ORDER NUMBER: 11-12-1690

The difference is service



AIR SOIL WATER MARINE CHEMISTRY

P E R
JAN 06 2012
BY:

Analytical Report For

Client: Cardno ERI

Client Project Name: ExxonMobil 74121/022780C

Attention: Paula Sime
601 North McDowell Blvd.
Petaluma, CA 94954-2312

Cecile L. deGuia

Approved for release on 01/6/2012 by:
Cecile deGuia
Project Manager

[ResultLink ▶](#)

[Email your PM ▶](#)



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



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NELAP ID: 03220CA | DoD-ELAP ID: L10-41 | CSDLAC ID: 10109 | SCAQMD ID: 93LA0830

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Work Order Number: 11-12-1690

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Cardno ERI
601 North McDowell Blvd.
Petaluma, CA 94954-2312

Date Received: 12/22/11
Work Order No: 11-12-1690
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: ExxonMobil 74121/022780C

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-SP1 (1-4)	11-12-1690-5-A	12/19/11 13:40	Solid	GC 48	12/29/11	12/29/11 22:30	111229B03S

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	5.0	1	SG,U	mg/kg

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	115	61-145	

Method Blank	099-12-275-4,323	N/A	Solid	GC 48	12/29/11	12/29/11 19:01	111229B03S
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Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	5.0	1	U	mg/kg

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	108	61-145	


[Return to Contents](#)

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



Analytical Report



Cardno ERI
601 North McDowell Blvd.
Petaluma, CA 94954-2312

Date Received: 12/22/11
Work Order No: 11-12-1690
Preparation: EPA 5030C
Method: EPA 8015B (M)

Project: ExxonMobil 74121/022780C

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-SP1 (1-4)	11-12-1690-5-A	12/19/11 13:40	Solid	GC 11	12/27/11	12/27/11 17:15	111227B01

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
TPH as Gasoline	ND	0.50	1	U	mg/kg

<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>
1,4-Bromofluorobenzene - FID	78	42-126	

Method Blank	099-14-571-129	N/A	Solid	GC 11	12/27/11	12/27/11 13:14	111227B01
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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
TPH as Gasoline	ND	0.50	1	U	mg/kg

<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>
1,4-Bromofluorobenzene - FID	83	42-126	


[Return to Contents](#)

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



Analytical Report



Cardno ERI
601 North McDowell Blvd.
Petaluma, CA 94954-2312

Date Received: 12/22/11
Work Order No: 11-12-1690
Preparation: EPA 5030C
Method: EPA 8260B
Units: mg/kg

Project: ExxonMobil 74121/022780C

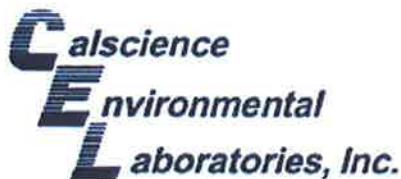
Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-SP1 (1-4)	11-12-1690-5-A	12/19/11 13:40	Solid	GC/MS XX	12/22/11	12/28/11 15:41	111228L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0050	1	U	2-Chlorotoluene	ND	0.0050	1	U
Toluene	ND	0.0050	1	U	4-Chlorotoluene	ND	0.0050	1	U
Ethylbenzene	ND	0.0050	1	U	4-Methyl-2-Pentanone	ND	0.050	1	U
Xylenes (total)	ND	0.0050	1	U	Acetone	ND	0.12	1	U
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1	U	Bromobenzene	ND	0.0050	1	U
Tert-Butyl Alcohol (TBA)	ND	0.050	1	U	Bromoform	ND	0.0050	1	U
Diisopropyl Ether (Dipe)	ND	0.010	1	U	Bromochloromethane	ND	0.0050	1	U
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1	U	Bromomethane	ND	0.025	1	U
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1	U	Carbon Disulfide	ND	0.050	1	U
1,1,1,2-Tetrachloroethane	ND	0.0050	1	U	Carbon Tetrachloride	ND	0.0050	1	U
1,1,1-Trichloroethane	ND	0.0050	1	U	Chlorobenzene	ND	0.0050	1	U
1,1,2,2-Tetrachloroethane	ND	0.0050	1	U	Dibromochloromethane	ND	0.0050	1	U
1,1,2-Trichloroethane	ND	0.0050	1	U	Chloroethane	ND	0.0050	1	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	1	U	Chloroform	ND	0.0050	1	U
1,1-Dichloroethane	ND	0.0050	1	U	Chloromethane	ND	0.025	1	U
1,1-Dichloroethene	ND	0.0050	1	U	Dibromomethane	ND	0.0050	1	U
1,1-Dichloropropene	ND	0.0050	1	U	Bromodichloromethane	ND	0.0050	1	U
1,2,3-Trichlorobenzene	ND	0.010	1	U	Dichlorodifluoromethane	ND	0.0050	1	U
1,2,3-Trichloropropane	ND	0.0050	1	U	Hexachloro-1,3-Butadiene	ND	0.10	1	U
1,2,4-Trichlorobenzene	ND	0.0050	1	U	Isopropylbenzene	ND	0.0050	1	U
1,2,4-Trimethylbenzene	ND	0.0050	1	U	2-Butanone	ND	0.050	1	U
1,3,5-Trimethylbenzene	ND	0.0050	1	U	Methylene Chloride	ND	0.050	1	U
c-1,2-Dichloroethene	ND	0.0050	1	U	2-Hexanone	ND	0.050	1	U
1,2-Dibromo-3-Chloropropane	ND	0.010	1	U	Naphthalene	ND	0.050	1	U
1,2-Dibromoethane	ND	0.0050	1	U	n-Butylbenzene	ND	0.0050	1	U
1,2-Dichlorobenzene	ND	0.0050	1	U	n-Propylbenzene	ND	0.0050	1	U
1,2-Dichloroethane	ND	0.0050	1	U	p-Isopropyltoluene	ND	0.0050	1	U
1,2-Dichloropropane	ND	0.0050	1	U	sec-Butylbenzene	ND	0.0050	1	U
t-1,2-Dichloroethene	ND	0.0050	1	U	Styrene	ND	0.0050	1	U
c-1,3-Dichloropropene	ND	0.0050	1	U	tert-Butylbenzene	ND	0.0050	1	U
1,3-Dichlorobenzene	ND	0.0050	1	U	Tetrachloroethene	ND	0.0050	1	U
1,3-Dichloropropene	ND	0.0050	1	U	Trichloroethene	ND	0.0050	1	U
t-1,3-Dichloropropene	ND	0.0050	1	U	Trichlorofluoromethane	ND	0.050	1	U
1,4-Dichlorobenzene	ND	0.0050	1	U	Vinyl Chloride	ND	0.0050	1	U
2,2-Dichloropropane	ND	0.0050	1	U					
Surrogates:	REC (%)	Control	Limits	Qual	Surrogates:	REC (%)	Control	Limits	Qual
1,4-Bromofluorobenzene	101	60-132			Dibromofluoromethane	100	63-141		
1,2-Dichloroethane-d4	104	62-146			Toluene-d8	99	80-120		

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



Analytical Report



Cardno ERI
601 North McDowell Blvd.
Petaluma, CA 94954-2312

Date Received: 12/22/11
Work Order No: 11-12-1690
Preparation: EPA 5030C
Method: EPA 8260B
Units: mg/kg

Project: ExxonMobil 74121/022780C

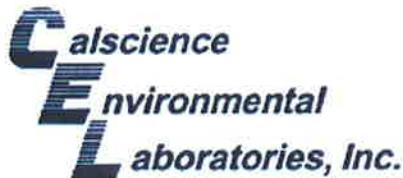
Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-882-1,236	N/A	Solid	GC/MS XX	12/28/11	12/28/11 11:59	111228L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0050	1	U	2-Chlorotoluene	ND	0.0050	1	U
Toluene	ND	0.0050	1	U	4-Chlorotoluene	ND	0.0050	1	U
Ethylbenzene	ND	0.0050	1	U	4-Methyl-2-Pentanone	ND	0.050	1	U
Xylenes (total)	ND	0.0050	1	U	Acetone	ND	0.12	1	U
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1	U	Bromobenzene	ND	0.0050	1	U
Tert-Butyl Alcohol (TBA)	ND	0.050	1	U	Bromochloromethane	ND	0.0050	1	U
Diisopropyl Ether (DIPE)	ND	0.010	1	U	Bromoform	ND	0.0050	1	U
Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1	U	Bromomethane	ND	0.025	1	U
Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1	U	Carbon Disulfide	ND	0.050	1	U
1,1,1,2-Tetrachloroethane	ND	0.0050	1	U	Carbon Tetrachloride	ND	0.0050	1	U
1,1,1-Trichloroethane	ND	0.0050	1	U	Chlorobenzene	ND	0.0050	1	U
1,1,2,2-Tetrachloroethane	ND	0.0050	1	U	Dibromochloromethane	ND	0.0050	1	U
1,1,2-Trichloroethane	ND	0.0050	1	U	Chloroethane	ND	0.0050	1	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	1	U	Chloroform	ND	0.0050	1	U
1,1-Dichloroethane	ND	0.0050	1	U	Chloromethane	ND	0.025	1	U
1,1-Dichloroethene	ND	0.0050	1	U	Dibromomethane	ND	0.0050	1	U
1,1-Dichloropropene	ND	0.0050	1	U	Bromodichloromethane	ND	0.0050	1	U
1,2,3-Trichlorobenzene	ND	0.010	1	U	Dichlorodifluoromethane	ND	0.0050	1	U
1,2,3-Trichloropropane	ND	0.0050	1	U	Hexachloro-1,3-Butadiene	ND	0.10	1	U
1,2,4-Trichlorobenzene	ND	0.0050	1	U	Isopropylbenzene	ND	0.0050	1	U
1,2,4-Trimethylbenzene	ND	0.0050	1	U	2-Butanone	ND	0.050	1	U
1,3,5-Trimethylbenzene	ND	0.0050	1	U	Methylene Chloride	ND	0.050	1	U
c-1,2-Dichloroethene	ND	0.0050	1	U	2-Hexanone	ND	0.050	1	U
1,2-Dibromo-3-Chloropropane	ND	0.010	1	U	Naphthalene	ND	0.050	1	U
1,2-Dibromoethane	ND	0.0050	1	U	n-Butylbenzene	ND	0.0050	1	U
1,2-Dichlorobenzene	ND	0.0050	1	U	n-Propylbenzene	ND	0.0050	1	U
1,2-Dichloroethane	ND	0.0050	1	U	p-Isopropyltoluene	ND	0.0050	1	U
1,2-Dichloropropane	ND	0.0050	1	U	sec-Butylbenzene	ND	0.0050	1	U
t-1,2-Dichloroethene	ND	0.0050	1	U	Styrene	ND	0.0050	1	U
c-1,3-Dichloropropene	ND	0.0050	1	U	tert-Butylbenzene	ND	0.0050	1	U
1,3-Dichlorobenzene	ND	0.0050	1	U	Tetrachloroethene	ND	0.0050	1	U
1,3-Dichloropropane	ND	0.0050	1	U	Trichloroethene	ND	0.0050	1	U
t-1,3-Dichloropropene	ND	0.0050	1	U	Trichlorofluoromethane	ND	0.050	1	U
1,4-Dichlorobenzene	ND	0.0050	1	U	Vinyl Chloride	ND	0.0050	1	U
2,2-Dichloropropene	ND	0.0050	1	U					
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	100	60-132			Dibromofluoromethane	101	63-141		
1,2-Dichloroethane-d4	102	62-146			Toluene-d8	99	80-120		

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



Analytical Report



Cardno ERI
601 North McDowell Blvd.
Petaluma, CA 94954-2312

Date Received: 12/22/11
Work Order No: 11-12-1690
Preparation: EPA 3050B
Method: EPA 6010B

Project: ExxonMobil 74121/022780C

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-SP1 (1-4)	11-12-1690-5-A	12/19/11 13:40	Solid	ICP 5300	12/30/11	12/30/11 18:44	111230L03

Parameter	Result	RL	DF	Qual	Units
Lead	9.04	0.500	1		mg/kg

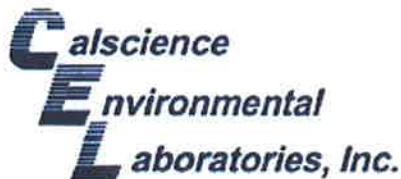
Method Blank	097-01-002-15,556	N/A	Solid	ICP 5300	12/30/11	12/30/11 17:18	111230L03
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Parameter	Result	RL	DF	Qual	Units
Lead	ND	0.500	1	U	mg/kg



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



Quality Control - Spike/Spike Duplicate



Cardno ERI
601 North McDowell Blvd.
Petaluma, CA 94954-2312

Date Received: 12/22/11
Work Order No: 11-12-1690
Preparation: EPA 3050B
Method: EPA 6010B

Project ExxonMobil 74121/022780C

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
11-12-1778-1	Solid	ICP 5300	12/30/11	12/30/11	111230S03

Parameter	SPIKE ADDED	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Lead	25.00	114	84	75-125	11	0-20	

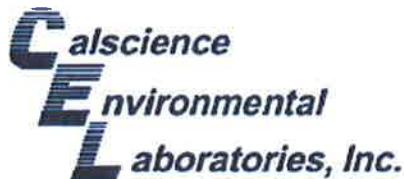


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RPD - Relative Percent Difference , CL - Control Limit



7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501



Quality Control - PDS / PDSD



Cardno ERI
601 North McDowell Blvd.
Petaluma, CA 94954-2312

Date Received 12/22/11
Work Order No: 11-12-1690
Preparation: EPA 3050B
Method: EPA 6010B

Project: ExxonMobil 74121/022780C

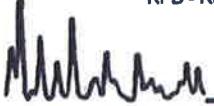
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS / PDSD Batch Number
11-12-1776-1	Solid	ICP 5300	12/30/11	12/30/11	111230S03

Parameter	SPIKE ADDED	PDS %REC	PDSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Lead	25.00	94	94	75-125	0	0-20	

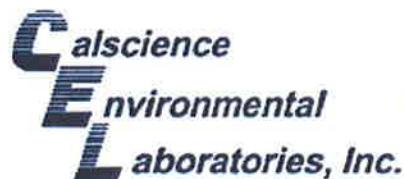


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RPD - Relative Percent Difference , CL - Control Limit



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Quality Control - Spike/Spike Duplicate



Cardno ERI
601 North McDowell Blvd.
Petaluma, CA 94954-2312

Date Received: 12/22/11
Work Order No: 11-12-1690
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project ExxonMobil 74121/022780C

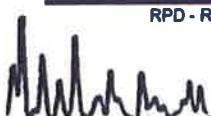
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
11-12-1939-5	Solid	GC 48	12/29/11	12/29/11	111229S03

Parameter	SPIKE ADDED	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	400.0	96	102	64-130	6	0-15	



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RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



Cardno ERI
601 North McDowell Blvd.
Petaluma, CA 94954-2312

Date Received: 12/22/11
Work Order No: 11-12-1690
Preparation: EPA 5030C
Method: EPA 8015B (M)

Project ExxonMobil 74121/022780C

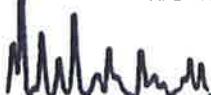
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
11-12-1780-21	Solid	GC 11	12/27/11	12/27/11	111227801

Parameter	SPIKE ADDED	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	10.00	101	106	48-114	5	0-23	



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RPD - Relative Percent Difference , CL - Control Limit



7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501



Quality Control - Spike/Spike Duplicate



Cardno ERI
601 North McDowell Blvd.
Petaluma, CA 94954-2312

Date Received: 12/22/11
Work Order No: 11-12-1690
Preparation: EPA 5030C
Method: EPA 8260B

Project ExxonMobil 74121/022780C

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
11-12-1684-1	Solid	GC/MS XX	12/22/11	12/28/11	111228S02

Parameter	SPIKE ADDED	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	0.05000	106	102	61-127	4	0-20	
Toluene	0.05000	105	100	63-123	4	0-20	
Ethylbenzene	0.05000	104	101	57-129	3	0-22	
Methyl-t-Butyl Ether (MTBE)	0.05000	116	110	57-123	5	0-21	
Tert-Butyl Alcohol (TBA)	0.2500	101	95	30-168	7	0-34	
Diisopropyl Ether (DIPE)	0.05000	115	110	57-129	4	0-20	
Ethyl-t-Butyl Ether (ETBE)	0.05000	109	107	55-127	2	0-20	
Tert-Amyl-Methyl Ether (TAME)	0.05000	108	105	58-124	3	0-20	
Ethanol	0.5000	107	94	17-167	13	0-47	
1,1-Dichloroethene	0.05000	107	103	47-143	4	0-25	
1,2-Dibromoethane	0.05000	104	99	64-124	5	0-20	
1,2-Dichlorobenzene	0.05000	99	95	35-131	4	0-25	
1,2-Dichloroethane	0.05000	101	95	80-120	6	0-20	
Carbon Tetrachloride	0.05000	85	93	51-135	9	0-29	
Chlorobenzene	0.05000	99	96	57-123	3	0-20	
Trichloroethene	0.05000	103	99	44-158	4	0-20	
Vinyl Chloride	0.05000	73	72	49-139	1	0-47	

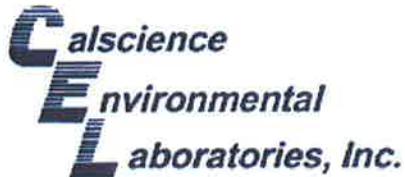


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RPD - Relative Percent Difference , CL - Control Limit



7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501



Quality Control - LCS/LCS Duplicate



Cardno ERI
601 North McDowell Blvd.
Petaluma, CA 94954-2312

Date Received: N/A
Work Order No: 11-12-1690
Preparation: EPA 3050B
Method: EPA 6010B

Project: ExxonMobil 74121/022780C

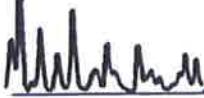
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-002-15,556	Solid	ICP 5300	12/30/11	12/30/11	111230L03

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Lead	25.00	104	105	80-120	1	0-20	

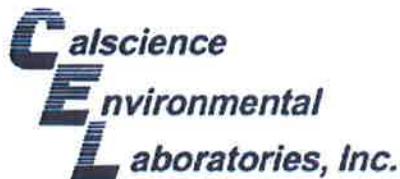


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RPD - Relative Percent Difference , CL - Control Limit



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Quality Control - LCS/LCS Duplicate



Cardno ERI
601 North McDowell Blvd.
Petaluma, CA 94954-2312

Date Received: N/A
Work Order No: 11-12-1690
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: ExxonMobil 74121/022780C

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-275-4,323	Solid	GC 48	12/29/11	12/29/11	111229B03S

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	400.0	99	102	75-123	3	0-12	

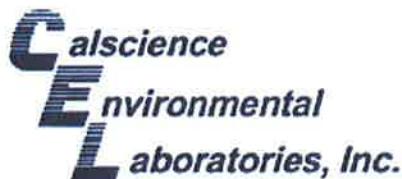


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RPD - Relative Percent Difference , CL - Control Limit



7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501



Quality Control - LCS/LCS Duplicate



Cardno ERI
601 North McDowell Blvd.
Petaluma, CA 94954-2312

Date Received: N/A
Work Order No: 11-12-1690
Preparation: EPA 5030C
Method: EPA 8015B (M)

Project: ExxonMobil 74121/022780C

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-571-129	Solid	GC 11	12/27/11	12/27/11	111227B01

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	10.00	116	121	70-124	4	0-18	

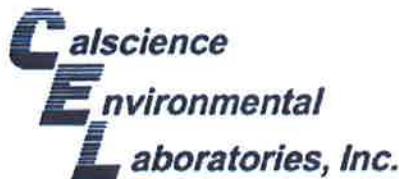


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RPD - Relative Percent Difference , CL - Control Limit



7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501



Quality Control - LCS/LCS Duplicate



Cardno ERI
601 North McDowell Blvd.
Petaluma, CA 94954-2312

Date Received: N/A
Work Order No: 11-12-1690
Preparation: EPA 5030C
Method: EPA 8260B

Project: ExxonMobil 74121/022780C

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed		LCS/LCSD Batch Number		
099-12-882-1,236	Solid	GC/MS XX	12/28/11	12/28/11		111228L01		
Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	0.05000	101	100	78-120	71-127	2	0-20	
Toluene	0.05000	101	100	77-120	70-127	1	0-20	
Ethylbenzene	0.05000	101	99	76-120	69-127	2	0-20	
Methyl-t-Butyl Ether (MTBE)	0.05000	109	112	77-120	70-127	3	0-20	
Tert-Butyl Alcohol (TBA)	0.2500	95	93	68-122	59-131	3	0-20	
Diisopropyl Ether (DIPE)	0.05000	109	110	78-120	71-127	0	0-20	
Ethyl-t-Butyl Ether (ETBE)	0.05000	106	107	78-120	71-127	1	0-20	
Tert-Amyl-Methyl Ether (TAME)	0.05000	107	107	75-120	68-128	1	0-20	
Ethanol	0.5000	95	91	56-140	42-154	5	0-20	
1,1-Dichloroethene	0.05000	101	100	74-122	66-130	1	0-20	
1,2-Dibromoethane	0.05000	102	103	80-120	73-127	0	0-20	
1,2-Dichlorobenzene	0.05000	98	98	75-120	68-128	0	0-20	
1,2-Dichloroethane	0.05000	97	98	80-120	73-127	0	0-20	
Carbon Tetrachloride	0.05000	94	94	49-139	34-154	1	0-20	
Chlorobenzene	0.05000	97	96	79-120	72-127	0	0-20	
Trichloroethene	0.05000	99	98	80-120	73-127	2	0-20	
Vinyl Chloride	0.05000	93	89	68-122	59-131	5	0-20	

Total number of LCS compounds : 17

Total number of ME compounds : 0

Total number of ME compounds allowed : 1

LCS ME CL validation result : Pass

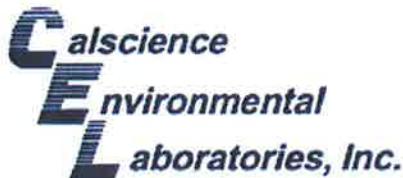


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RPD - Relative Percent Difference . CL - Control Limit



7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501



Glossary of Terms and Qualifiers



Work Order Number: 11-12-1690

<u>Qualifier</u>	<u>Definition</u>
AZ	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
BA	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
BB	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
BU	Sample analyzed after holding time expired.
DF	Reporting limits elevated due to matrix interferences.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
GE	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
HD	Chromat. profile inconsistent with pattern(s) of ref. fuel stds.
HO	High concentration matrix spike recovery out of limits
HT	Analytical value calculated using results from associated tests.
HX	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
IL	Relative percent difference out of control.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
LD	Analyte presence was not confirmed by second column or GC/MS analysis.
LP	The LCS and/or LCSD recoveries for this analyte were above the upper control limit. The associated sample was non-detected. Therefore, the sample data was reported without further clarification.
LQ	LCS recovery above method control limits.
LR	LCS recovery below method control limits.
ND	Parameter not detected at the indicated reporting limit.
QO	Compound did not meet method-described identification guidelines. Identification was based on additional GC/MS characteristics.
RU	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
SG	A silica gel cleanup procedure was performed.
SN	See applicable analysis comment.
U	Undetected at detection limit.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	MPN - Most Probable Number



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1690



< WebShip > > > >

800-322-5555 www.gso.com

Ship From:
 ALAN KEMP
 CAL SCIENCE- CONCORD
 5063 COMMERCIAL CIRCLE #H
 CONCORD, CA 94520

Ship To:
SAMPLE RECEIVING
CEL
7440 LINCOLN WAY
GARDEN GROVE, CA 92841

COD:
\$0.00

Reference:
 CARDNO ERI, YOLO COUNTY

Delivery Instructions:

Signature Type:
 SIGNATURE REQUIRED

Tracking #: 518099523

**NPS****A**

ORC
GARDEN GROVE

D92841A

97139840

Print Date : 12/21/11 15:10 PM

Package 1 of 1

LABEL INSTRUCTIONS:

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

STEP 1 - Use the "Send Label to Printer" button on this page to print the shipping label on a laser or inkjet printer.

STEP 2 - Fold this page in half.

STEP 3 - Securely attach this label to your package, do not cover the barcode.

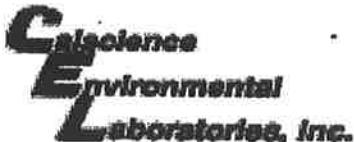
STEP 4 - Request an on-call pickup for your package, if you do not have scheduled daily pickup service or Drop-off your package at the nearest GSO drop box. Locate nearest GSO dropbox locations using this link.

ADDITIONAL OPTIONS:

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all the service terms and conditions described in this section. Our liability for loss or damage to any package is limited to your actual damages or \$100 whichever is less, unless you pay for and declare a higher authorized value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your loss or damage. In any event, we will not be liable for any damage, whether direct, incidental, special or consequential, in excess of the declared value of a shipment whether or not we had knowledge that such damage might be incurred including but not limited to loss of income or profit. We will not be liable for your acts or omissions, including but not limited to improper or insufficient packaging, securing, marking or addressing. Also, we will not be liable if you or the recipient violates any of the terms of our agreement. We will not be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, act of public enemies, war, strikes, or civil commotion. The highest declared value for our GSO Priority Letter or GSO Priority Package is \$500. For other shipments the highest declared value is \$10,000 unless your package contains items of "extraordinary value", in which case the highest declared value we allow is \$500. Items of "extraordinary value" include, but are not limited to, artwork, jewelry, furs, precious metals, tickets, negotiable instruments and other items with intrinsic value.

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WORK ORDER #: 11-12-1690

SAMPLE RECEIPT FORM Cooler 1 of 1CLIENT: Cardno ERIDATE: 12/22/11**TEMPERATURE:** Thermometer ID: SC3 (Criteria: 0.0 °C – 6.0 °C, not frozen)Temperature 2.1 °C - 0.3 °C (CF) = 1.8 °C Blank Sample Sample(s) outside temperature criteria (PM/APM contacted by: _____). Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling. Received at ambient temperature, placed on ice for transport by Courier.Ambient Temperature: Air FilterInitial: JF**CUSTODY SEALS INTACT:**

<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/>	<input type="checkbox"/> No (Not Intact)	<input type="checkbox"/> Not Present	<input type="checkbox"/> N/A	Initial: <u>JF</u>
<input type="checkbox"/> Sample	<input type="checkbox"/>	<input type="checkbox"/> No (Not Intact)	<input checked="" type="checkbox"/> Not Present	<input type="checkbox"/>	Initial: <u>WBC</u>

SAMPLE CONDITION:Chain-Of-Custody (COC) document(s) received with samples..... Yes No N/ACOC document(s) received complete..... Yes No N/A Collection date/time, matrix, and/or # of containers logged in based on sample labels. No analysis requested. Not relinquished. No date/time relinquished.Sampler's name indicated on COC..... Yes No N/ASample container label(s) consistent with COC..... Yes No N/ASample container(s) intact and good condition..... Yes No N/AProper containers and sufficient volume for analyses requested..... Yes No N/AAnalyses received within holding time..... Yes No N/ApH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours... Yes No N/AProper preservation noted on COC or sample container..... Yes No N/A Unpreserved vials received for Volatiles analysisVolatile analysis container(s) free of headspace..... Yes No N/ATedlar bag(s) free of condensation..... Yes No N/A**CONTAINER TYPE:**Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (S) EnCores® TerraCores® Water: VOA VOAh VOAna₂ 125AGB 125AGBh 125AGBp 1AGB 1AGBna₂ 1AGBs 500AGB 500AGJ 500AGJs 250AGB 250CGB 250CGBs 1PB 1PBna 500PB 250PB 250PBn 125PB 125PBzna 100PJ 100PJna₂ _____ _____ _____Air: Tedlar® Summa® Other: _____ Trip Blank Lot#: _____ Labeled/Checked by: JASContainer: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: PLPreservative: H: HCl I: HNO₃ N: Na₂S₂O₃ Na: NaOH P: H₃PO₄ S: H₂SO₄ U: Ultra-pure zrnia: ZnAc₂+NaOH F: Filtered Scanned by: JL

Return to Contents

H&P

Mobile
Geochemistry
Inc.

13 January 2012



Ms. Paula Sime
Environmental Resolutions, Inc. - Petaluma
601 N. McDowell Blvd
Petaluma, CA 94954

H&P Project: ERI010512-13
Client Project: Former Exxon 74121 / 10605 Foothill Blvd.

Dear Ms. Paula Sime:

Enclosed is the analytical report for the above referenced project. The data herein applies to samples as received by H&P Mobile Geochemistry, Inc. on 05-Jan-12 which were analyzed in accordance with the attached Chain of Custody record(s).

The results for all sample analyses and required QA/QC analyses are presented in the following sections and summarized in the documents:

- Sample Summary
- Case Narrative (if applicable)
- Sample Results
- Quality Control Summary
- Notes and Definitions / Appendix
- Chain of Custody

Unless otherwise noted, all analyses were performed and reviewed in compliance with our Quality Systems Manual and Standard Operating Procedures. This report shall not be reproduced, except in full, without the written approval of H&P Mobile Geochemistry, Inc.

We at H&P Mobile Geochemistry, Inc. sincerely appreciate the opportunity to provide analytical services to you on this project. If you have any questions or concerns regarding this analytical report, please contact me at your convenience at 760-804-9678.

Sincerely,

Janis Villarreal
Laboratory Director

H&P Mobile Geochemistry, Inc. operates under CA Environmental Lab Accreditation Program Numbers 2579, 2740, 2741, 2742, 2743, 2745 and 2754. National Environmental Laboratory Accreditation Conference (NELAC) Standards Lab #11845

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Environmental Resolutions, Inc. - Petaluma
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Project: ERI010512-13
Project Number: Former Exxon 74121 / 10605 Foothill Blvd.
Project Manager: Ms. Paula Sime

Reported:
13-Jan-12 08:40

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
VW6	E201010-01	Vapor	29-Dec-11	05-Jan-12
VW10	E201010-02	Vapor	29-Dec-11	05-Jan-12
VW5	E201010-03	Vapor	29-Dec-11	05-Jan-12
VW2	E201010-04	Vapor	29-Dec-11	05-Jan-12
VW2-DUP	E201010-05	Vapor	29-Dec-11	05-Jan-12
VW11R	E201010-06	Vapor	30-Dec-11	05-Jan-12
VW4R	E201010-07	Vapor	30-Dec-11	05-Jan-12
VW3R	E201010-08	Vapor	30-Dec-11	05-Jan-12
Trip Blank	E201010-09	Vapor	30-Dec-11	05-Jan-12



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Project Manager: Ms. Paula Sime

Reported:
13-Jan-12 08:40

Soil Gas and Vapor Analysis

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VW6 (E201010-01) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
Carbon dioxide	2.8	0.2	%	1	EA20603	06-Jan-12	06-Jan-12	ASTM I945-96	
Oxygen	20	0.2	"	"	"	"	"	"	"
Helium (LCC)	ND	1.0	"	"	EA20602	06-Jan-12	06-Jan-12	ASTM D1945M	
Methane	ND	0.0010	"	"	EA20601	06-Jan-12	06-Jan-12	EPA 8015M	
Vacuum	-4.2	-30.0	inch of Hg	"	EA21207	05-Jan-12	05-Jan-12	Vacuum Gauge	
VW10 (E201010-02) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
Carbon dioxide	3.8	0.2	%	1	EA20603	06-Jan-12	06-Jan-12	ASTM I945-96	
Oxygen	11	0.2	"	"	"	"	"	"	"
Helium (LCC)	ND	1.0	"	"	EA20602	06-Jan-12	06-Jan-12	ASTM D1945M	
Methane	ND	0.0010	"	"	EA20601	06-Jan-12	06-Jan-12	EPA 8015M	
Vacuum	-4.4	-30.0	inch of Hg	"	EA21207	05-Jan-12	05-Jan-12	Vacuum Gauge	
VW5 (E201010-03) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
Carbon dioxide	7.9	0.2	%	1	EA20603	06-Jan-12	06-Jan-12	ASTM I945-96	
Oxygen	7.0	0.2	"	"	"	"	"	"	"
Helium (LCC)	ND	1.0	"	"	EA20602	06-Jan-12	06-Jan-12	ASTM D1945M	
Methane	0.032	0.0010	"	"	EA20601	06-Jan-12	06-Jan-12	EPA 8015M	
Vacuum	-4.9	-30.0	inch of Hg	"	EA21207	05-Jan-12	05-Jan-12	Vacuum Gauge	
VW2 (E201010-04) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
Carbon dioxide	2.8	0.2	%	1	EA20603	06-Jan-12	06-Jan-12	ASTM I945-96	
Oxygen	19	0.2	"	"	"	"	"	"	"
Helium (LCC)	ND	1.0	"	"	EA20602	06-Jan-12	06-Jan-12	ASTM D1945M	
Methane	0.052	0.0010	"	"	EA20601	06-Jan-12	06-Jan-12	EPA 8015M	
Vacuum	-4.1	-30.0	inch of Hg	"	EA21207	05-Jan-12	05-Jan-12	Vacuum Gauge	



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Project Manager: Ms. Paula Sime

Reported:
13-Jan-12 08:40

Soil Gas and Vapor Analysis

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VW2-DUP (E201010-05) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
Carbon dioxide	2.0	0.2	%	1	EA20603	06-Jan-12	06-Jan-12	ASTM 1945-96	
Oxygen	20	0.2	"	"	"	"	"	"	"
Helium (LCC)	ND	1.0	"	"	EA20602	06-Jan-12	06-Jan-12	ASTM D1945M	
Methane	0.037	0.0010	"	"	EA20601	06-Jan-12	06-Jan-12	EPA 8015M	
Vacuum	-3.7	-30.0	inch of Hg	"	EA21207	05-Jan-12	05-Jan-12	Vacuum Gauge	
VW11R (E201010-06) Vapor Sampled: 30-Dec-11 Received: 05-Jan-12									
Carbon dioxide	8.1	0.2	%	1	EA20603	06-Jan-12	06-Jan-12	ASTM 1945-96	
Oxygen	7.0	0.2	"	"	"	"	"	"	"
Helium (LCC)	ND	1.0	"	"	EA20602	06-Jan-12	06-Jan-12	ASTM D1945M	
Methane	0.52	0.0010	"	"	EA20601	06-Jan-12	06-Jan-12	EPA 8015M	
Vacuum	-3.0	-30.0	inch of Hg	"	EA21207	05-Jan-12	05-Jan-12	Vacuum Gauge	
VW4R (E201010-07) Vapor Sampled: 30-Dec-11 Received: 05-Jan-12									
Carbon dioxide	5.3	0.2	%	1	EA20603	06-Jan-12	06-Jan-12	ASTM 1945-96	
Oxygen	15	0.2	"	"	"	"	"	"	"
Helium (LCC)	ND	1.0	"	"	EA20602	06-Jan-12	06-Jan-12	ASTM D1945M	
Methane	0.042	0.0010	"	"	EA20601	06-Jan-12	06-Jan-12	EPA 8015M	
Vacuum	-3.3	-30.0	inch of Hg	"	EA21207	05-Jan-12	05-Jan-12	Vacuum Gauge	
VW3R (E201010-08) Vapor Sampled: 30-Dec-11 Received: 05-Jan-12									
Carbon dioxide	6.8	0.2	%	1	EA20603	06-Jan-12	06-Jan-12	ASTM 1945-96	
Oxygen	7.2	0.2	"	"	"	"	"	"	"
Helium (LCC)	ND	1.0	"	"	EA20602	06-Jan-12	06-Jan-12	ASTM D1945M	
Methane	0.085	0.0010	"	"	EA20601	06-Jan-12	06-Jan-12	EPA 8015M	
Vacuum	-5.2	-30.0	inch of Hg	"	EA21207	05-Jan-12	05-Jan-12	Vacuum Gauge	



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Project Manager: Ms. Paula Sime

Reported:
13-Jan-12 08:40

Soil Gas and Vapor Analysis

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
Trip Blank (E201010-09) Vapor Sampled: 30-Dec-11 Received: 05-Jan-12									
Carbon dioxide	ND	0.2	%	1	EA20603	06-Jan-12	06-Jan-12	ASTM 1945-96	
Oxygen	3.0	0.2	"	"	"	"	"	"	"
Helium (LCC)	ND	1.0	"	"	EA20602	06-Jan-12	06-Jan-12	ASTM D1945M	
Methane	ND	0.0010	"	"	EA20601	06-Jan-12	06-Jan-12	EPA 8015M	



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Project Manager: Ms. Paula Sime

Reported:
13-Jan-12 08:40

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VW6 (E201010-01) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
Chloromethane	ND	2.1	"	1	"	"	"	"	"
Dichlorotetrafluoroethane (F114)	ND	7.1	"	1	"	"	"	"	"
Vinyl chloride	ND	2.6	"	1	"	"	"	"	"
Bromomethane	ND	16	"	1	"	"	"	"	"
Chloroethane	ND	8.0	"	1	"	"	"	"	"
Trichlorofluoromethane (F11)	ND	5.7	"	1	"	"	"	"	"
Acetone	ND	24	"	1	"	"	"	"	"
1,1-Dichloroethene	ND	4.0	"	1	"	"	"	"	"
Tertiary-butyl alcohol (TBA)	ND	6.1	"	1	"	"	"	"	"
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	1	"	"	"	"	"
Methylene chloride (Dichloromethane)	ND	3.5	"	1	"	"	"	"	"
Carbon disulfide	ND	6.3	"	1	"	"	"	"	"
trans-1,2-Dichloroethene	ND	8.0	"	1	"	"	"	"	"
Methyl tertiary-butyl ether (MTBE)	ND	3.7	"	1	"	"	"	"	"
1,1-Dichloroethane	ND	4.1	"	1	"	"	"	"	"
2-Butanone (MEK)	ND	30	"	1	"	"	"	"	"
cis-1,2-Dichloroethene	ND	4.0	"	1	"	"	"	"	"
Diisopropyl ether (DIPE)	ND	4.2	"	1	"	"	"	"	"
Chloroform	ND	5.0	"	1	"	"	"	"	"
Ethyl tert-butyl ether (ETBE)	ND	4.2	"	1	"	"	"	"	"
1,1,1-Trichloroethane	ND	5.5	"	1	"	"	"	"	"
1,2-Dichloroethane (EDC)	ND	4.1	"	1	"	"	"	"	"
Benzene	ND	3.2	"	1	"	"	"	"	"
Carbon tetrachloride	ND	6.4	"	1	"	"	"	"	"
Tertiary-amyl methyl ether (TAME)	ND	4.2	"	1	"	"	"	"	"
Trichloroethene	ND	5.5	"	1	"	"	"	"	"
1,2-Dichloropropane	ND	9.4	"	1	"	"	"	"	"
Bromodichloromethane	ND	6.8	"	1	"	"	"	"	"
cis-1,3-Dichloropropene	ND	4.6	"	1	"	"	"	"	"
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	1	"	"	"	"	"
trans-1,3-Dichloropropene	ND	4.6	"	1	"	"	"	"	"
Toluene	8.6	3.8	"	1	"	"	"	"	"
1,1,2-Trichloroethane	ND	5.5	"	1	"	"	"	"	"
2-Hexanone (MBK)	ND	8.3	"	1	"	"	"	"	"
Dibromochloromethane	ND	8.6	"	1	"	"	"	"	"
Tetrachloroethene	ND	6.9	"	1	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	7.8	"	1	"	"	"	"	"



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Project Number: Former Exxon 74121 / 10605 Foothill Blvd.
Project Manager: Ms. Paula Sime

Reported:
13-Jan-12 08:40

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VW6 (E201010-01) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
1,1,1,2-Tetrachloroethane	ND	7.0	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	"
Ethylbenzene	ND	4.4	"	"	"	"	"	"	"
m,p-Xylene	ND	8.8	"	"	"	"	"	"	"
Styrene	ND	4.3	"	"	"	"	"	"	"
o-Xylene	ND	4.4	"	"	"	"	"	"	"
Bromoform	ND	10	"	"	"	"	"	"	"
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	"
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	"
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	"
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	"
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	"
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	"
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	"
1,2,4-Trichlorobenzene	ND	7.5	"	"	"	"	"	"	"
Hexachlorobutadiene	ND	11	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		103 %	76-134						
<i>Surrogate: Toluene-d8</i>		101 %	78-125						
<i>Surrogate: 4-Bromofluorobenzene</i>		98.5 %	77-127						
VW10 (E201010-02) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	"
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	"
Vinyl chloride	ND	2.6	"	"	"	"	"	"	"
Bromomethane	ND	16	"	"	"	"	"	"	"
Chloroethane	ND	8.0	"	"	"	"	"	"	"
Trichlorofluoromethane (F11)	ND	5.7	"	"	"	"	"	"	"
Acetone	ND	24	"	"	"	"	"	"	"
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	"
Tertiary-butyl alcohol (TBA)	ND	6.1	"	"	"	"	"	"	"
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	"
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	"
Carbon disulfide	ND	6.3	"	"	"	"	"	"	"
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	"
Methyl tertiary-butyl ether (MTBE)	26	3.7	"	"	"	"	"	"	"
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	"



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H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VW10 (E201010-02) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
2-Butanone (MEK)	ND	30	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
cis-1,2-Dichloroethene	ND	4.0	"	1	1	1	1	"	"
Diisopropyl ether (DIPE)	ND	4.2	"	1	1	1	1	"	"
Chloroform	7.2	5.0	"	1	1	1	1	"	"
Ethyl tert-butyl ether (ETBE)	ND	4.2	"	1	1	1	1	"	"
1,1,1-Trichloroethane	ND	5.5	"	1	1	1	1	"	"
1,2-Dichloroethane (EDC)	ND	4.1	"	1	1	1	1	"	"
Benzene	4.1	3.2	"	1	1	1	1	"	"
Carbon tetrachloride	ND	6.4	"	1	1	1	1	"	"
Tertiary-amyl methyl ether (TAME)	ND	4.2	"	1	1	1	1	"	"
Trichloroethene	ND	5.5	"	1	1	1	1	"	"
1,2-Dichloropropane	ND	9.4	"	1	1	1	1	"	"
Bromodichloromethane	ND	6.8	"	1	1	1	1	"	"
cis-1,3-Dichloropropene	ND	4.6	"	1	1	1	1	"	"
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	1	1	1	1	"	"
trans-1,3-Dichloropropene	ND	4.6	"	1	1	1	1	"	"
Toluene	17	3.8	"	1	1	1	1	"	"
1,1,2-Trichloroethane	ND	5.5	"	1	1	1	1	"	"
2-Hexanone (MBK)	ND	8.3	"	1	1	1	1	"	"
Dibromochloromethane	ND	8.6	"	1	1	1	1	"	"
Tetrachloroethene	ND	6.9	"	1	1	1	1	"	"
1,2-Dibromoethane (EDB)	ND	7.8	"	1	1	1	1	"	"
1,1,1,2-Tetrachloroethane	ND	7.0	"	1	1	1	1	"	"
Chlorobenzene	ND	4.7	"	1	1	1	1	"	"
Ethylbenzene	ND	4.4	"	1	1	1	1	"	"
m,p-Xylene	ND	8.8	"	1	1	1	1	"	"
Styrene	ND	4.3	"	1	1	1	1	"	"
o-Xylene	ND	4.4	"	1	1	1	1	"	"
Bromoform	ND	10	"	1	1	1	1	"	"
1,1,2,2-Tetrachloroethane	ND	7.0	"	1	1	1	1	"	"
4-Ethyltoluene	ND	5.0	"	1	1	1	1	"	"
1,3,5-Trimethylbenzene	ND	5.0	"	1	1	1	1	"	"
1,2,4-Trimethylbenzene	ND	5.0	"	1	1	1	1	"	"
1,3-Dichlorobenzene	ND	12	"	1	1	1	1	"	"
1,4-Dichlorobenzene	ND	12	"	1	1	1	1	"	"
1,2-Dichlorobenzene	ND	12	"	1	1	1	1	"	"
1,2,4-Trichlorobenzene	ND	7.5	"	1	1	1	1	"	"
Hexachlorobutadiene	ND	11	"	1	1	1	1	"	"



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H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VW10 (E201010-02) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
Surrogate: 1,2-Dichloroethane-d4	101 %	76-134		EA20906	10-Jan-12	10-Jan-12		EPA TO-15	
Surrogate: Toluene-d8	100 %	78-125	"	"	"	"	"	"	"
Surrogate: 4-Bromofluorobenzene	97.8 %	77-127	"	"	"	"	"	"	"
VW5 (E201010-03) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	"
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	"
Vinyl chloride	ND	2.6	"	"	"	"	"	"	"
Bromomethane	ND	16	"	"	"	"	"	"	"
Chloroethane	ND	8.0	"	"	"	"	"	"	"
Trichlorofluoromethane (F11)	ND	5.7	"	"	"	"	"	"	"
Acetone	26	24	"	"	"	"	"	"	"
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	"
Tertiary-butyl alcohol (TBA)	ND	6.1	"	"	"	"	"	"	"
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	"
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	"
Carbon disulfide	ND	6.3	"	"	"	"	"	"	"
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	"
Methyl tertiary-butyl ether (MTBE)	ND	3.7	"	"	"	"	"	"	"
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	"
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	"
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	"
Diisopropyl ether (DIPE)	ND	4.2	"	"	"	"	"	"	"
Chloroform	ND	5.0	"	"	"	"	"	"	"
Ethyl tert-butyl ether (ETBE)	ND	4.2	"	"	"	"	"	"	"
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	"
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	"
Benzene	5.9	3.2	"	"	"	"	"	"	"
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	"
Tertiary-amyl methyl ether (TAME)	ND	4.2	"	"	"	"	"	"	"
Trichloroethene	ND	5.5	"	"	"	"	"	"	"
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	"
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	"
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	"
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	"
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	"
Toluene	12	3.8	"	"	"	"	"	"	"



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Environmental Resolutions, Inc. - Petaluma
601 N. McDowell Blvd
Petaluma, CA 94954

Project: ERI010512-13
Project Number: Former Exxon 74121 / 10605 Foothill Blvd.
Project Manager: Ms. Paula Sime

Reported:
13-Jan-12 08:40

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VW5 (E201010-03) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
1,1,2-Trichloroethane	ND	5.5	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	"
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	"
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	"
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	"
Chlorobenzene	ND	4.7	"	"	"	"	"	"	"
Ethylbenzene	ND	4.4	"	"	"	"	"	"	"
m,p-Xylene	ND	8.8	"	"	"	"	"	"	"
Styrene	ND	4.3	"	"	"	"	"	"	"
o-Xylene	ND	4.4	"	"	"	"	"	"	"
Bromoform	ND	10	"	"	"	"	"	"	"
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	"
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	"
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	"
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	"
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	"
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	"
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	"
1,2,4-Trichlorobenzene	ND	7.5	"	"	"	"	"	"	"
Hexachlorobutadiene	ND	11	"	"	"	"	"	"	"
Surrogate: 1,2-Dichloroethane-d4		104 %	76-134	"	"	"	"	"	
Surrogate: Toluene-d8		104 %	78-125	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.5 %	77-127	"	"	"	"	"	



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Project Manager: Ms. Paula Sime

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13-Jan-12 08:40

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VW2 (E201010-04) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
Chloromethane	ND	2.1	"	10	10	10	10		
Dichlorotetrafluoroethane (F114)	ND	7.1	"	10	10	10	10		
Vinyl chloride	ND	2.6	"	10	10	10	10		
Bromomethane	ND	16	"	10	10	10	10		
Chloroethane	ND	8.0	"	10	10	10	10		
Trichlorofluoromethane (F11)	ND	5.7	"	10	10	10	10		
Acetone	37	24	"	10	10	10	10		
1,1-Dichloroethene	ND	4.0	"	10	10	10	10		
Tertiary-butyl alcohol (TBA)	ND	6.1	"	10	10	10	10		
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	10	10	10	10		
Methylene chloride (Dichloromethane)	ND	3.5	"	10	10	10	10		
Carbon disulfide	ND	6.3	"	10	10	10	10		
trans-1,2-Dichloroethene	ND	8.0	"	10	10	10	10		
Methyl tertiary-butyl ether (MTBE)	ND	3.7	"	10	10	10	10		
1,1-Dichloroethane	ND	4.1	"	10	10	10	10		
2-Butanone (MEK)	ND	30	"	10	10	10	10		
cis-1,2-Dichloroethene	ND	4.0	"	10	10	10	10		
Diisopropyl ether (DIPE)	ND	4.2	"	10	10	10	10		
Chloroform	ND	5.0	"	10	10	10	10		
Ethyl tert-butyl ether (ETBE)	ND	4.2	"	10	10	10	10		
1,1,1-Trichloroethane	ND	5.5	"	10	10	10	10		
1,2-Dichloroethane (EDC)	ND	4.1	"	10	10	10	10		
Benzene	6.8	3.2	"	10	10	10	10		
Carbon tetrachloride	ND	6.4	"	10	10	10	10		
Tertiary-amyl methyl ether (TAME)	ND	4.2	"	10	10	10	10		
Trichloroethene	ND	5.5	"	10	10	10	10		
1,2-Dichloropropane	ND	9.4	"	10	10	10	10		
Bromodichloromethane	ND	6.8	"	10	10	10	10		
cis-1,3-Dichloropropene	ND	4.6	"	10	10	10	10		
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	10	10	10	10		
trans-1,3-Dichloropropene	ND	4.6	"	10	10	10	10		
Toluene	11	3.8	"	10	10	10	10		
1,1,2-Trichloroethane	ND	5.5	"	10	10	10	10		
2-Hexanone (MBK)	ND	8.3	"	10	10	10	10		
Dibromochloromethane	ND	8.6	"	10	10	10	10		
Tetrachloroethene	ND	6.9	"	10	10	10	10		
1,2-Dibromoethane (EDB)	ND	7.8	"	10	10	10	10		



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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VW2 (E201010-04) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
1,1,1,2-Tetrachloroethane	ND	7.0	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	"
Ethylbenzene	ND	4.4	"	"	"	"	"	"	"
m,p-Xylene	ND	8.8	"	"	"	"	"	"	"
Styrene	ND	4.3	"	"	"	"	"	"	"
o-Xylene	ND	4.4	"	"	"	"	"	"	"
Bromoform	ND	10	"	"	"	"	"	"	"
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	"
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	"
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	"
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	"
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	"
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	"
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	"
1,2,4-Trichlorobenzene	ND	7.5	"	"	"	"	"	"	"
Hexachlorobutadiene	ND	11	"	"	"	"	"	"	"
Surrogate: 1,2-Dichloroethane-d4		99.8 %		76-134		"	"	"	"
Surrogate: Toluene-d8		98.8 %		78-125		"	"	"	"
Surrogate: 4-Bromofluorobenzene		98.8 %		77-127		"	"	"	"
VW2-DUP (E201010-05) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	"
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	"
Vinyl chloride	ND	2.6	"	"	"	"	"	"	"
Bromomethane	ND	16	"	"	"	"	"	"	"
Chloroethane	ND	8.0	"	"	"	"	"	"	"
Trichlorofluoromethane (F11)	ND	5.7	"	"	"	"	"	"	"
Acetone	ND	24	"	"	"	"	"	"	"
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	"
Tertiary-butyl alcohol (TBA)	ND	6.1	"	"	"	"	"	"	"
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	"
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	"
Carbon disulfide	ND	6.3	"	"	"	"	"	"	"
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	"
Methyl tertiary-butyl ether (MTBE)	ND	3.7	"	"	"	"	"	"	"
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	"



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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VW2-DUP (E201010-05) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
2-Butanone (MEK)	ND	30	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
cis-1,2-Dichloroethene	ND	4.0	"	1	1	1	1		
Diisopropyl ether (DIPE)	ND	4.2	"	1	1	1	1		
Chloroform	ND	5.0	"	1	1	1	1		
Ethyl tert-butyl ether (ETBE)	ND	4.2	"	1	1	1	1		
1,1,1-Trichloroethane	ND	5.5	"	1	1	1	1		
1,2-Dichloroethane (EDC)	ND	4.1	"	1	1	1	1		
Benzene	3.8	3.2	"	1	1	1	1		
Carbon tetrachloride	ND	6.4	"	1	1	1	1		
Tertiary-amyl methyl ether (TAME)	ND	4.2	"	1	1	1	1		
Trichloroethene	ND	5.5	"	1	1	1	1		
1,2-Dichloropropane	ND	9.4	"	1	1	1	1		
Bromodichloromethane	ND	6.8	"	1	1	1	1		
cis-1,3-Dichloropropene	ND	4.6	"	1	1	1	1		
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	1	1	1	1		
trans-1,3-Dichloropropene	ND	4.6	"	1	1	1	1		
Toluene	7.8	3.8	"	1	1	1	1		
1,1,2-Trichloroethane	ND	5.5	"	1	1	1	1		
2-Hexanone (MBK)	ND	8.3	"	1	1	1	1		
Dibromochloromethane	ND	8.6	"	1	1	1	1		
Tetrachloroethene	ND	6.9	"	1	1	1	1		
1,2-Dibromoethane (EDB)	ND	7.8	"	1	1	1	1		
1,1,1,2-Tetrachloroethane	ND	7.0	"	1	1	1	1		
Chlorobenzene	ND	4.7	"	1	1	1	1		
Ethylbenzene	ND	4.4	"	1	1	1	1		
m,p-Xylene	ND	8.8	"	1	1	1	1		
Styrene	ND	4.3	"	1	1	1	1		
o-Xylene	ND	4.4	"	1	1	1	1		
Bromoform	ND	10	"	1	1	1	1		
1,1,2,2-Tetrachloroethane	ND	7.0	"	1	1	1	1		
4-Ethyltoluene	ND	5.0	"	1	1	1	1		
1,3,5-Trimethylbenzene	ND	5.0	"	1	1	1	1		
1,2,4-Trimethylbenzene	ND	5.0	"	1	1	1	1		
1,3-Dichlorobenzene	ND	12	"	1	1	1	1		
1,4-Dichlorobenzene	ND	12	"	1	1	1	1		
1,2-Dichlorobenzene	ND	12	"	1	1	1	1		
1,2,4-Trichlorobenzene	ND	7.5	"	1	1	1	1		
Hexachlorobutadiene	ND	11	"	1	1	1	1		



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Project Manager: Ms. Paula Sime

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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VW2-DUP (E201010-05) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
Surrogate: 1,2-Dichloroethane-d4	100 %	76-134		EA20906	10-Jan-12	10-Jan-12		EPA TO-15	
Surrogate: Toluene-d8	98.8 %	78-125	"	"	"	"		"	"
Surrogate: 4-Bromoanisole	98.0 %	77-127	"	"	"	"		"	"
VW11R (E201010-06) Vapor Sampled: 30-Dec-11 Received: 05-Jan-12									
Dichlorodifluoromethane (F12)	ND	50	ug/m3	10	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
Chloromethane	ND	21	"	"	"	"	"	"	"
Dichlorotetrafluoroethane (F114)	ND	71	"	"	"	"	"	"	"
Vinyl chloride	ND	26	"	"	"	"	"	"	"
Bromomethane	ND	160	"	"	"	"	"	"	"
Chloroethane	ND	80	"	"	"	"	"	"	"
Trichlorofluoromethane (F11)	ND	57	"	"	"	"	"	"	"
Acetone	ND	240	"	"	"	"	"	"	"
1,1-Dichloroethene	ND	40	"	"	"	"	"	"	"
Tertiary-butyl alcohol (TBA)	ND	61	"	"	"	"	"	"	"
1,1,2-Trichlorotrifluoroethane (F113)	ND	77	"	"	"	"	"	"	"
Methylene chloride (Dichloromethane)	ND	35	"	"	"	"	"	"	"
Carbon disulfide	ND	63	"	"	"	"	"	"	"
trans-1,2-Dichloroethene	ND	80	"	"	"	"	"	"	"
Methyl tertiary-butyl ether (MTBE)	ND	37	"	"	"	"	"	"	"
1,1-Dichloroethane	ND	41	"	"	"	"	"	"	"
2-Butanone (MEK)	ND	300	"	"	"	"	"	"	"
cis-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	"
Diisopropyl ether (DIPE)	ND	42	"	"	"	"	"	"	"
Chloroform	ND	50	"	"	"	"	"	"	"
Ethyl tert-butyl ether (ETBE)	ND	42	"	"	"	"	"	"	"
1,1,1-Trichloroethane	ND	55	"	"	"	"	"	"	"
1,2-Dichloroethane (EDC)	ND	41	"	"	"	"	"	"	"
Benzene	ND	32	"	"	"	"	"	"	"
Carbon tetrachloride	ND	64	"	"	"	"	"	"	"
Tertiary-amyl methyl ether (TAME)	ND	42	"	"	"	"	"	"	"
Trichloroethene	ND	55	"	"	"	"	"	"	"
1,2-Dichloropropane	ND	94	"	"	"	"	"	"	"
Bromodichloromethane	ND	68	"	"	"	"	"	"	"
cis-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	"
4-Methyl-2-pentanone (MIBK)	ND	83	"	"	"	"	"	"	"
trans-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	"
Toluene	ND	38	"	"	"	"	"	"	"



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Reported:
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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VW11R (E201010-06) Vapor	Sampled: 30-Dec-11	Received: 05-Jan-12							R-05
1,1,2-Trichloroethane	ND	55	ug/m3	10	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
2-Hexanone (MBK)	ND	83	"	"	"	"	"	"	"
Dibromochloromethane	ND	86	"	"	"	"	"	"	"
Tetrachloroethene	ND	69	"	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	78	"	"	"	"	"	"	"
1,1,1,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	"
Chlorobenzene	ND	47	"	"	"	"	"	"	"
Ethylbenzene	ND	44	"	"	"	"	"	"	"
m,p-Xylene	ND	88	"	"	"	"	"	"	"
Styrene	ND	43	"	"	"	"	"	"	"
o-Xylene	ND	44	"	"	"	"	"	"	"
Bromoform	ND	100	"	"	"	"	"	"	"
1,1,2,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	"
4-Ethyltoluene	ND	50	"	"	"	"	"	"	"
1,3,5-Trimethylbenzene	ND	50	"	"	"	"	"	"	"
1,2,4-Trimethylbenzene	ND	50	"	"	"	"	"	"	"
1,3-Dichlorobenzene	ND	120	"	"	"	"	"	"	"
1,4-Dichlorobenzene	ND	120	"	"	"	"	"	"	"
1,2-Dichlorobenzene	ND	120	"	"	"	"	"	"	"
1,2,4-Trichlorobenzene	ND	75	"	"	"	"	"	"	"
Hexachlorobutadiene	ND	110	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		101 %	76-134	"	"	"	"	"	
Surrogate: Toluene-d8		103 %	78-125	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.4 %	77-127	"	"	"	"	"	



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Environmental Resolutions, Inc. - Petaluma
601 N. McDowell Blvd
Petaluma, CA 94954

Project: ERI010512-13
Project Number: Former Exxon 74121 / 10605 Foothill Blvd.
Project Manager: Ms. Paula Sime

Reported:
13-Jan-12 08:40

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VW4R (E201010-07) Vapor Sampled: 30-Dec-11 Received: 05-Jan-12									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	"
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	"
Vinyl chloride	ND	2.6	"	"	"	"	"	"	"
Bromomethane	ND	16	"	"	"	"	"	"	"
Chloroethane	ND	8.0	"	"	"	"	"	"	"
Trichlorofluoromethane (F11)	ND	5.7	"	"	"	"	"	"	"
Acetone	ND	24	"	"	"	"	"	"	"
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	"
Tertiary-butyl alcohol (TBA)	ND	6.1	"	"	"	"	"	"	"
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	"
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	"
Carbon disulfide	11	6.3	"	"	"	"	"	"	"
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	"
Methyl tertiary-butyl ether (MTBE)	ND	3.7	"	"	"	"	"	"	"
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	"
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	"
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	"
Diisopropyl ether (DIPE)	ND	4.2	"	"	"	"	"	"	"
Chloroform	ND	5.0	"	"	"	"	"	"	"
Ethyl tert-butyl ether (ETBE)	ND	4.2	"	"	"	"	"	"	"
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	"
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	"
Benzene	8.3	3.2	"	"	"	"	"	"	"
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	"
Tertiary-amyl methyl ether (TAME)	ND	4.2	"	"	"	"	"	"	"
Trichloroethene	ND	5.5	"	"	"	"	"	"	"
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	"
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	"
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	"
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	"
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	"
Toluene	13	3.8	"	"	"	"	"	"	"
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	"
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	"
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	"
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	"



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Project: ERI010512-13
Project Number: Former Exxon 74121 / 10605 Foothill Blvd.
Project Manager: Ms. Paula Sime

Reported:
13-Jan-12 08:40

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VW4R (E201010-07) Vapor Sampled: 30-Dec-11 Received: 05-Jan-12									
1,1,1,2-Tetrachloroethane	ND	7.0	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	"
Ethylbenzene	ND	4.4	"	"	"	"	"	"	"
m,p-Xylene	ND	8.8	"	"	"	"	"	"	"
Styrene	ND	4.3	"	"	"	"	"	"	"
o-Xylene	ND	4.4	"	"	"	"	"	"	"
Bromoform	ND	10	"	"	"	"	"	"	"
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	"
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	"
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	"
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	"
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	"
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	"
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	"
1,2,4-Trichlorobenzene	ND	7.5	"	"	"	"	"	"	"
Hexachlorobutadiene	ND	11	"	"	"	"	"	"	"
Surrogate: 1,2-Dichloroethane-d4		100 %	76-134						
Surrogate: Toluene-d8		99.8 %	78-125						
Surrogate: 4-Bromofluorobenzene		98.8 %	77-127						
VW3R (E201010-08) Vapor Sampled: 30-Dec-11 Received: 05-Jan-12									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	"
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	"
Vinyl chloride	ND	2.6	"	"	"	"	"	"	"
Bromomethane	ND	16	"	"	"	"	"	"	"
Chloroethane	ND	8.0	"	"	"	"	"	"	"
Trichlorofluoromethane (F11)	ND	5.7	"	"	"	"	"	"	"
Acetone	ND	24	"	"	"	"	"	"	"
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	"
Tertiary-butyl alcohol (TBA)	ND	6.1	"	"	"	"	"	"	"
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	"
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	"
Carbon disulfide	12	6.3	"	"	"	"	"	"	"
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	"
Methyl tertiary-butyl ether (MTBE)	4.2	3.7	"	"	"	"	"	"	"
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	"



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Project: ERJ010512-13
Project Number: Former Exxon 74121 / 10605 Foothill Blvd
Project Manager: Ms. Paula Sime

Reported:
13-Jan-12 08:40

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VW3R (E201010-08) Vapor Sampled: 30-Dec-11 Received: 05-Jan-12									
2-Butanone (MEK)	ND	30	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	"
Diisopropyl ether (DIPE)	ND	4.2	"	"	"	"	"	"	"
Chloroform	ND	5.0	"	"	"	"	"	"	"
Ethyl tert-butyl ether (ETBE)	ND	4.2	"	"	"	"	"	"	"
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	"
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	"
Benzene	5.0	3.2	"	"	"	"	"	"	"
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	"
Tertiary-amyl methyl ether (TAME)	ND	4.2	"	"	"	"	"	"	"
Trichloroethene	ND	5.5	"	"	"	"	"	"	"
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	"
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	"
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	"
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	"
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	"
Toluene	8.0	3.8	"	"	"	"	"	"	"
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	"
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	"
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	"
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	"
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	"
Chlorobenzene	ND	4.7	"	"	"	"	"	"	"
Ethylbenzene	ND	4.4	"	"	"	"	"	"	"
m,p-Xylene	ND	8.8	"	"	"	"	"	"	"
Styrene	ND	4.3	"	"	"	"	"	"	"
o-Xylene	ND	4.4	"	"	"	"	"	"	"
Bromoform	ND	10	"	"	"	"	"	"	"
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	"
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	"
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	"
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	"
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	"
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	"
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	"
1,2,4-Trichlorobenzene	ND	7.5	"	"	"	"	"	"	"
Hexachlorobutadiene	ND	11	"	"	"	"	"	"	"



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Project: ERI010512-13
Project Number: Former Exxon 74121 / 10605 Foothill Blvd.
Project Manager: Ms. Paula Sime

Reported:
13-Jan-12 08:40

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VW3R (E201010-08) Vapor Sampled: 30-Dec-11 Received: 05-Jan-12									
Surrogate: 1,2-Dichloroethane-d4	102 %	76-134		EA20906	10-Jan-12	10-Jan-12		EPA TO-15	
Surrogate: Toluene-d8	100 %	78-125	"	"	"	"		"	"
Surrogate: 4-Bromo/fluorobenzene	97.5 %	77-127	"	"	"	"		"	"
Trip Blank (E201010-09) Vapor Sampled: 30-Dec-11 Received: 05-Jan-12									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	"
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	"
Vinyl chloride	ND	2.6	"	"	"	"	"	"	"
Bromomethane	ND	16	"	"	"	"	"	"	"
Chloroethane	ND	8.0	"	"	"	"	"	"	"
Trichlorofluoromethane (F11)	ND	5.7	"	"	"	"	"	"	"
Acetone	ND	24	"	"	"	"	"	"	"
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	"
Tertiary-butyl alcohol (TBA)	ND	6.1	"	"	"	"	"	"	"
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	"
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	"
Carbon disulfide	ND	6.3	"	"	"	"	"	"	"
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	"
Methyl tertiary-butyl ether (MTBE)	ND	3.7	"	"	"	"	"	"	"
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	"
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	"
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	"
Diisopropyl ether (DIPE)	ND	4.2	"	"	"	"	"	"	"
Chloroform	ND	5.0	"	"	"	"	"	"	"
Ethyl tert-butyl ether (ETBE)	ND	4.2	"	"	"	"	"	"	"
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	"
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	"
Benzene	ND	3.2	"	"	"	"	"	"	"
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	"
Tertiary-amyl methyl ether (TAME)	ND	4.2	"	"	"	"	"	"	"
Trichloroethene	ND	5.5	"	"	"	"	"	"	"
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	"
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	"
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	"
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	"
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	"
Toluene	ND	3.8	"	"	"	"	"	"	"



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Project: ERI010512-13
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Project Manager: Ms. Paula Sime

Reported:
13-Jan-12 08:40

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
Trip Blank (E201010-09) Vapor Sampled: 30-Dec-11 Received: 05-Jan-12									
1,1,2-Trichloroethane	ND	5.5	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
2-Hexanone (MBK)	ND	8.3	"	1	1	1	1		
Dibromochloromethane	ND	8.6	"	1	1	1	1		
Tetrachloroethene	ND	6.9	"	1	1	1	1		
1,2-Dibromoethane (EDB)	ND	7.8	"	1	1	1	1		
1,1,1,2-Tetrachloroethane	ND	7.0	"	1	1	1	1		
Chlorobenzene	ND	4.7	"	1	1	1	1		
Ethylbenzene	ND	4.4	"	1	1	1	1		
m,p-Xylene	ND	8.8	"	1	1	1	1		
Styrene	ND	4.3	"	1	1	1	1		
o-Xylene	ND	4.4	"	1	1	1	1		
Bromoform	ND	10	"	1	1	1	1		
1,1,2,2-Tetrachloroethane	ND	7.0	"	1	1	1	1		
4-Ethyltoluene	ND	5.0	"	1	1	1	1		
1,3,5-Trimethylbenzene	ND	5.0	"	1	1	1	1		
1,2,4-Trimethylbenzene	ND	5.0	"	1	1	1	1		
1,3-Dichlorobenzene	ND	12	"	1	1	1	1		
1,4-Dichlorobenzene	ND	12	"	1	1	1	1		
1,2-Dichlorobenzene	ND	12	"	1	1	1	1		
1,2,4-Trichlorobenzene	ND	7.5	"	1	1	1	1		
Hexachlorobutadiene	ND	11	"	1	1	1	1		
Surrogate: 1,2-Dichloroethane-d4		103 %	76-134	"	"	"	"		
Surrogate: Toluene-d8		97.9 %	78-125	"	"	"	"		
Surrogate: 4-Bromofluorobenzene		98.0 %	77-127	"	"	"	"		



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Reported:
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TPHv on Vapors by EPA Method TO-15

H&P Mobile Geochemistry, Inc.

Analyst	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VW6 (E201010-01) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
TPHv (C5 - C11)	460	100	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
VW10 (E201010-02) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
TPHv (C5 - C11)	1700	100	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
VW5 (E201010-03) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
TPHv (C5 - C11)	27000	500	ug/m3	5	EA20906	10-Jan-12	11-Jan-12	EPA TO-15	
VW2 (E201010-04) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
TPHv (C5 - C11)	330	100	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
VW2-DUP (E201010-05) Vapor Sampled: 29-Dec-11 Received: 05-Jan-12									
TPHv (C5 - C11)	160	100	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
VW11R (E201010-06) Vapor Sampled: 30-Dec-11 Received: 05-Jan-12									
TPHv (C5 - C11)	220000	1000	ug/m3	10	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
VW4R (E201010-07) Vapor Sampled: 30-Dec-11 Received: 05-Jan-12									
TPHv (C5 - C11)	230	100	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
VW3R (E201010-08) Vapor Sampled: 30-Dec-11 Received: 05-Jan-12									
TPHv (C5 - C11)	230	100	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	
Trip Blank (E201010-09) Vapor Sampled: 30-Dec-11 Received: 05-Jan-12									
TPHv (C5 - C11)	ND	100	ug/m3	1	EA20906	10-Jan-12	10-Jan-12	EPA TO-15	



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Project: ERI010512-13
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Project Manager: Ms. Paula Sime

Reported:
13-Jan-12 08:40

Soil Gas and Vapor Analysis - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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Batch EA20601 - GC

Blank (EA20601-BLK1)	Prepared & Analyzed: 06-Jan-12		
Methane	ND	0.001	%

Batch EA20602 - GC

Blank (EA20602-BLK1)	Prepared & Analyzed: 06-Jan-12		
Helium (LCC)	ND	1.0	%

Batch EA20603 - GC

Blank (EA20603-BLK1)	Prepared & Analyzed: 06-Jan-12		
Carbon dioxide	ND	0.2	%



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Reported:
13-Jan-12 08:40

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EA20906 - TO-15

Blank (EA20906-BLK1)

Prepared & Analyzed: 10-Jan-12

Dichlorodifluoromethane (F12)	ND	5.0	ug/m3							
Chloromethane	ND	2.1	"							
Dichlorotetrafluoroethane (F114)	ND	7.1	"							
Vinyl chloride	ND	2.6	"							
Bromomethane	ND	16	"							
Chloroethane	ND	8.0	"							
Trichlorofluoromethane (F11)	ND	5.7	"							
Acetone	ND	24	"							
1,1-Dichloroethene	ND	4.0	"							
Tertiary-butyl alcohol (TBA)	ND	6.1	"							
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"							
Methylene chloride (Dichloromethane)	ND	3.5	"							
Carbon disulfide	ND	6.3	"							
trans-1,2-Dichloroethene	ND	8.0	"							
Methyl tertiary-butyl ether (MTBE)	ND	3.7	"							
1,1-Dichloroethane	ND	4.1	"							
2-Butanone (MEK)	ND	30	"							
cis-1,2-Dichloroethene	ND	4.0	"							
Diisopropyl ether (DIPE)	ND	4.2	"							
Chloroform	ND	5.0	"							
Ethyl tert-butyl ether (ETBE)	ND	4.2	"							
1,1,1-Trichloroethane	ND	5.5	"							
1,2-Dichloroethane (EDC)	ND	4.1	"							
Benzene	ND	3.2	"							
Carbon tetrachloride	ND	6.4	"							
Tertiary-amyl methyl ether (TAME)	ND	4.2	"							
Trichloroethene	ND	5.5	"							
1,2-Dichloropropane	ND	9.4	"							
Bromodichloromethane	ND	6.8	"							
cis-1,3-Dichloropropene	ND	4.6	"							
4-Methyl-2-pentanone (MIBK)	ND	8.3	"							
trans-1,3-Dichloropropene	ND	4.6	"							
Toluene	ND	3.8	"							
1,1,2-Trichloroethane	ND	5.5	"							



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Environmental Resolutions, Inc. - Petaluma
601 N. McDowell Blvd
Petaluma, CA 94954

Project: ERI010512-13
Project Number: Former Exxon 74121 / 10605 Foothill Blvd.
Project Manager: Ms. Paula Sime

Reported:
13-Jan-12 08:40

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EA20906 - TO-15

Blank (EA20906-BLK1)

Prepared & Analyzed: 10-Jan-12

2-Hexanone (MBK)	ND	8.3	ug/m3							
Dibromochloromethane	ND	8.6	"							
Tetrachloroethene	ND	6.9	"							
1,2-Dibromoethane (EDB)	ND	7.8	"							
1,1,1,2-Tetrachloroethane	ND	7.0	"							
Chlorobenzene	ND	4.7	"							
Ethylbenzene	ND	4.4	"							
m,p-Xylene	ND	8.8	"							
Styrene	ND	4.3	"							
o-Xylene	ND	4.4	"							
Bromoform	ND	10	"							
1,1,2,2-Tetrachloroethane	ND	7.0	"							
4-Ethyltoluene	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	12	"							
1,4-Dichlorobenzene	ND	12	"							
1,2-Dichlorobenzene	ND	12	"							
1,2,4-Trichlorobenzene	ND	7.5	"							
Hexachlorobutadiene	ND	11	"							
Surrogate: 1,2-Dichloroethane-d4	211		"	214		98.4	76-134			
Surrogate: Toluene-d8	207		"	207		99.9	78-125			
Surrogate: 4-Bromofluorobenzene	362		"	365		99.3	77-127			

LCS (EA20906-BS1)

Prepared & Analyzed: 10-Jan-12

Dichlorodifluoromethane (F12)	100	5.0	ug/m3	101	101	65-135
Vinyl chloride	52	2.6	"	52.0	99.8	65-135
Chloroethane	50	8.0	"	53.6	93.9	65-135
Trichlorofluoromethane (F11)	120	5.7	"	113	106	65-135
1,1-Dichloroethene	85	4.0	"	80.8	105	65-135
1,1,2-Trichlorotrifluoroethane (F113)	160	7.7	"	155	102	65-135
Methylene chloride (Dichloromethane)	67	3.5	"	70.8	94.3	65-135
trans-1,2-Dichloroethene	79	8.0	"	80.8	98.2	65-135



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Project: ERI010512-13
Project Number: Former Exxon 74121 / 10605 Foothill Blvd.
Project Manager: Ms. Paula Sime

Reported:
13-Jan-12 08:40

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
Batch EA20906 - TO-15									
LCS (EA20906-BS1) Prepared & Analyzed: 10-Jan-12									
1,1-Dichloroethane	85	4.1	ug/m3	82.4	103	65-135			
cis-1,2-Dichloroethene	84	4.0	"	80.0	105	65-135			
Chloroform	100	5.0	"	99.2	102	65-135			
1,1,1-Trichloroethane	110	5.5	"	111	99.2	65-135			
1,2-Dichloroethane (EDC)	83	4.1	"	82.4	101	65-135			
Benzene	67	3.2	"	64.8	103	65-135			
Carbon tetrachloride	130	6.4	"	128	98.1	65-135			
Trichloroethene	110	5.5	"	110	99.7	65-135			
Toluene	73	3.8	"	76.8	94.4	65-135			
1,1,2-Trichloroethane	100	5.5	"	111	92.5	65-135			
Tetrachloroethene	130	6.9	"	138	93.5	65-135			
1,1,1,2-Tetrachloroethane	120	7.0	"	140	85.5	65-135			
Ethylbenzene	81	4.4	"	88.4	91.3	65-135			
m,p-Xylene	160	8.8	"	177	88.5	65-135			
o-Xylene	76	4.4	"	88.4	86.3	65-135			
1,1,2,2-Tetrachloroethane	94	7.0	"	140	67.1	65-135			
Surrogate: 1,2-Dichloroethane-d4	217		"	214	101	76-134			
Surrogate: Toluene-d8	202		"	207	97.7	78-125			
Surrogate: 4-Bromofluorobenzene	370		"	365	101	77-127			



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Project: ERI010512-13
Project Number: Former Exxon 74121 / 10605 Foothill Blvd.
Project Manager: Ms. Paula Sime

Reported:
13-Jan-12 08:40

TPH_v on Vapors by EPA Method TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EA20906 - TO-15

Blank (EA20906-BLK1) Prepared & Analyzed: 10-Jan-12
TPH_v (C5 - C11) ND 100 ug/m³



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Project: ERI010512-13
Project Number: Former Exxon 74121 / 10605 Foothill Blvd.
Project Manager: Ms. Paula Sime

Reported:
13-Jan-12 08:40

Notes and Definitions

- R-05 The sample was diluted due to the presence of high levels of non-target analytes resulting in elevated reporting limits.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference



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Project Number: Former Exxon 74121 / 10605 Foothill Blvd.
Project Manager: Ms. Paula Sime

Reported:
13-Jan-12 08:40

Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Laboratory in conformance with the Environmental Laboratory Accreditation Program (CA) for the category of Volatile and Semi-Volatile Organic Chemistry of Hazardous Waste for the following methods:

Certificate# 2741, 2743, 2579, 2754 & 2740 approved for EPA 8260 and LUF^T GC/MS
Certificate# 2742, 2745 & 2741 approved for LUF^T
Certificate# 2745 & 2742 approved for EPA 4181

H&P Mobile Geochemistry, Inc. is approved as an Environmental Laboratory in conformance with the National Environmental Accreditation Conference Standards for the category Environmental Analysis Air and Emissions for the following analytes and methods:

1,2,4-Trichlorobenzene by EPA TO-15 & TO-14A
Hexachlorbutadiene by EPA TO-15 & TO-14A
1,2,4-Trimethylbenzene by EPA TO-14A
1,2-Dichlorobenzene by EPA TO-15 & TO-14A
1,3,5-Triisopropylbenzene by EPA TO-14A
1,4-Dichlorobenzene by EPA TO-15 & TO-14A
Benzene by EPA TO-15 & TO-14A
Chlorobenzene by EPA TO-15 & TO-14A
Ethyl benzene by EPA TO-15 & TO-14A
Styrene by EPA TO-15 & TO-14A
Toluene by EPA TO-15 & TO-14A
Total Xylenes by EPA TO-15 & TO-14A
1,1,1-Trichloroethane by EPA TO-15 & TO-14A
1,1,2,2-Tetrachloroethane by EPA TO-15 & TO-14A
1,1,2-Trichloroethane by EPA TO-15 & TO-14A
1,1-Dichloroethane by EPA TO-15 & TO-14A
1,1-Dichloroethene by EPA TO-15 & TO-14A
1,2-Dichloroethane by EPA TO-15 & TO-14A
1,2-Dichloropropane by EPA TO-15 & TO-14A
Bromoform by EPA TO-15
Bromomethane by EPA TO-15 & TO-14A
Carbon tetrachloride by EPA TO-15 & TO-14A
Chloroethane by EPA TO-15
Chloroform by EPA TO-15 & TO-14A
Chloromethane by EPA TO-15 & TO-14A
cis-1,2-Dichloroethylene by EPA TO-15
cis-1,2-Dichloropropene by EPA TO-15 & TO-14A
Methylene chloride by EPA TO-15 & TO-14A
Tetrachloroethane by EPA TO-15 & TO-14A
trans-1,2-Dichloroethene by EPA TO-15
trans-1,2-Dichloropropene by EPA TO-15 & TO-14A
Trichloroethene by EPA TO-15 & TO-14A
Vugyl chloride by EPA TO-15 & TO-14A
2-Butanone by EPA TO-15
4-Methyl-2-Pentanone by EPA TO-15
Hexane by EPA TO-15
Methyl tert-butyl ether by EPA TO-15
Vinyl acetate by EPA TO-15

This certification applies to samples analyzed in summa canisters



Chain of Custody Record

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 1855 Coronado Ave., Signal Hill, CA 90755 • ph 800.834.9888

Date 12-29-11

H&P Project # EP1010512-13

Outside Lab

Client	Exxon Mobil Oil Company, Jennifer Seelbach	Collector	Alex Snyder	Page	1 of 1
Address	601 N McDowell Blvd Foothill Ranch, CA 92654	Client Project #	Former Exxon 74121	Project Contact	Bruce Sime
Email	alex.snyder@cardno.com	Location	10105 Foothill Blvd, Oakland, CA		
Phone	207-766-2222	Fax		Turi ground line	STANDARD

Geotracker EDF	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Sample Receipt					
Global ID	7D00012-0383	Intact	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	TPH gas			
Excel EDD	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Seal Intact	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	ext			
		Cold	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA				
		Temperature	RT				

Special Instructions	Reporting units = mg/m³
Report final vacuum reading	
UPS TRACK#	1Z927T619046016958
Lab Work Order #	E201010
Total # of containers	

Sample Name	Field Point Name	Purge Vol	Time	Date	Sample Type	Container Type	Total # of containers	SOIL/GW		SOIL VAPOR/AIR ANALYSIS										SOIL VAPOR/AIR ANALYSIS		SOIL VAPOR/AIR ANALYSIS																			
								8260B Full List	8260B	BTX/OXY	TPH gas	8015M TPH	□ g	□ d	□ ext	418.1 TRPH	VOCs: Full List	□ 8260B	□ TO-15	VOCs: Short List/DTSC	□ 8260B	□ TO-15	VOCs: SAM	□ SAM A	□ SAM B	Naphthalene	□ 8260B	□ TO-15	Oxygenates	□ 8260B	□ TO-15	TPH gas	□ 8260B	□ TO-15	Ketones	□ 8260B	□ TO-15	Other	□ 8260B	□ TO-15	Leak Check Compound
VW6	VW6	1319	12-24-11	✓	Summer	1		X										X			X	X																-4.2105			
VW10	VW10	1225	12-24-11	✓	Summer	1		X										X			X	X																-4.4250			
VW5	VW5	1150	12-24-11	✓	Summer	1		X										X			X	X																-4.9131			
VW2	VW2	1427	12-24-11	✓	Summer	1		X									X			X	X																	-4.1310			
VW2-DJP	VW2	1437	12-24-11	✓	Summer	1		X									X			X	X																	-3.7202			
VW4R	VW4R	1403	12-24-11	✓	Summer	1		X									X			X	X																	-3.0057			
VW3R	VW3R	1331	12-24-11	✓	Summer	1		X									X			X	X																	-3.3041			
VW3R	VW3R	1050	12-24-11	✓	Summer	1		X									X			X	X																	-5.2200			
TRIP BLANK	TRIP BLANK	1230	12-24-11	✓	Summer	1		X									X			X	X																	313			

Refrigerated by (Signature)	(Company)	Received by (Signature)	(Company)	Date	Time																												
Refrigerated by (Signature)	(Company)	Received by (Signature)	(Company)	Date	Time																												
Refrigerated by (Signature)	(Company)	Received by (Signature)	(Company)	Date	Time																												

*Signature indicates container was received with seal intact and good/below acceptable condition on date.

Sample Disposal Method: Reuse Return to customer Pump