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By Alameda County Environmental Health at 9:56 am, Jul 25, 2014



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July 24, 2014

Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

**Re: 76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard, Oakland, California**

**ACEH Fuel Leak Case No. RO0000409
RWQCB Case No. 01-2474
GeoTracker Global ID T0600102279**

I have reviewed the attached monitoring well installation report dated July 25, 2014.

I agree with the conclusions and recommendations presented in the referenced report. The information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This report was prepared by AECOM, upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13257(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Sincerely,

A handwritten signature in blue ink, appearing to read "Nicole Arceneaux".

Nicole Arceneaux
Project Manager

Attachment: *Monitoring Well Installation Report*

Monitoring Well Installation Report



76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

ACEH Case No. RO0000409
RWQCB Case No. 01-2474

Monitoring Well Installation Report

76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

ACEH Case No. RO0000409
RWQCB Case No. 01-2474

Prepared by:

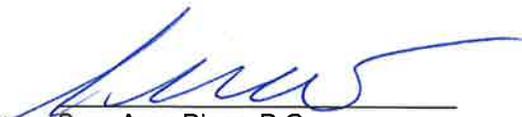


James Harms
Project Geologist



Chad Roper, PhD
Project Manager

Reviewed by:



Sara Arav Piper, P.G.
Project Geologist



7124114

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1.0 Introduction

On behalf of Chevron Environmental Management Company's (EMC's) affiliate, Union Oil of California ("Union Oil"), AECOM is pleased to submit this report on the well installation and limited site assessment recently conducted on-site. AECOM has prepared this report in association with Alameda County Environmental Health (ACEH) Case No. RO0000409, for 76 Service Station No. 1156 (351645), located at 4276 MacArthur Boulevard, Oakland, California (**Figures 1 and 2**).

1.1 Background and Objectives

On November 21, 2013, ACEH issued a directive letter (**Appendix A**) as a result of their review of October 22, 2013, *Third Quarter 2013 Semiannual Groundwater Monitoring and Sampling Report* (AECOM 2013a) and AECOM's October 29, 2013, *Report on Vapor Intrusion Investigation and Risk Assessment for the Oakland Veterinary Hospital* (AECOM 2013b). In their November 21 letter, ACEH directed EMC to "submit a work plan to conduct interim remediation or pilot testing" to "address the elevated concentrations of petroleum hydrocarbons detected in soil vapor in the northwestern portion of the site adjacent to the Oakland Veterinary Hospital."

On December 18, 2013, EMC and AECOM met with ACEH and discussed their directive to prepare a work plan for interim remediation or pilot testing. As a result of that meeting, ACEH issued an email on December 18, 2013, revising the scope for the work plan as follows:

- "The Work Plan will include a screening of remedial technologies applicable to the area of potential vapor intrusion along the northwestern property boundary.
- The Work Plan will propose site characterization activities focused on evaluation of remedial technologies. A remedial technology is to be selected following the focused data collection.
- The Work Plan will also address data gaps associated with the detections of petroleum hydrocarbons in well MW-11A and shallow groundwater between monitoring well MW-11A and the former tank pit."

On March 6, 2014, AECOM submitted the *Remedial Technology Screening and Work Plan for Site Assessment*, addressing ACEH directives outlined above and to address the data gaps previously identified at the site, which are collectively summarized below (AECOM 2014):

- Perform a screening of feasible remedial technologies for mitigating off-site contaminant migration along the northwestern property boundary and minimizing the potential of vapor intrusion into the adjacent veterinary hospital.
- The vertical extent of groundwater impacts on-site has not been sufficiently assessed to determine the presence of LNAPL or dissolved-phase hydrocarbon concentrations above 10 feet below ground surface (bgs).

The scope of work focused on soil boring and monitoring well installation for on-site hydrocarbon delineation, LNAPL detection, and additional remedial technology screening.

On March 19, 2014, ACEH conditionally approved the work plan, adding additional soil samples and requesting that the wells be 4-inch-diameter wells with stainless steel casings and screens (ACEH 2014). The evaluation of remedial technologies will be submitted in a corrective action plan under separate cover once sufficient groundwater data have been collected.

1.2 Site Location and Description

The site is located at the northern corner of the intersection of MacArthur Boulevard and High Street in an urbanized area of Oakland, California, at the base of the San Leandro Hills (**Figures 1 and 2**).

The site area consists of mixed commercial and residential development. The Oakland Veterinary Hospital (OVH) borders the site to the northwest, beyond which is a pharmacy/drug store. Single-family dwellings border the site to the northeast. An apartment building and commercial businesses (cleaners, tax service, pizza restaurant, and sandwich shop) are present across High Street to the southeast. A vacant lot is located south of the site at the southern corner of the MacArthur Boulevard and High Street intersection (Roberts Tires, GeoTracker Identification [ID] T0600193302). A vacant lot is also located across MacArthur Boulevard to the southwest of the site (Former Shell Station #13-5701, GeoTracker ID T0600101261).

Based on site survey data, surface elevations at the site range from 179.42 feet above mean sea level (amsl) at MW-4B to 173.99 feet amsl at MW-2B (**Appendix A**). Visual observations during site visits further revealed that the elevation at the northeastern site boundary is noticeably higher than at MW-4B. Additionally, the elevation at MW-5 is 169.67 feet amsl. MW-5 is located in the street in front of the OVH (adjacent to the northwest of the site). To summarize, the southwestern portion of the site is at least 8 feet lower in elevation than the northeastern portion; and the western corner is approximately 4 feet lower in elevation than the southern corner.

2.0 Scope of Work

The completed scope of work included the installation of two groundwater monitoring wells to determine the presence of LNAPL on-site, and to collect data for use in further screening of remedial technologies. The locations of the newly installed wells are shown on **Figure 2**. The monitoring well locations were moved slightly from the proposed locations to avoid subsurface utilities identified at the site.

2.1 Monitoring Well Installation

AECOM contracted Pencore Drilling, a State of California C-57-licensed drilling contractor, to advance the boreholes and install the monitoring wells.

2.1.1 Soil Borings and Soil Sampling Collection

AECOM supervised a limited-access combination hollow-stem auger/direct-push technology drill rig which advanced and sampled two soil borings (MW-10S and MW-11S) that were converted into two groundwater monitoring wells (**Figure 2**). The soil borings were continuously sampled with a direct-push technology macro core with acetate liners from the ground surface to a depth of 10 feet bgs.

Soil samples for laboratory analyses were collected at 2-foot intervals, and were biased toward the highest probable degree of contamination based on field screening results. The soil samples were collected in 5-foot-long acetate liners and were screened every foot for field headspace volatile analysis with a photoionization detector (PID) and lithologic description. For volatile organic compounds (VOCs) and total petroleum hydrocarbon (TPH) volatile fraction analyses, three EnCore® samplers were used for sample collection and field preservation, consistent with United States Environmental Protection Agency (EPA) Method 5035 requirements. The remaining sample analyses were performed from samples collected in an 8-ounce unpreserved jar. The sample containers were sealed, labeled, recorded on a chain-of-custody form, and placed in a cooler with ice pending delivery to the analytical laboratory (**Appendix C**).

2.1.2 Soil Lithology Observations

The lithology observed during this investigation was generally consistent with previous investigations. The subsurface is predominantly fine-grained material made up of fat and lean clays with varying percentages of sands and gravels. For MW-10S, lean clay with sand and gravel was noted from the surface to 2.0 feet bgs; fat and lean clays were observed from 2.0 to 5.5 feet bgs; and fat clay was observed from 7.0 to 10.0 feet bgs with a trace of fine gravel in the clay at 9.5 to 10.0 feet bgs. For MW-11S, silty gravel was present from the surface to 3.0 feet bgs, lean clay with silt was observed from 3.0 to 7.0 feet bgs, silt with sand was observed from 7.0 to 10.0 feet bgs.

No evidence of moisture was observed in MW-10S, there was a 6" layer of moist soil from 5.0 to 5.5 feet bgs observed in MW-11S. Boring logs are presented in **Appendix D**. These shallower wells (MW-10S and MW-11S) are unlikely to produce significant water based on the dry condition of the fine-grained soil. However, the deeper wells (MW-10A and B, MW-11A and B) appear to intersect a coarser-grained layer that was observed as being moist to wet, suggesting it may produce more water than the surrounding clay. However, due to the surrounding clay, water production will likely be limited with low recharge rates.

2.1.3 Groundwater Monitoring Well Installation

Following completion of the soil sampling, each soil boring was completed as a groundwater monitoring well. Each well consisted of a 4-inch-diameter 316 stainless steel well casings with 3.5 feet of 0.020-inch slot stainless steel screen at the bottom.

A 4-inch-diameter end cap was added to the bottom of each well casing. A Monterey #3 sand pack was placed in the annular space from the bottom of the well screen to 3.5 feet bgs. A 2.5-foot-long hydrated bentonite seal was placed in the annular space above the sand pack using bentonite chips, and concrete colored to match surrounding conditions was used from 1 feet bgs to grade.

Each monitoring well was completed with a traffic-rated well box with a locking well cap, set in the concrete. The cap was permanently labeled with the well identification number. The Alameda County Public Works Agency (ACPWA) inspected the wells and placed an inspection label in each well box. Well construction diagrams are included on the boring logs provided in **Appendix D**.

2.1.4 Soil Sample Analytical Results

The soil samples were analyzed by BC Laboratories, a State of California-certified laboratory, for the following constituents:

- TPH carbon chain (TPHCC) by EPA Method 8015CC; and
- Full-scan VOCs by EPA Method 8260B.

LNAPL was not observed during well installation or development. Groundwater samples will be collected and analyzed during the next routine groundwater monitoring event scheduled for the third quarter of 2014 if sufficient water accumulates in the wells for sampling.

Concentrations of TPHCC, benzene, toluene, ethyl benzene, and total xylenes (BTEX) were detected in the northwestern portion of the property (MW-10S) from 2 feet bgs to 10 feet bgs. These results are consistent with analytical data collected from nearby historical soil boring SB-17 but less than the data for SB-13. TPHCC and BTEX concentrations in the southwestern portion of the property (MW-11S) were detected from 6 to 10.0 feet bgs, consistent with analytical data for MW-3B but less than data for SB-2 (AECOM 2013c).

Carbon-chain analysis was performed on each soil boring sample collected to distinguish light hydrocarbon sources from heavy hydrocarbon sources. Concentrations of total TPH for the wells were low overall (maximum total TPH for MW-10S and MW-11S was 27 milligrams per kilogram [mg/kg], for MW-11S at 2 feet bgs). Results for samples collected in the northwestern portion of the site (MW-10S) indicate a maximum concentration of 2.8 mg/kg at 5 feet bgs for carbon-chain length C10-C11. The maximum concentration detected for MW-11S was 11 mg/kg at 2 feet bgs for carbon-chain length C29-C32.

2.1.5 Groundwater Monitoring Well Development and Survey

AECOM developed the two monitoring wells on July 3, 2014. The wells were first gauged to measure how much water had accumulated in each well. The wells were then developed using a weighted disposable bailer and inertial pump to surge along the well screen for approximately 10 minutes. The wells were then purged using the weighted bailer and inertial pump. Water quality parameters, including temperature, pH, turbidity, were collected from the pump tubing. Copies of the well development logs are provided in **Appendix E**.

Depth to water measurements ranged from 6.02 to 10.13 feet below the top of casing. There was only 0.20 feet of water in MW-10S which was insufficient for development. MW-11S exhibited slow recharge with less than 3 well casing volumes able to be removed after the well went dry twice (**Appendix E**). Observed depth to water measurements for MW-10S and MW-11S are shallower than those observed for MW-10A/B and MW-11A/B, installed in March 2013. This contrast suggests that the shallower zone is not connected to the deeper zone under hydrostatic pressure, which forces the groundwater up in the deeper wells.

The presence of a discontinuous semi-impermeable lithology (i.e., the presence of lean and fat clay) likely causes slow groundwater recovery rates in the shallow zone and limits the vertical migration of petroleum impacts. Lithologies observed during the installation of MW-10S and MW-11S are consistent with historical soil borings and indicate that hydrocarbon mobility is expected to be extremely limited due to tight, semi-permeable soil matrices.

The groundwater monitoring wells were surveyed on July 3, 2014, by Morrow Surveying. The well survey map is included in **Appendix B**.

3.0 Conclusions and Recommendations

3.1 Findings and Conclusions

The horizontal soil impacts at less than 20 feet bgs have been sufficiently evaluated to determine potential downgradient migration of source zone residual impacts (e.g., the former USTs). Although shallow impacts were observed, they appear to be related to minimal mobilization in semi-saturated zones due to a deep aquifer under hydrostatic pressure. Soil data obtained during the installation of downgradient monitoring wells (off-site) and historical soil data indicate that the shallow impacts are confined to the site property. Significant vertical migration of impacts has not been observed based on wells screened below 20 feet bgs, for which BTEX concentrations are stable and/or decreasing.

Soil sample results are consistent with previous investigations, indicating only minor impacts to shallow soil across the site.

AECOM has submitted the required electronic files necessary to comply with ACEH and State of California GeoTracker requirements.

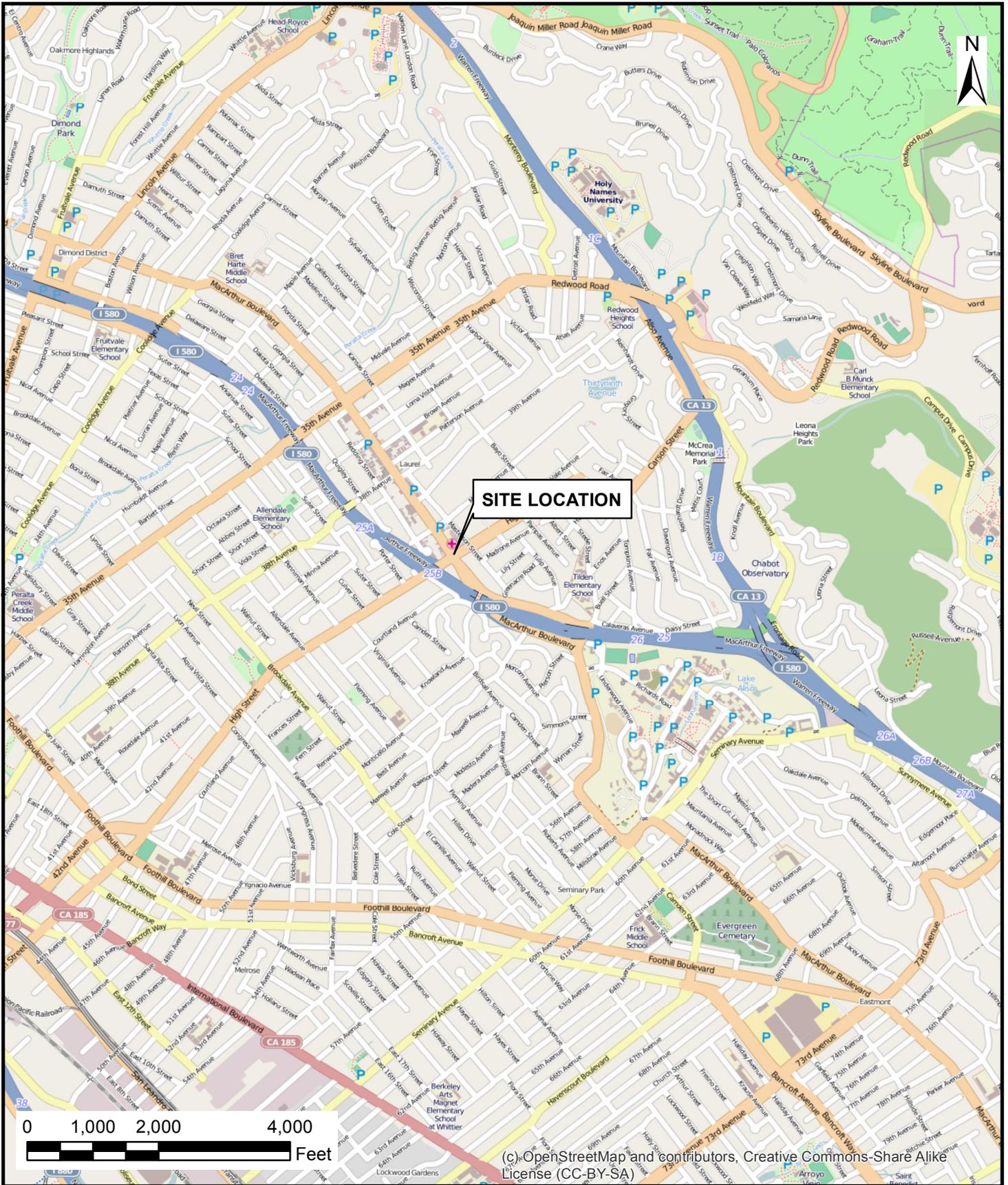
3.2 Recommendations

Based upon the above findings and conclusions, AECOM recommends continued monitoring of on-site and off-site groundwater wells. In order to better understand the vertical extent of groundwater impacts, groundwater monitoring will include the two recently installed shallow wells (MW-11S and MW-10S). The next groundwater monitoring event is scheduled for July 22, 2014. AECOM will evaluate the results of groundwater sampling in the next semiannual groundwater report and will outline a path forward at that time.

4.0 References

- AECOM. 2013a. *Third Quarter 2013 Semiannual Groundwater Monitoring and Sampling Report. Former Unocal Station No. 1156, (Chevron Facility 351645), 4276 MacArthur Boulevard, Oakland, California, ACEH Case No. RO0000409, RWQCB Case No. 01-2474.* October 22.
- AECOM. 2013b. *Report on Vapor Intrusion Investigation and Risk Assessment for the Oakland Veterinary Hospital, Former Unocal Station No. 1156, (Chevron Facility 351645), 4276 MacArthur Boulevard, Oakland, California, ACEH Case No. RO0000409, RWQCB Case No. 01-2474.* October 29.
- AECOM. 2013c. *Conceptual Site Model, Former Unocal Station No. 1156, (Chevron Facility 351645), 4276 MacArthur Boulevard, Oakland, California, ACEH Case No. RO0000409, RWQCB Case No. 01-2474.* November 11.
- AECOM. 2014. *Remedial Technology Screening and Work Plan for Site Assessment, 76 Service Station No. 1156 (351645), 4276 MacArthur Boulevard, Oakland, California, ACEH Case No. RO0000409, RWQCB Case No. 01-2474.* March 5.
- Alameda County Environmental Health. 2014. *Conditional Work Plan Approval for Fuel Leak Case No. RO0000409 and GeoTracker Global ID T0600102279, Unocal #1156, 4276 MacArthur Boulevard, Oakland, CA 94619.* March 19.

Figures



(c) OpenStreetMap and contributors, Creative Commons-Share Alike License (CC-BY-SA)



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 WEB: HTTP://WWW.AECOM.COM

SITE LOCATION MAP

76 Service Station No. 1156 (351645)
 4276 MacArthur Boulevard
 Oakland, California

FIGURE NUMBER:

1

DRAWN BY:

M. Scop

DATE:

02/10/2014

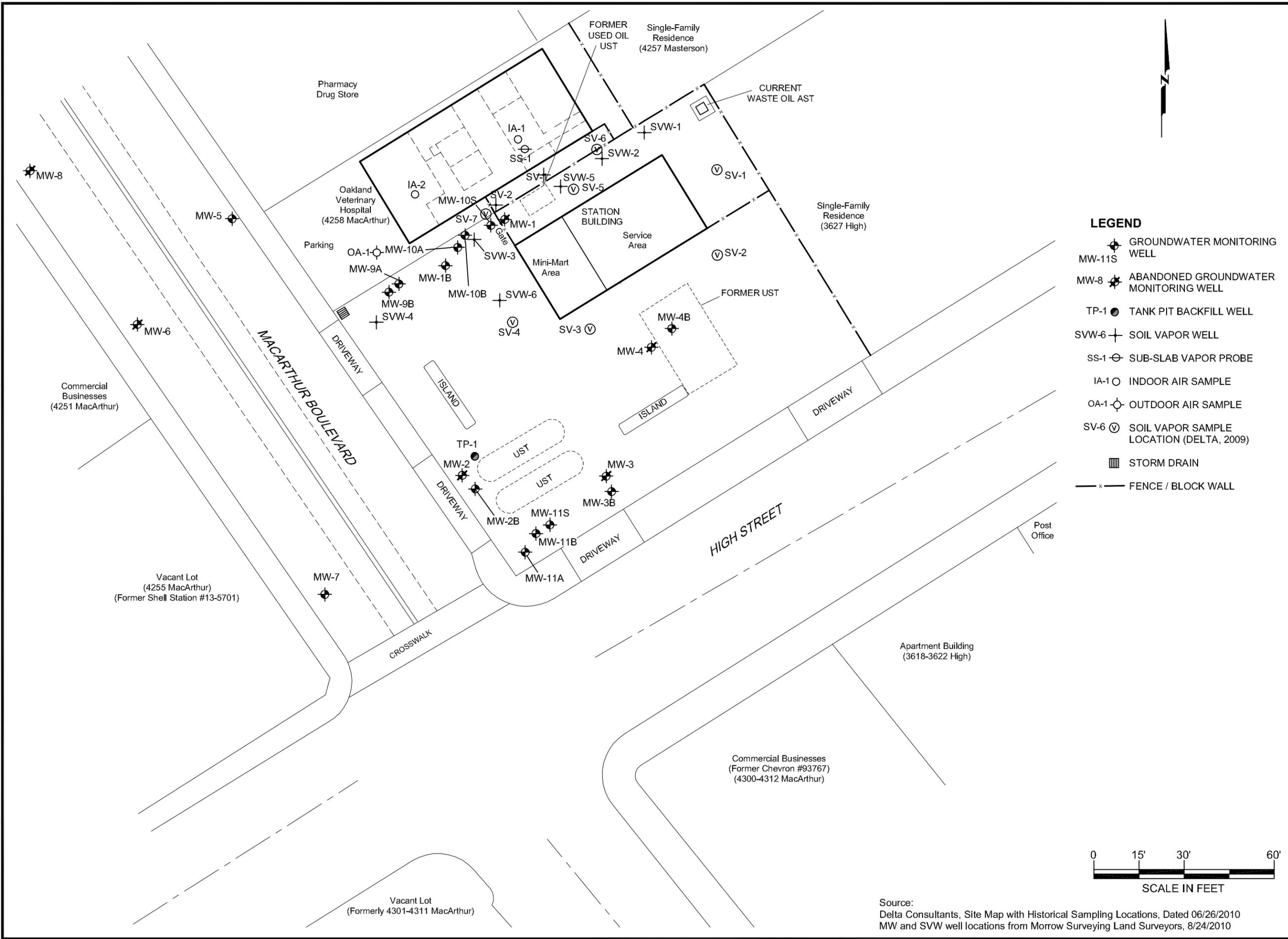
PROJECT NUMBER:

60313673

SHEET NUMBER:

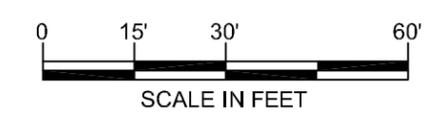
1 of 1

FILENAME: J:\Client-Projects\76_Products\351645-Oakland\7.0_Deliverables\7.2_CADD-Graphics\2014 2Q SVI Report\Figure 2 Site Plan_2014.July.dwg



LEGEND

- GROUNDWATER MONITORING WELL
- ABANDONED GROUNDWATER MONITORING WELL
- TANK PIT BACKFILL WELL
- SOIL VAPOR WELL
- SUB-SLAB VAPOR PROBE
- INDOOR AIR SAMPLE
- OUTDOOR AIR SAMPLE
- SOIL VAPOR SAMPLE LOCATION (DELTA, 2009)
- STORM DRAIN
- FENCE / BLOCK WALL



Source:
Delta Consultants, Site Map with Historical Sampling Locations, Dated 06/26/2010
MW and SVW well locations from Morrow Surveying Land Surveyors, 8/24/2010

DESIGNED BY:	NO.:	DESCRIPTION:	DATE:	BY:
C. Roper				
DRAWN BY:				
M. Scop				
CHECKED BY:				
C. Roper				
APPROVED BY:				
B. Evans				

AECOM

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SITE PLAN WITH WELL LOCATIONS AND SVI LOCATIONS

76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

SCALE: 1" = 30'
DATE: 7/21/2014
PROJECT NUMBER: 60316610 - 04.05

FIGURE NUMBER:
2

SHEET NUMBER:
X

Tables

Table 1
Laboratory Analytical Results for Soil - VOCs
 76 Service Station No. 1156 (351645)
 4276 MacArthur Boulevard
 Oakland, California

BORING LOCATION	SAMPLE IDENTIFICATION	SAMPLE DEPTH (feet bgs)	DATE	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	MTBE (mg/kg)	Naphthalene (mg/kg)
MW-10S	MW-10S-S-N-2	2.0	6/12/2014	0.018	<0.0044	0.032	<0.0088	0.0049	0.032
	MW-10S-S-N-5	5.0	6/12/2014	0.0062	<0.0050	0.021	0.017	<0.0050	0.0062
	MW-10S-S-N-7	7.0	6/12/2014	<0.0050	<0.0050	0.012	<0.010	<0.0050	0.016
	MW-10S-S-N-8.5	8.5	6/12/2014	0.24	<0.089	0.57	0.55	<0.089	0.17
	MW-10S-S-N-10	10.0	6/12/2014	0.068	<0.0050	0.040	0.041	0.0081	0.032
MW-11S	MW-11S-S-N-2	2.0	6/11/2014	<0.0041	<0.0041	<0.0041	<0.0082	<0.0041	<0.0041
	MW-11S-S-N-4	4.0	6/11/2014	<0.0041	<0.0041	<0.0041	<0.0082	<0.0041	<0.0041
	MW-11S-S-N-6	6.0	6/11/2014	<0.098	<0.098	0.13	<0.20	<0.098	0.48
	MW-11S-S-N-8	8.0	6/11/2014	0.68	2.2	5.4	27	0.15	1.9
	MW-11S-S-N-10	10.0	6/11/2014	0.28	1.6	2.2	12	<0.11	1.2

Notes:

bgs = Below ground surface
 mg/kg = Milligrams per kilogram
 <# = Analyte not detected at or above indicated laboratory practical quantitation limit

B = Benzene
 T = Toluene
 E = Ethylbenzene
 X = Total xylenes
 MTBE = Methyl tertiary-butyl ether

Table 2
Laboratory Analytical Results for Soil - TPH Carbon-Chain
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

BORING LOCATION	SAMPLE IDENTIFICATION	SAMPLE DEPTH (feet bgs)	DATE	TPH C8-C9 (mg/kg)	TPH C10-C11 (mg/kg)	TPH C12-C14 (mg/kg)	TPH C15-C16 (mg/kg)	TPH C17-C18 (mg/kg)	TPH C19-C20 (mg/kg)	TPH C21-C22 (mg/kg)	TPH C23-C28 (mg/kg)	TPH C29-C32 (mg/kg)	TPH C33-C36 (mg/kg)	TPH C37-C40 (mg/kg)	TPH C41-C43 (mg/kg)	TPH C44+ (mg/kg)	TPH (Total) (mg/kg)
MW-10S	MW-10S-S-N-2	2.0	6/12/2014	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10
	MW-10S-S-N-5	5.0	6/12/2014	<1.0	2.8	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10
	MW-10S-S-N-7	7.0	6/12/2014	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10
	MW-10S-S-N-8.5	8.5	6/12/2014	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10
	MW-10S-S-N-10	10.0	6/12/2014	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10
MW-11S	MW-11S-S-N-2	2.0	6/11/2014	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.4	11	5.1	6.4	<1.0	<1.0	27
	MW-11S-S-N-4	4.0	6/11/2014	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.7	8.0	3.5	<1.0	<1.0	<1.0	15
	MW-11S-S-N-6	6.0	6/11/2014	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.1	4.2	1.3	<1.0	<1.0	<1.0	<10
	MW-11S-S-N-8	8.0	6/11/2014	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10
	MW-11S-S-N-10	10.0	6/11/2014	<1.0	1.9	1.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10

Notes:

TPH = Total petroleum hydrocarbons

bgs = Below ground surface

mg/kg = Milligrams per kilogram

<# = Analyte not detected at or above indicated laboratory practical quantitation limit

Appendix A

**November 21, 2013, ACEH
Directive Letter**



ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
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FAX (510) 337-9335

November 21, 2013

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Chevron Environmental Management Company
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Rajan Goswamy
4276 MacArthur Boulevard
Oakland, CA 94619

(Sent via E-mail to: rajgoswamy@sbcglobal.net)

Carole Quick and Lorraine Mudgett
10214 SW Stuart Court
Portland, OR 97224-4304

Subject: Case File Review for Fuel Leak Case No. RO0000409 and GeoTracker Global ID T0600102279, Unocal #1156, 4276 MacArthur Boulevard, Oakland, CA 94619

Dear Ms. Arceneaux, Mr. Hetrick, Ms. Quick, Ms. Mudgett, and Mr. Goswamy:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site, including the documents entitled, "*Report on Vapor Intrusion Investigation and Risk Assessment for the Oakland Veterinary Hospital Located at 4258 MacArthur Boulevard, Oakland, CA,*" dated October 29, 2013 (Vapor Intrusion Report) and "Third Quarter 2013 Semiannual Groundwater Monitoring and Sampling Report" dated October 22, 2013 (Groundwater Monitoring Report). The Vapor Intrusion Report presents results from sampling of two existing soil vapor probes that were installed adjacent to the Oakland Veterinary Hospital. Soil vapor samples collected from the two probes on August 6, 2013 contained up to 190,000,000 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) Total Petroleum Hydrocarbons as gasoline and 500,000 $\mu\text{g}/\text{m}^3$ benzene. Vapor intrusion modeling indicated that the concentrations of petroleum hydrocarbons in soil vapor result in a potential excess lifetime cancer risk of 7.5E-05 and a noncancer hazard index of 1.4+E01. Based on these results, the Vapor Intrusion Report indicates that further evaluation is necessary to determine whether there is an unacceptable risk/hazard posed to occupants of the Oakland Veterinary Hospital. Paired sub-slab and indoor air sampling in the Oakland Veterinary Hospital is recommended. We concur that further evaluation is required and request that you submit a Work Plan **no later than January 7, 2014** to conduct further evaluation of the vapor intrusion pathway.

To help address the elevated concentrations of petroleum hydrocarbons detected in soil vapor in the northwestern portion of the site adjacent to the Oakland Veterinary Hospital, we request that you also propose interim remediation or pilot testing in this area. Please submit a Work Plan to conduct interim remediation or pilot testing **no later than January 21, 2014**. If you would like to discuss a scope of work for the interim remediation or pilot testing prior to Work Plan preparation, please contact me to arrange a meeting.

The Groundwater Monitoring Report recommends additional groundwater monitoring in January 2014 with collection of additional natural attenuation parameters. We have no objection to the collection of the proposed additional parameters. Please present results from the groundwater sampling in the Semi-Annual Groundwater Monitoring Report requested below.

Responsible Parties
RO0000409
November 21, 2013
Page 2

TECHNICAL REPORT REQUEST

Please upload technical reports to the ACEH ftp site (Attention: Jerry Wickham), and to the State Water Resources Control Board's GeoTracker website according to the following schedule and file-naming convention:

- **January 7, 2014** – Vapor Intrusion Work Plan
File to be named: WP_R_yyyy-mm-dd RO409
- **January 21, 2014** – Interim Remediation or Pilot Test Work Plan
File to be named: WP_R_yyyy-mm-dd RO409
- **March 30, 2014** – Semi-Annual Groundwater Monitoring Report
File to be named: GWM_R_yyyy-mm-dd RO409

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at jerry.wickham@acgov.org. Online case files are available for review at the following website: <http://www.acgov.org/aceh/index.htm>. If your email address does not appear on the cover page of this notification, ACEH is requesting you provide your email address so that we can correspond with you quickly and efficiently regarding your case.

Sincerely,

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 2032 (*Sent via E-mail to: lgriffin@oaklandnet.com*)

Maureen Dorsey, Oakland Veterinary Clinic, 4258 MacArthur Boulevard, Oakland, CA 94619

Responsible Parties
RO0000409
November 21, 2013
Page 3

Brenda Evans, AECOM, 1220 Avenida Acaso, Camarillo, CA 93012 (*Sent via E-mail to:*
brenda.evans@aecom.com)

Perry Pineda, Shell Oil Products US, 20945 S. Wilmington Ave., Carson, CA 90810-1039 (*Sent via*
(Sent via E-mail to: perry.pineda@shell.com)

Peter Schaefer, Conestoga-Rovers & Associates, 5900 Hollis Street, Suite A
Emeryville, CA 94608 (*Sent via E-mail to:* pschaefer@croworld.com)

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

GeoTracker, e-File

Attachment 1

Responsible Party(ies) Legal Requirements/Obligations

REPORT/DATA REQUESTS

These reports/data are being requested pursuant to Division 7 of the California Water Code (Water Quality), Chapter 6.7 of Division 20 of the California Health and Safety Code (Underground Storage of Hazardous Substances), and Chapter 16 of Division 3 of Title 23 of the California Code of Regulations (Underground Storage Tank Regulations).

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (Local Oversight Program [LOP] for unauthorized releases from petroleum Underground Storage Tanks [USTs], and Site Cleanup Program [SCP] for unauthorized releases of non-petroleum hazardous substances) require submission of reports in electronic format pursuant to Chapter 3 of Division 7, Sections 13195 and 13197.5 of the California Water Code, and Chapter 30, Articles 1 and 2, Sections 3890 to 3895 of Division 3 of Title 23 of the California Code of Regulations (23 CCR). Instructions for submission of electronic documents to the ACEH FTP site are provided on the attached "Electronic Report Upload Instructions."

Submission of reports to the ACEH FTP site is in addition to requirements for electronic submittal of information (ESI) to the State Water Resources Control Board's (SWRCB) Geotracker website. In April 2001, the SWRCB adopted 23 CCR, Division 3, Chapter 16, Article 12, Sections 2729 and 2729.1 (Electronic Submission of Laboratory Data for UST Reports). Article 12 required electronic submittal of analytical laboratory data submitted in a report to a regulatory agency (effective September 1, 2001), and surveyed locations (latitude, longitude and elevation) of groundwater monitoring wells (effective January 1, 2002) in Electronic Deliverable Format (EDF) to Geotracker. Article 12 was subsequently repealed in 2004 and replaced with Article 30 (Electronic Submittal of Information) which expanded the ESI requirements to include electronic submittal of any report or data required by a regulatory agency from a cleanup site. The expanded ESI submittal requirements for petroleum UST sites subject to the requirements of 23 CCR, Division, 3, Chapter 16, Article 11, became effective December 16, 2004. All other electronic submittals required pursuant to Chapter 30 became effective January 1, 2005. Please visit the SWRCB website for more information on these requirements. (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/)

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 7835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, late reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	REVISION DATE: July 25, 2012
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (petroleum UST and SCP) require submission of all reports in electronic form to the county's FTP site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as a **single Portable Document Format (PDF) with no password protection.**
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and perjury statements must be included and have either original or electronic signature.**
- **Do not password protect the document.** Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted.**
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:

RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

- 1) Obtain User Name and Password
 - a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
 - i) Send an e-mail to .loptoxic@acgov.org
 - b) In the subject line of your request, be sure to include "**ftp PASSWORD REQUEST**" and in the body of your request, include the **Contact Information, Site Addresses, and the Case Numbers (RO# available in Geotracker) you will be posting for.**
- 2) Upload Files to the ftp Site
 - a) Using Internet Explorer (IE4+), go to <://alcoftp1.acgov.org>
 - (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
 - b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
 - c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
 - d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
 - e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.
- 3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
 - a) Send email to .loptoxic@acgov.org notify us that you have placed a report on our ftp site.
 - b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
 - c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
 - d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

Appendix B

Well Survey Map

Monitoring Well Exhibit

Prepared For:
AECOM



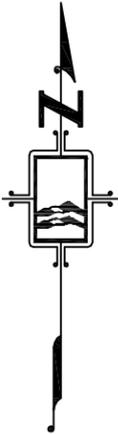
BASIS OF COORDINATES:

COORDINATES ARE CALIFORNIA STATE PLANE ZONE 3 COORDINATES FROM GPS OBSERVATIONS USING UNIVERSITY OF CALIFORNIA BAY AREA DEFORMATION CORS STATION OBSERVATION FILES AND BASED ON THE CALIFORNIA SPATIAL REFERENCE CENTER DATUM, REFERENCE EPOCH 2000.35.
 COORDINATE DATUM IS NAD 83(CORS)
 DATUM ELLIPSOID IS GRS80
 REFERENCE GEODID IS GEODID99
 VERTICAL DATUM IS NAVD 88 FROM GPS OBSERVATIONS

CORS STATION USED WAS DIAB AND MOLA.

*Note: MW-1, 2, 3, 4, 6, and 8 have been abandoned. MW-1, 2, 3, and 4 have been replaced by MW-1B, 2B, 3B, and 4B as of 8-24-10. MAM

DESC.	NORTHING	EASTING	LATITUDE	LONGITUDE	EL. PVC	EL. BOX
WELLS SURVEYED FOR DELTA IN 2008 AND 2010:						
MW-1B	2113738.0	6071926.4	37.7877602	-122.1948610	174.05	174.58
MW-2B	2113664.1	6071936.3	37.7875576	-122.1948223	173.55	173.99
MW-3B	2113663.2	6071981.6	37.7875574	-122.1946655	177.77	178.37
MW-4B	2113717.2	6072001.6	37.7877067	-122.1945995	179.07	179.42
MW-5	2113753.6	6071855.6	37.7877993	-122.1951072	169.18	169.67
MW-7	2113629.1	6071886.3	37.7874591	-122.1949929	172.11	172.39
SVW-1	2113782.1	6071992.4	37.7878845	-122.1946353		
SVW-2	2113773.4	6071978.4	37.7878600	-122.1946833		
SVW-3	2113746.7	6071936.0	37.7877844	-122.1948285		
SVW-4	2113719.2	6071903.5	37.7877075	-122.1949393		
SVW-5	2113764.2	6071964.7	37.7878341	-122.1947304		
SVW-6	2113726.5	6071944.4	37.7877295	-122.1947980		
WELLS SURVEYED FOR AECOM ON 4-8-13:						
MW-9A	2113731.9	6071911.0	37.7877426	-122.1949142	173.01	173.36
MW-9B	2113729.2	6071907.6	37.7877351	-122.1949255	172.78	173.12
MW-10A	2113744.1	6071930.5	37.7877770	-122.1948474	174.48	174.85
MW-10B	2113748.1	6071932.9	37.7877881	-122.1948392	174.62	174.98
MW-11A	2113649.2	6071956.5	37.7875179	-122.1947515	175.37	175.85
MW-11B	2113643.1	6071952.9	37.7875008	-122.1947635	174.65	175.37
SV-1	2113771.8	6071956.9	37.7878544	-122.1947577		175.71
SV-2	2113761.8	6071941.0	37.7878262	-122.1948120		175.85
WELLS SURVEYED FOR AECOM ON 7-3-14:						
MW-10S	2113753.4	6071940.8	37.7878032	-122.1948124	175.57	175.63
MW-11S	2113649.4	6071959.8	37.7875186	-122.1947398	176.09	176.27



76 Service Station # 1156
 4276 MacArthur Blvd.
 Oakland
 Alameda County
 California



1255 Starboard Drive
 West Sacramento
 California 95691
 (916) 372-8124
 mark@morrrowsurveying.com

Date: April, 2013
 Field: 4-8-13 RL, 7-3-14 SF
 Scale: 1" = 30'
 Revised: July, 2014
 Field Book: 1152
 Dwg. 1856-046 MAM
 Reference Dwg. 1275-106 MAM

Appendix C

Laboratory Analytical Data



Date of Report: 06/24/2014

Brenda Evans

AECOM

1220 Avenida Acaso
Camarillo, CA 93012

Client Project: 351645
BCL Project: 1156
BCL Work Order: 1413204
Invoice ID: B176508

Enclosed are the results of analyses for samples received by the laboratory on 6/12/2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Molly Meyers
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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Total Petroleum Hydrocarbons.....	12
1413204-02 - MW-11S-S-N-4-140611	
Volatile Organic Analysis (EPA Method 8260B/5035).....	13
Total Petroleum Hydrocarbons.....	16
1413204-03 - MW-11S-S-N-6-140611	
Volatile Organic Analysis (EPA Method 8260B/5035).....	17
Total Petroleum Hydrocarbons.....	20
1413204-04 - MW-11S-S-N-8-140611	
Volatile Organic Analysis (EPA Method 8260B/5035).....	21
Total Petroleum Hydrocarbons.....	24
1413204-05 - MW-11S-S-N-10-140611	
Volatile Organic Analysis (EPA Method 8260B/5035).....	25
Total Petroleum Hydrocarbons.....	28
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Volatile Organic Analysis (EPA Method 8260B/5035).....	29
Total Petroleum Hydrocarbons.....	32
1413204-07 - MW-10S-S-N-5-140612	
Volatile Organic Analysis (EPA Method 8260B/5035).....	33
Total Petroleum Hydrocarbons.....	36
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Volatile Organic Analysis (EPA Method 8260B/5035).....	37
Total Petroleum Hydrocarbons.....	40
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Total Petroleum Hydrocarbons.....	44
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CHAIN OF CUSTODY FORM
Union Oil Company of California ■ 6101 Bollinger Canyon Road ■ San Ramon, CA 94583

COC _____ of _____

Union Oil Site ID: 14-13-204 Site Global ID: 351045	Union Oil Consultant: AECOM	Union Oil Company of California ■ 6101 Bollinger Canyon Road ■ San Ramon, CA 94583	ANALYSES REQUIRED	Turnaround Time (TAT): Standard <input checked="" type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 72 Hours <input type="checkbox"/>
Site Address: 4276 MacArthur Blvd, Oakland	Consultant Contact: Brenda Evans Consultant Phone No.: 805-388-3775			Special Instructions: EPA Samples - Short Hold!
Union Oil PM: Nicole Arceneaux	Sampling Company: TRO-AECOM			
Union Oil PM Phone No.: 925-790-6912	Sampled By (PRINT): Jim Harms			
Charge Code: NWRTE-0351645-0- LAB	Sampler Signature:			
This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.		BC Laboratories, Inc. Project Manager: Molly Meyers 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911		

SAMPLE ID	Field Point Name	Matrix	DTW	Date (yymmdd)	# of Containers	ANALYSES REQUIRED							Notes / Comments					
						TPH - Diesel by EPA 8015	TPH - G by GC/MS	BTEX/MTBE/OXYS by EPA 8260B	Ethanol by EPA 8260B	EPA 8260B Full List with OXYS	TPHCC EPA 8015 (M)	Relinquished By		Company	Date / Time			
MW-115-5-N-2-201404 WSA		WSA		140611-1	4	X				X								
MW-115-5-N-4-201404 WSA		WSA		140611-2	4	X				X								
MW-115-5-N-6-201404 WSA		WSA		140611-3	4	X				X								
MW-115-5-N-8-201404 WSA		WSA		140611-4	4	X				X								
MW-115-5-N-10-201404 WSA		WSA		140611-5	4	X				X								
MW-105-5-N-2-201404 WSA		WSA		140612-6	4	X				X								
MW-105-5-N-5-201404 WSA		WSA		140612-7	4	X				X								
MW-105-5-N-7-201404 WSA		WSA		140612-8	4	X				X								
MW-105-5-N-8-201404 WSA		WSA		140612-9	4	X				X								
MW-105-5-N-10-201404 WSA		WSA		140612-10	4	X				X								
		W-S-A																
		W-S-A																

Relinquished By:	Company: AECOM	Date / Time: 6/12/14 1345	Relinquished By:	Company: BCLAB	Date / Time: 6-12-14 1830
Received By:	Company: BCLAB	Date / Time: 6-12-14 1345	Received By:	Company: BCLAB	Date / Time: 6-12-14 1830

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BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 17 06/05/14 Page 1 Of 1

Submission #: 1413204

SHIPPING INFORMATION: Federal Express UPS Hand Delivery BC Lab Field Service Other (Specify) _____

SHIPPING CONTAINER: Ice Chest None Box Other (Specify) _____

FREE LIQUID: YES NO

Refrigerant: Ice Blue Ice None Other Comments: _____

Custody Seals: Ice Chest Containers None Comments: _____

Intact? Yes No Intact? Yes No

All samples received? Yes No All samples containers intact? Yes No Description(s) match COC? Yes No

COC Received: YES NO Emissivity: 0.97 Container: PE Thermometer ID: 207 Date/Time: 6/12/14 2235

Temperature: (A) 1.4 °C (C) 1.6 °C Analyst Init: BP

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE/NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
1A PHENOLICS										
0ml VOA VIAL TRAVEL BLANK										
0ml VOA VIAL	()	()	()	()	()	()	()	()	()	()
PT EPA 413.1, 413.2, 413.1										
T ODOR										
ADIOLOGICAL										
ACTERIOLOGICAL										
1ml VOA VIAL- 504										
T EPA 508/608/8080										
T EPA 515.1/8150										
T EPA 525										
T EPA 525 TRAVEL BLANK										
ml EPA 547										
ml EPA 531.1										
Amber EPA 548										
EPA 549										
EPA 632										
EPA 8015M										
AMBER										
Z. JAR										
Z. JAR 803	B	B	B	B	B	B	B	B	B	B
L SLEEVE										
VIAL										
STIC BAG										
ROUS IRON										
ORE	A	A	A	A	A	A	A	A	A	A
RT KIT										
ma Canister										

Comments: _____
 File Numbering Completed By: BP Date/Time: 6/12/14 2302



AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

1413204-01	COC Number: --- Project Number: 1156 Sampling Location: --- Sampling Point: MW-11S-S-N-2-140611 Sampled By: AEOR	Receive Date: 06/12/2014 22:35 Sampling Date: 06/11/2014 13:30 Sample Depth: --- Lab Matrix: Solids Sample Type: Soil Delivery Work Order: Global ID: Location ID (FieldPoint): MW-11S Matrix: SO Sample QC Type (SACode): CS Cooler ID:
-------------------	---	---

1413204-02	COC Number: --- Project Number: 1156 Sampling Location: --- Sampling Point: MW-11S-S-N-4-140611 Sampled By: AEOR	Receive Date: 06/12/2014 22:35 Sampling Date: 06/11/2014 13:35 Sample Depth: --- Lab Matrix: Solids Sample Type: Soil Delivery Work Order: Global ID: Location ID (FieldPoint): MW-11S Matrix: SO Sample QC Type (SACode): CS Cooler ID:
-------------------	---	---

1413204-03	COC Number: --- Project Number: 1156 Sampling Location: --- Sampling Point: MW-11S-S-N-6-140611 Sampled By: AEOR	Receive Date: 06/12/2014 22:35 Sampling Date: 06/11/2014 13:40 Sample Depth: --- Lab Matrix: Solids Sample Type: Soil Delivery Work Order: Global ID: Location ID (FieldPoint): MW-11S Matrix: SO Sample QC Type (SACode): CS Cooler ID:
-------------------	---	---

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

1413204-04	COC Number: --- Project Number: 1156 Sampling Location: --- Sampling Point: MW-11S-S-N-8-140611 Sampled By: AEOR	Receive Date: 06/12/2014 22:35 Sampling Date: 06/11/2014 13:45 Sample Depth: --- Lab Matrix: Solids Sample Type: Soil Delivery Work Order: Global ID: Location ID (FieldPoint): MW-11S Matrix: SO Sample QC Type (SACode): CS Cooler ID:
-------------------	---	---

1413204-05	COC Number: --- Project Number: 1156 Sampling Location: --- Sampling Point: MW-11S-S-N-10-140611 Sampled By: AEOR	Receive Date: 06/12/2014 22:35 Sampling Date: 06/11/2014 13:50 Sample Depth: --- Lab Matrix: Solids Sample Type: Soil Delivery Work Order: Global ID: Location ID (FieldPoint): MW-11S Matrix: SO Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

1413204-06	COC Number: --- Project Number: 1156 Sampling Location: --- Sampling Point: MW-10S-S-N-2-140612 Sampled By: AEOR	Receive Date: 06/12/2014 22:35 Sampling Date: 06/12/2014 10:15 Sample Depth: --- Lab Matrix: Solids Sample Type: Soil Delivery Work Order: Global ID: Location ID (FieldPoint): MW-10S Matrix: SO Sample QC Type (SACode): CS Cooler ID:
-------------------	---	---

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

1413204-07	COC Number: --- Project Number: 1156 Sampling Location: --- Sampling Point: MW-10S-S-N-5-140612 Sampled By: AEOR	Receive Date: 06/12/2014 22:35 Sampling Date: 06/12/2014 10:20 Sample Depth: --- Lab Matrix: Solids Sample Type: Soil Delivery Work Order: Global ID: Location ID (FieldPoint): MW-10S Matrix: SO Sample QC Type (SACode): CS Cooler ID:
-------------------	---	---

1413204-08	COC Number: --- Project Number: 1156 Sampling Location: --- Sampling Point: MW-10S-S-N-7-140612 Sampled By: AEOR	Receive Date: 06/12/2014 22:35 Sampling Date: 06/12/2014 10:30 Sample Depth: --- Lab Matrix: Solids Sample Type: Soil Delivery Work Order: Global ID: Location ID (FieldPoint): MW-10S Matrix: SO Sample QC Type (SACode): CS Cooler ID:
-------------------	---	---

1413204-09	COC Number: --- Project Number: 1156 Sampling Location: --- Sampling Point: MW-10S-S-N-8.5-140612 Sampled By: AEOR	Receive Date: 06/12/2014 22:35 Sampling Date: 06/12/2014 10:40 Sample Depth: --- Lab Matrix: Solids Sample Type: Soil Delivery Work Order: Global ID: Location ID (FieldPoint): MW-10S Matrix: SO Sample QC Type (SACode): CS Cooler ID:
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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
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1413204-10	COC Number: ---	Receive Date: 06/12/2014 22:35
	Project Number: 1156	Sampling Date: 06/12/2014 10:45
	Sampling Location: ---	Sample Depth: ---
	Sampling Point: MW-10S-S-N-10-140612	Lab Matrix: Solids
	Sampled By: AEOR	Sample Type: Soil
		Delivery Work Order:
		Global ID:
		Location ID (FieldPoint): MW-10S
		Matrix: SO
		Sample QC Type (SACode): CS
		Cooler ID:

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Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-01	Client Sample Name: 1156, MW-11S-S-N-2-140611, 6/11/2014 1:30:00PM
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0041		EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0041		EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0041		EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0041		EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0041		EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0041		EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0041		EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0041		EPA-8260B	ND		1

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Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-01		Client Sample Name: 1156, MW-11S-S-N-2-140611, 6/11/2014 1:30:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0041		EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.0082		EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0041		EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0041		EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0041		EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.0082		EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0041		EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.1	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	88.0	%	74 - 121 (LCL - UCL)		EPA-8260B			1

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Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-01	Client Sample Name: 1156, MW-11S-S-N-2-140611, 6/11/2014 1:30:00PM
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Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-8260B	06/14/14	06/20/14	15:42	ADC	MS-V3	0.821	BXF1154

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Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Total Petroleum Hydrocarbons

BCL Sample ID: 1413204-01		Client Sample Name: 1156, MW-11S-S-N-2-140611, 6/11/2014 1:30:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - C8 - C9	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C10 - C11	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C12 - C14	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C15 - C16	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C17 - C18	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C19 - C20	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C21 - C22	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C23 - C28	4.4	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C29 - C32	11	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C33 - C36	5.1	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C37 - C40	6.4	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C41 - C43	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C44 plus	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH (Total)	27	mg/kg	10		EPA-8015CC	ND		1
Tetracosane (Surrogate)	77.9	%	20 - 145 (LCL - UCL)		EPA-8015CC			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015CC	06/19/14	06/22/14 17:13	MWB	GC-2	0.984	BXF1756

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Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-02	Client Sample Name: 1156, MW-11S-S-N-4-140611, 6/11/2014 1:35:00PM
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0041		EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
n-Butylbenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0041		EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0041		EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0041		EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0041		EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0041		EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0041		EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0041		EPA-8260B	ND		1

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Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-02		Client Sample Name: 1156, MW-11S-S-N-4-140611, 6/11/2014 1:35:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0041		EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Ethylbenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.0081		EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0041		EPA-8260B	ND		1
Naphthalene	ND	mg/kg	0.0041		EPA-8260B	ND		1
n-Propylbenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0041		EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0041		EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.0081		EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0041		EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0041		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	95.5	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.5	%	74 - 121 (LCL - UCL)		EPA-8260B			1

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Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-02	Client Sample Name: 1156, MW-11S-S-N-4-140611, 6/11/2014 1:35:00PM
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Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-8260B	06/14/14	06/20/14	16:08	ADC	MS-V3	0.813	BXF1154

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Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Total Petroleum Hydrocarbons

BCL Sample ID: 1413204-02		Client Sample Name: 1156, MW-11S-S-N-4-140611, 6/11/2014 1:35:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - C8 - C9	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C10 - C11	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C12 - C14	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C15 - C16	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C17 - C18	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C19 - C20	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C21 - C22	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C23 - C28	3.7	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C29 - C32	8.0	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C33 - C36	3.5	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C37 - C40	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C41 - C43	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C44 plus	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH (Total)	15	mg/kg	10		EPA-8015CC	ND		1
Tetracosane (Surrogate)	77.0	%	20 - 145 (LCL - UCL)		EPA-8015CC			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-8015CC	06/19/14	06/22/14	17:35	MWB	GC-2	0.987	BXF1756

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Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-03	Client Sample Name: 1156, MW-11S-S-N-6-140611, 6/11/2014 1:40:00PM
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Bromobenzene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Bromochloromethane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Bromodichloromethane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Bromoform	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Bromomethane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
n-Butylbenzene	0.53	mg/kg	0.098		EPA-8260B	ND	A01	1
sec-Butylbenzene	0.14	mg/kg	0.098		EPA-8260B	ND	A01	1
tert-Butylbenzene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Carbon tetrachloride	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Chlorobenzene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Chloroethane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Chloroform	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Chloromethane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
2-Chlorotoluene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
4-Chlorotoluene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Dibromochloromethane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,2-Dibromoethane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Dibromomethane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,2-Dichlorobenzene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,3-Dichlorobenzene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,4-Dichlorobenzene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Dichlorodifluoromethane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,1-Dichloroethane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,2-Dichloroethane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,1-Dichloroethene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
cis-1,2-Dichloroethene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
trans-1,2-Dichloroethene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,2-Dichloropropane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,3-Dichloropropane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
2,2-Dichloropropane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,1-Dichloropropene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-03		Client Sample Name: 1156, MW-11S-S-N-6-140611, 6/11/2014 1:40:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
trans-1,3-Dichloropropene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Ethylbenzene	0.13	mg/kg	0.098		EPA-8260B	ND	A01	1
Hexachlorobutadiene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Isopropylbenzene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
p-Isopropyltoluene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Methylene chloride	ND	mg/kg	0.20		EPA-8260B	ND	A01	1
Methyl t-butyl ether	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Naphthalene	0.48	mg/kg	0.098		EPA-8260B	ND	A01	1
n-Propylbenzene	0.43	mg/kg	0.098		EPA-8260B	ND	A01	1
Styrene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Tetrachloroethene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Toluene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,1,1-Trichloroethane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,1,2-Trichloroethane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Trichloroethene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Trichlorofluoromethane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,2,3-Trichloropropane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Vinyl chloride	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
Total Xylenes	ND	mg/kg	0.20		EPA-8260B	ND	A01	1
p- & m-Xylenes	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
o-Xylene	ND	mg/kg	0.098		EPA-8260B	ND	A01	1
1,2-Dichloroethane-d4 (Surrogate)	98.5	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.2	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	94.4	%	74 - 121 (LCL - UCL)		EPA-8260B			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-03	Client Sample Name: 1156, MW-11S-S-N-6-140611, 6/11/2014 1:40:00PM
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Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-8260B	06/14/14	06/20/14	16:35	ADC	MS-V3	19.592	BXF1154

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Total Petroleum Hydrocarbons

BCL Sample ID: 1413204-03	Client Sample Name: 1156, MW-11S-S-N-6-140611, 6/11/2014 1:40:00PM
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - C8 - C9	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C10 - C11	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C12 - C14	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C15 - C16	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C17 - C18	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C19 - C20	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C21 - C22	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C23 - C28	2.1	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C29 - C32	4.2	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C33 - C36	1.3	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C37 - C40	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C41 - C43	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C44 plus	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH (Total)	ND	mg/kg	10		EPA-8015CC	ND		1
Tetracosane (Surrogate)	82.7	%	20 - 145 (LCL - UCL)		EPA-8015CC			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015CC	06/19/14	06/22/14 17:58	MWB	GC-2	0.997	BXF1756

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Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-04	Client Sample Name: 1156, MW-11S-S-N-8-140611, 6/11/2014 1:45:00PM
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	0.68	mg/kg	0.10		EPA-8260B	ND	A01	1
Bromobenzene	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
Bromochloromethane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
Bromodichloromethane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
Bromoform	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
Bromomethane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
n-Butylbenzene	1.0	mg/kg	0.10		EPA-8260B	ND	A01	1
sec-Butylbenzene	0.38	mg/kg	0.10		EPA-8260B	ND	A01	1
tert-Butylbenzene	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
Carbon tetrachloride	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
Chlorobenzene	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
Chloroethane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
Chloroform	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
Chloromethane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
2-Chlorotoluene	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
4-Chlorotoluene	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
Dibromochloromethane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
1,2-Dibromoethane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
Dibromomethane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
1,2-Dichlorobenzene	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
1,3-Dichlorobenzene	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
1,4-Dichlorobenzene	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
Dichlorodifluoromethane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
1,1-Dichloroethane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
1,2-Dichloroethane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
1,1-Dichloroethene	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
cis-1,2-Dichloroethene	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
trans-1,2-Dichloroethene	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
1,2-Dichloropropane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
1,3-Dichloropropane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
2,2-Dichloropropane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
1,1-Dichloropropene	ND	mg/kg	0.10		EPA-8260B	ND	A01	1

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Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-04		Client Sample Name: 1156, MW-11S-S-N-8-140611, 6/11/2014 1:45:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
trans-1,3-Dichloropropene	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
Ethylbenzene	5.4	mg/kg	0.10		EPA-8260B	ND	A01	1
Hexachlorobutadiene	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
Isopropylbenzene	0.71	mg/kg	0.10		EPA-8260B	ND	A01	1
p-Isopropyltoluene	0.23	mg/kg	0.10		EPA-8260B	ND	A01	1
Methylene chloride	ND	mg/kg	0.21		EPA-8260B	ND	A01	1
Methyl t-butyl ether	0.15	mg/kg	0.10		EPA-8260B	ND	A01	1
Naphthalene	1.9	mg/kg	0.10		EPA-8260B	ND	A01	1
n-Propylbenzene	2.6	mg/kg	0.10		EPA-8260B	ND	A01	1
Styrene	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
Tetrachloroethene	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
Toluene	2.2	mg/kg	0.10		EPA-8260B	ND	A01	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
1,1,1-Trichloroethane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
1,1,2-Trichloroethane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
Trichloroethene	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
Trichlorofluoromethane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
1,2,3-Trichloropropane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
1,2,4-Trimethylbenzene	15	mg/kg	0.21		EPA-8260B	ND	A01	2
1,3,5-Trimethylbenzene	3.7	mg/kg	0.10		EPA-8260B	ND	A01	1
Vinyl chloride	ND	mg/kg	0.10		EPA-8260B	ND	A01	1
Total Xylenes	27	mg/kg	0.21		EPA-8260B	ND	A01	1
p- & m-Xylenes	20	mg/kg	0.10		EPA-8260B	ND	A01	1
o-Xylene	7.0	mg/kg	0.10		EPA-8260B	ND	A01	1
1,2-Dichloroethane-d4 (Surrogate)	94.8	%	70 - 121 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	94.3	%	70 - 121 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	105	%	81 - 117 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	104	%	81 - 117 (LCL - UCL)		EPA-8260B			2

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Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-04	Client Sample Name: 1156, MW-11S-S-N-8-140611, 6/11/2014 1:45:00PM
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	92.4	%	74 - 121 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	101	%	74 - 121 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run		Instrument	Dilution	QC
			Date/Time	Analyst			Batch ID
1	EPA-8260B	06/14/14	06/20/14 17:00	ADC	MS-V3	20.973	BXF1154
2	EPA-8260B	06/14/14	06/24/14 04:00	ADC	MS-V3	41.946	BXF1154

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Total Petroleum Hydrocarbons

BCL Sample ID: 1413204-04		Client Sample Name: 1156, MW-11S-S-N-8-140611, 6/11/2014 1:45:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - C8 - C9	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C10 - C11	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C12 - C14	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C15 - C16	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C17 - C18	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C19 - C20	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C21 - C22	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C23 - C28	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C29 - C32	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C33 - C36	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C37 - C40	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C41 - C43	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C44 plus	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH (Total)	ND	mg/kg	10		EPA-8015CC	ND		1
Tetracosane (Surrogate)	74.6	%	20 - 145 (LCL - UCL)		EPA-8015CC			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015CC	06/19/14	06/22/14 18:21	MWB	GC-2	1	BXF1756

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Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-05	Client Sample Name: 1156, MW-11S-S-N-10-140611, 6/11/2014 1:50:00PM
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	0.28	mg/kg	0.11		EPA-8260B	ND	A01	1
Bromobenzene	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
Bromochloromethane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
Bromodichloromethane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
Bromoform	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
Bromomethane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
n-Butylbenzene	0.63	mg/kg	0.11		EPA-8260B	ND	A01	1
sec-Butylbenzene	0.23	mg/kg	0.11		EPA-8260B	ND	A01	1
tert-Butylbenzene	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
Carbon tetrachloride	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
Chlorobenzene	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
Chloroethane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
Chloroform	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
Chloromethane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
2-Chlorotoluene	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
4-Chlorotoluene	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
Dibromochloromethane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
1,2-Dibromoethane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
Dibromomethane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
1,2-Dichlorobenzene	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
1,3-Dichlorobenzene	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
1,4-Dichlorobenzene	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
Dichlorodifluoromethane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
1,1-Dichloroethane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
1,2-Dichloroethane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
1,1-Dichloroethene	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
cis-1,2-Dichloroethene	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
trans-1,2-Dichloroethene	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
1,2-Dichloropropane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
1,3-Dichloropropane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
2,2-Dichloropropane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
1,1-Dichloropropene	ND	mg/kg	0.11		EPA-8260B	ND	A01	1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-05		Client Sample Name: 1156, MW-11S-S-N-10-140611, 6/11/2014 1:50:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
trans-1,3-Dichloropropene	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
Ethylbenzene	2.2	mg/kg	0.11		EPA-8260B	ND	A01	1
Hexachlorobutadiene	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
Isopropylbenzene	0.35	mg/kg	0.11		EPA-8260B	ND	A01	1
p-Isopropyltoluene	0.13	mg/kg	0.11		EPA-8260B	ND	A01	1
Methylene chloride	ND	mg/kg	0.21		EPA-8260B	ND	A01	1
Methyl t-butyl ether	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
Naphthalene	1.2	mg/kg	0.11		EPA-8260B	ND	A01	1
n-Propylbenzene	1.4	mg/kg	0.11		EPA-8260B	ND	A01	1
Styrene	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
Tetrachloroethene	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
Toluene	1.6	mg/kg	0.11		EPA-8260B	ND	A01	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
1,1,1-Trichloroethane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
1,1,2-Trichloroethane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
Trichloroethene	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
Trichlorofluoromethane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
1,2,3-Trichloropropane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
1,2,4-Trimethylbenzene	6.4	mg/kg	0.11		EPA-8260B	ND	A01	1
1,3,5-Trimethylbenzene	1.9	mg/kg	0.11		EPA-8260B	ND	A01	1
Vinyl chloride	ND	mg/kg	0.11		EPA-8260B	ND	A01	1
Total Xylenes	12	mg/kg	0.21		EPA-8260B	ND	A01	1
p- & m-Xylenes	8.9	mg/kg	0.11		EPA-8260B	ND	A01	1
o-Xylene	3.3	mg/kg	0.11		EPA-8260B	ND	A01	1
1,2-Dichloroethane-d4 (Surrogate)	95.9	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.8	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.7	%	74 - 121 (LCL - UCL)		EPA-8260B			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-05	Client Sample Name: 1156, MW-11S-S-N-10-140611, 6/11/2014 1:50:00PM
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Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-8260B	06/14/14	06/20/14	17:27	ADC	MS-V3	21.115	BXF1154

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Total Petroleum Hydrocarbons

BCL Sample ID: 1413204-05		Client Sample Name: 1156, MW-11S-S-N-10-140611, 6/11/2014 1:50:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - C8 - C9	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C10 - C11	1.9	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C12 - C14	1.9	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C15 - C16	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C17 - C18	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C19 - C20	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C21 - C22	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C23 - C28	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C29 - C32	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C33 - C36	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C37 - C40	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C41 - C43	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C44 plus	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH (Total)	ND	mg/kg	10		EPA-8015CC	ND		1
Tetracosane (Surrogate)	80.8	%	20 - 145 (LCL - UCL)		EPA-8015CC			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-8015CC	06/19/14	06/22/14	18:43	MWB	GC-2	0.987	BXF1756

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Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-06	Client Sample Name: 1156, MW-10S-S-N-2-140612, 6/12/2014 10:15:00AM
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	0.018	mg/kg	0.0044		EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0044		EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0044		EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0044		EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0044		EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0044		EPA-8260B	ND		1
n-Butylbenzene	0.012	mg/kg	0.0044		EPA-8260B	ND		1
sec-Butylbenzene	0.018	mg/kg	0.0044		EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0044		EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0044		EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0044		EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0044		EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0044		EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0044		EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0044		EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0044		EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0044		EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0044		EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0044		EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0044		EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0044		EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0044		EPA-8260B	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-06		Client Sample Name: 1156, MW-10S-S-N-2-140612, 6/12/2014 10:15:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0044		EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0044		EPA-8260B	ND		1
Ethylbenzene	0.032	mg/kg	0.0044		EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0044		EPA-8260B	ND		1
Isopropylbenzene	0.026	mg/kg	0.0044		EPA-8260B	ND		1
p-Isopropyltoluene	0.0068	mg/kg	0.0044		EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.0088		EPA-8260B	ND		1
Methyl t-butyl ether	0.0049	mg/kg	0.0044		EPA-8260B	ND		1
Naphthalene	0.032	mg/kg	0.0044		EPA-8260B	ND		1
n-Propylbenzene	0.071	mg/kg	0.0044		EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0044		EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0044		EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0044		EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0044		EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,2,4-Trimethylbenzene	0.11	mg/kg	0.0044		EPA-8260B	ND		1
1,3,5-Trimethylbenzene	0.038	mg/kg	0.0044		EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0044		EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.0088		EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0044		EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0044		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	101	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	93.8	%	74 - 121 (LCL - UCL)		EPA-8260B			1

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Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-06	Client Sample Name: 1156, MW-10S-S-N-2-140612, 6/12/2014 10:15:00AM
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Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-8260B	06/14/14	06/21/14	16:11	ADC	MS-V3	0.876	BXF1154

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Total Petroleum Hydrocarbons

BCL Sample ID: 1413204-06		Client Sample Name: 1156, MW-10S-S-N-2-140612, 6/12/2014 10:15:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - C8 - C9	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C10 - C11	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C12 - C14	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C15 - C16	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C17 - C18	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C19 - C20	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C21 - C22	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C23 - C28	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C29 - C32	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C33 - C36	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C37 - C40	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C41 - C43	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C44 plus	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH (Total)	ND	mg/kg	10		EPA-8015CC	ND		1
Tetracosane (Surrogate)	86.8	%	20 - 145 (LCL - UCL)		EPA-8015CC			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015CC	06/19/14	06/22/14 19:06	MWB	GC-2	0.997	BXF1756

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Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-07	Client Sample Name: 1156, MW-10S-S-N-5-140612, 6/12/2014 10:20:00AM
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	0.0062	mg/kg	0.0050		EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050		EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
n-Butylbenzene	0.040	mg/kg	0.0050		EPA-8260B	ND		1
sec-Butylbenzene	0.044	mg/kg	0.0050		EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050		EPA-8260B	ND		1
Chlorobenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050		EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050		EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050		EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050		EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050		EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0050		EPA-8260B	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-07		Client Sample Name: 1156, MW-10S-S-N-5-140612, 6/12/2014 10:20:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0050		EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Ethylbenzene	0.021	mg/kg	0.0050		EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Isopropylbenzene	0.042	mg/kg	0.0050		EPA-8260B	ND		1
p-Isopropyltoluene	0.020	mg/kg	0.0050		EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010		EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050		EPA-8260B	ND		1
Naphthalene	0.0062	mg/kg	0.0050		EPA-8260B	ND		1
n-Propylbenzene	0.12	mg/kg	0.0050		EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2,4-Trimethylbenzene	0.026	mg/kg	0.0050		EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050		EPA-8260B	ND		1
Total Xylenes	0.017	mg/kg	0.010		EPA-8260B	ND		1
p- & m-Xylenes	0.017	mg/kg	0.0050		EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	100	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.3	%	74 - 121 (LCL - UCL)		EPA-8260B			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-07	Client Sample Name: 1156, MW-10S-S-N-5-140612, 6/12/2014 10:20:00AM
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Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-8260B	06/14/14	06/21/14	16:37	ADC	MS-V3	0.940	BXF1154

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Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Total Petroleum Hydrocarbons

BCL Sample ID: 1413204-07		Client Sample Name: 1156, MW-10S-S-N-5-140612, 6/12/2014 10:20:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - C8 - C9	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C10 - C11	2.8	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C12 - C14	1.6	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C15 - C16	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C17 - C18	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C19 - C20	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C21 - C22	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C23 - C28	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C29 - C32	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C33 - C36	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C37 - C40	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C41 - C43	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C44 plus	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH (Total)	ND	mg/kg	10		EPA-8015CC	ND		1
Tetracosane (Surrogate)	80.0	%	20 - 145 (LCL - UCL)		EPA-8015CC			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-8015CC	06/19/14	06/22/14	20:13	MWB	GC-2	0.993	BXF1756

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Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-08	Client Sample Name: 1156, MW-10S-S-N-7-140612, 6/12/2014 10:30:00AM
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050		EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
n-Butylbenzene	0.15	mg/kg	0.0050		EPA-8260B	ND		1
sec-Butylbenzene	0.096	mg/kg	0.0050		EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050		EPA-8260B	ND		1
Chlorobenzene	0.032	mg/kg	0.0050		EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050		EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050		EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050		EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050		EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050		EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0050		EPA-8260B	ND		1

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Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-08		Client Sample Name: 1156, MW-10S-S-N-7-140612, 6/12/2014 10:30:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0050		EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Ethylbenzene	0.012	mg/kg	0.0050		EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Isopropylbenzene	0.047	mg/kg	0.0050		EPA-8260B	ND		1
p-Isopropyltoluene	0.022	mg/kg	0.0050		EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010		EPA-8260B	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050		EPA-8260B	ND		1
Naphthalene	0.016	mg/kg	0.0050		EPA-8260B	ND		1
n-Propylbenzene	0.13	mg/kg	0.0050		EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2,4-Trimethylbenzene	0.076	mg/kg	0.0050		EPA-8260B	ND		1
1,3,5-Trimethylbenzene	0.079	mg/kg	0.0050		EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050		EPA-8260B	ND		1
Total Xylenes	ND	mg/kg	0.010		EPA-8260B	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050		EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	100	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	112	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.7	%	74 - 121 (LCL - UCL)		EPA-8260B			1

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Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-08	Client Sample Name: 1156, MW-10S-S-N-7-140612, 6/12/2014 10:30:00AM
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Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-8260B	06/14/14	06/21/14	17:03	ADC	MS-V3	0.954	BXF1154

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Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Total Petroleum Hydrocarbons

BCL Sample ID: 1413204-08		Client Sample Name: 1156, MW-10S-S-N-7-140612, 6/12/2014 10:30:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - C8 - C9	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C10 - C11	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C12 - C14	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C15 - C16	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C17 - C18	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C19 - C20	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C21 - C22	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C23 - C28	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C29 - C32	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C33 - C36	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C37 - C40	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C41 - C43	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C44 plus	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH (Total)	ND	mg/kg	10		EPA-8015CC	ND		1
Tetracosane (Surrogate)	89.0	%	20 - 145 (LCL - UCL)		EPA-8015CC			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015CC	06/19/14	06/22/14 20:36	MWB	GC-2	1.007	BXF1756

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Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

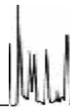
Volatile Organic Analysis (EPA Method 8260B/5035)

Table with 2 columns: BCL Sample ID (1413204-09) and Client Sample Name (1156, MW-10S-S-N-8.5-140612, 6/12/2014 10:40:00AM)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various organic compounds and their analysis results.

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Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-09		Client Sample Name: 1156, MW-10S-S-N-8.5-140612, 6/12/2014 10:40:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.089		EPA-8260B	ND	A01	1
trans-1,3-Dichloropropene	ND	mg/kg	0.089		EPA-8260B	ND	A01	1
Ethylbenzene	0.57	mg/kg	0.089		EPA-8260B	ND	A01	1
Hexachlorobutadiene	ND	mg/kg	0.089		EPA-8260B	ND	A01	1
Isopropylbenzene	0.24	mg/kg	0.089		EPA-8260B	ND	A01	1
p-Isopropyltoluene	0.11	mg/kg	0.089		EPA-8260B	ND	A01	1
Methylene chloride	ND	mg/kg	0.18		EPA-8260B	ND	A01	1
Methyl t-butyl ether	ND	mg/kg	0.089		EPA-8260B	ND	A01	1
Naphthalene	0.17	mg/kg	0.089		EPA-8260B	ND	A01	1
n-Propylbenzene	0.60	mg/kg	0.089		EPA-8260B	ND	A01	1
Styrene	ND	mg/kg	0.089		EPA-8260B	ND	A01	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.089		EPA-8260B	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.089		EPA-8260B	ND	A01	1
Tetrachloroethene	ND	mg/kg	0.089		EPA-8260B	ND	A01	1
Toluene	ND	mg/kg	0.089		EPA-8260B	ND	A01	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.089		EPA-8260B	ND	A01	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.089		EPA-8260B	ND	A01	1
1,1,1-Trichloroethane	ND	mg/kg	0.089		EPA-8260B	ND	A01	1
1,1,2-Trichloroethane	ND	mg/kg	0.089		EPA-8260B	ND	A01	1
Trichloroethene	ND	mg/kg	0.089		EPA-8260B	ND	A01	1
Trichlorofluoromethane	ND	mg/kg	0.089		EPA-8260B	ND	A01	1
1,2,3-Trichloropropane	ND	mg/kg	0.089		EPA-8260B	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.089		EPA-8260B	ND	A01	1
1,2,4-Trimethylbenzene	1.6	mg/kg	0.089		EPA-8260B	ND	A01	1
1,3,5-Trimethylbenzene	0.42	mg/kg	0.089		EPA-8260B	ND	A01	1
Vinyl chloride	ND	mg/kg	0.089		EPA-8260B	ND	A01	1
Total Xylenes	0.55	mg/kg	0.18		EPA-8260B	ND	A01	1
p- & m-Xylenes	0.55	mg/kg	0.089		EPA-8260B	ND	A01	1
o-Xylene	ND	mg/kg	0.089		EPA-8260B	ND	A01	1
1,2-Dichloroethane-d4 (Surrogate)	92.9	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.3	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	95.8	%	74 - 121 (LCL - UCL)		EPA-8260B			1

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Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-09	Client Sample Name: 1156, MW-10S-S-N-8.5-140612, 6/12/2014 10:40:00AM
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Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-8260B	06/14/14	06/20/14	19:11	ADC	MS-V3	17.883	BXF1155

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Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Total Petroleum Hydrocarbons

BCL Sample ID: 1413204-09		Client Sample Name: 1156, MW-10S-S-N-8.5-140612, 6/12/2014 10:40:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - C8 - C9	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C10 - C11	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C12 - C14	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C15 - C16	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C17 - C18	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C19 - C20	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C21 - C22	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C23 - C28	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C29 - C32	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C33 - C36	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C37 - C40	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C41 - C43	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C44 plus	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH (Total)	ND	mg/kg	10		EPA-8015CC	ND		1
Tetracosane (Surrogate)	80.9	%	20 - 145 (LCL - UCL)		EPA-8015CC			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015CC	06/19/14	06/22/14 20:58	MWB	GC-2	0.997	BXF1756

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-10	Client Sample Name: 1156, MW-10S-S-N-10-140612, 6/12/2014 10:45:00AM
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	0.068	mg/kg	0.0050		EPA-8260B	ND		1
Bromobenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Bromochloromethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
Bromodichloromethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
Bromoform	ND	mg/kg	0.0050		EPA-8260B	ND		1
Bromomethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
n-Butylbenzene	0.0058	mg/kg	0.0050		EPA-8260B	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050		EPA-8260B	ND		1
Chlorobenzene	0.0076	mg/kg	0.0050		EPA-8260B	ND		1
Chloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
Chloroform	ND	mg/kg	0.0050		EPA-8260B	ND		1
Chloromethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050		EPA-8260B	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Dibromochloromethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
Dibromomethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050		EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050		EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050		EPA-8260B	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0050		EPA-8260B	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-10		Client Sample Name: 1156, MW-10S-S-N-10-140612, 6/12/2014 10:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0050		EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Ethylbenzene	0.040	mg/kg	0.0050		EPA-8260B	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Isopropylbenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Methylene chloride	ND	mg/kg	0.010		EPA-8260B	ND		1
Methyl t-butyl ether	0.0081	mg/kg	0.0050		EPA-8260B	ND		1
Naphthalene	0.032	mg/kg	0.0050		EPA-8260B	ND		1
n-Propylbenzene	0.011	mg/kg	0.0050		EPA-8260B	ND		1
Styrene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
Tetrachloroethene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Toluene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
Trichloroethene	ND	mg/kg	0.0050		EPA-8260B	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2,4-Trimethylbenzene	0.069	mg/kg	0.0050		EPA-8260B	ND		1
1,3,5-Trimethylbenzene	0.015	mg/kg	0.0050		EPA-8260B	ND		1
Vinyl chloride	ND	mg/kg	0.0050		EPA-8260B	ND		1
Total Xylenes	0.041	mg/kg	0.010		EPA-8260B	ND		1
p- & m-Xylenes	0.041	mg/kg	0.0050		EPA-8260B	ND		1
o-Xylene	ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	102	%	70 - 121 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.3	%	81 - 117 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	96.7	%	74 - 121 (LCL - UCL)		EPA-8260B			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

BCL Sample ID: 1413204-10	Client Sample Name: 1156, MW-10S-S-N-10-140612, 6/12/2014 10:45:00AM
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Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-8260B	06/14/14	06/21/14	17:29	ADC	MS-V3	0.906	BXF1155

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Total Petroleum Hydrocarbons

BCL Sample ID: 1413204-10		Client Sample Name: 1156, MW-10S-S-N-10-140612, 6/12/2014 10:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - C8 - C9	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C10 - C11	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C12 - C14	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C15 - C16	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C17 - C18	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C19 - C20	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C21 - C22	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C23 - C28	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C29 - C32	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C33 - C36	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C37 - C40	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C41 - C43	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH - C44 plus	ND	mg/kg	1.0		EPA-8015CC	ND		1
TPH (Total)	ND	mg/kg	10		EPA-8015CC	ND		1
Tetracosane (Surrogate)	85.6	%	20 - 145 (LCL - UCL)		EPA-8015CC			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015CC	06/19/14	06/22/14 21:20	MWB	GC-2	1	BXF1756

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXF1154						
Benzene	BXF1154-BLK1	ND	mg/kg	0.0050		
Bromobenzene	BXF1154-BLK1	ND	mg/kg	0.0050		
Bromochloromethane	BXF1154-BLK1	ND	mg/kg	0.0050		
Bromodichloromethane	BXF1154-BLK1	ND	mg/kg	0.0050		
Bromoform	BXF1154-BLK1	ND	mg/kg	0.0050		
Bromomethane	BXF1154-BLK1	ND	mg/kg	0.0050		
n-Butylbenzene	BXF1154-BLK1	ND	mg/kg	0.0050		
sec-Butylbenzene	BXF1154-BLK1	ND	mg/kg	0.0050		
tert-Butylbenzene	BXF1154-BLK1	ND	mg/kg	0.0050		
Carbon tetrachloride	BXF1154-BLK1	ND	mg/kg	0.0050		
Chlorobenzene	BXF1154-BLK1	ND	mg/kg	0.0050		
Chloroethane	BXF1154-BLK1	ND	mg/kg	0.0050		
Chloroform	BXF1154-BLK1	ND	mg/kg	0.0050		
Chloromethane	BXF1154-BLK1	ND	mg/kg	0.0050		
2-Chlorotoluene	BXF1154-BLK1	ND	mg/kg	0.0050		
4-Chlorotoluene	BXF1154-BLK1	ND	mg/kg	0.0050		
Dibromochloromethane	BXF1154-BLK1	ND	mg/kg	0.0050		
1,2-Dibromo-3-chloropropane	BXF1154-BLK1	ND	mg/kg	0.0050		
1,2-Dibromoethane	BXF1154-BLK1	ND	mg/kg	0.0050		
Dibromomethane	BXF1154-BLK1	ND	mg/kg	0.0050		
1,2-Dichlorobenzene	BXF1154-BLK1	ND	mg/kg	0.0050		
1,3-Dichlorobenzene	BXF1154-BLK1	ND	mg/kg	0.0050		
1,4-Dichlorobenzene	BXF1154-BLK1	ND	mg/kg	0.0050		
Dichlorodifluoromethane	BXF1154-BLK1	ND	mg/kg	0.0050		
1,1-Dichloroethane	BXF1154-BLK1	ND	mg/kg	0.0050		
1,2-Dichloroethane	BXF1154-BLK1	ND	mg/kg	0.0050		
1,1-Dichloroethene	BXF1154-BLK1	ND	mg/kg	0.0050		
cis-1,2-Dichloroethene	BXF1154-BLK1	ND	mg/kg	0.0050		
trans-1,2-Dichloroethene	BXF1154-BLK1	ND	mg/kg	0.0050		
1,2-Dichloropropane	BXF1154-BLK1	ND	mg/kg	0.0050		
1,3-Dichloropropane	BXF1154-BLK1	ND	mg/kg	0.0050		
2,2-Dichloropropane	BXF1154-BLK1	ND	mg/kg	0.0050		
1,1-Dichloropropene	BXF1154-BLK1	ND	mg/kg	0.0050		
cis-1,3-Dichloropropene	BXF1154-BLK1	ND	mg/kg	0.0050		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
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QC Batch ID: BXF1154

trans-1,3-Dichloropropene	BXF1154-BLK1	ND	mg/kg	0.0050		
Ethylbenzene	BXF1154-BLK1	ND	mg/kg	0.0050		
Hexachlorobutadiene	BXF1154-BLK1	ND	mg/kg	0.0050		
Isopropylbenzene	BXF1154-BLK1	ND	mg/kg	0.0050		
p-Isopropyltoluene	BXF1154-BLK1	ND	mg/kg	0.0050		
Methylene chloride	BXF1154-BLK1	ND	mg/kg	0.010		
Methyl t-butyl ether	BXF1154-BLK1	ND	mg/kg	0.0050		
Naphthalene	BXF1154-BLK1	ND	mg/kg	0.0050		
n-Propylbenzene	BXF1154-BLK1	ND	mg/kg	0.0050		
Styrene	BXF1154-BLK1	ND	mg/kg	0.0050		
1,1,1,2-Tetrachloroethane	BXF1154-BLK1	ND	mg/kg	0.0050		
1,1,1,2-Tetrachloroethane	BXF1154-BLK1	ND	mg/kg	0.0050		
Tetrachloroethene	BXF1154-BLK1	ND	mg/kg	0.0050		
Toluene	BXF1154-BLK1	ND	mg/kg	0.0050		
1,2,3-Trichlorobenzene	BXF1154-BLK1	ND	mg/kg	0.0050		
1,2,4-Trichlorobenzene	BXF1154-BLK1	ND	mg/kg	0.0050		
1,1,1-Trichloroethane	BXF1154-BLK1	ND	mg/kg	0.0050		
1,1,2-Trichloroethane	BXF1154-BLK1	ND	mg/kg	0.0050		
Trichloroethene	BXF1154-BLK1	ND	mg/kg	0.0050		
Trichlorofluoromethane	BXF1154-BLK1	ND	mg/kg	0.0050		
1,2,3-Trichloropropane	BXF1154-BLK1	ND	mg/kg	0.0050		
1,1,2-Trichloro-1,2,2-trifluoroethane	BXF1154-BLK1	ND	mg/kg	0.0050		
1,2,4-Trimethylbenzene	BXF1154-BLK1	ND	mg/kg	0.0050		
1,3,5-Trimethylbenzene	BXF1154-BLK1	ND	mg/kg	0.0050		
Vinyl chloride	BXF1154-BLK1	ND	mg/kg	0.0050		
Total Xylenes	BXF1154-BLK1	ND	mg/kg	0.010		
p- & m-Xylenes	BXF1154-BLK1	ND	mg/kg	0.0050		
o-Xylene	BXF1154-BLK1	ND	mg/kg	0.0050		
1,2-Dichloroethane-d4 (Surrogate)	BXF1154-BLK1	84.3	%	70 - 121 (LCL - UCL)		
Toluene-d8 (Surrogate)	BXF1154-BLK1	95.6	%	81 - 117 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BXF1154-BLK1	90.6	%	74 - 121 (LCL - UCL)		

QC Batch ID: BXF1155

Benzene	BXF1155-BLK1	ND	mg/kg	0.0050		
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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXF1155						
Bromobenzene	BXF1155-BLK1	ND	mg/kg	0.0050		
Bromochloromethane	BXF1155-BLK1	ND	mg/kg	0.0050		
Bromodichloromethane	BXF1155-BLK1	ND	mg/kg	0.0050		
Bromoform	BXF1155-BLK1	ND	mg/kg	0.0050		
Bromomethane	BXF1155-BLK1	ND	mg/kg	0.0050		
n-Butylbenzene	BXF1155-BLK1	ND	mg/kg	0.0050		
sec-Butylbenzene	BXF1155-BLK1	ND	mg/kg	0.0050		
tert-Butylbenzene	BXF1155-BLK1	ND	mg/kg	0.0050		
Carbon tetrachloride	BXF1155-BLK1	ND	mg/kg	0.0050		
Chlorobenzene	BXF1155-BLK1	ND	mg/kg	0.0050		
Chloroethane	BXF1155-BLK1	ND	mg/kg	0.0050		
Chloroform	BXF1155-BLK1	ND	mg/kg	0.0050		
Chloromethane	BXF1155-BLK1	ND	mg/kg	0.0050		
2-Chlorotoluene	BXF1155-BLK1	ND	mg/kg	0.0050		
4-Chlorotoluene	BXF1155-BLK1	ND	mg/kg	0.0050		
Dibromochloromethane	BXF1155-BLK1	ND	mg/kg	0.0050		
1,2-Dibromo-3-chloropropane	BXF1155-BLK1	ND	mg/kg	0.0050		
1,2-Dibromoethane	BXF1155-BLK1	ND	mg/kg	0.0050		
Dibromomethane	BXF1155-BLK1	ND	mg/kg	0.0050		
1,2-Dichlorobenzene	BXF1155-BLK1	ND	mg/kg	0.0050		
1,3-Dichlorobenzene	BXF1155-BLK1	ND	mg/kg	0.0050		
1,4-Dichlorobenzene	BXF1155-BLK1	ND	mg/kg	0.0050		
Dichlorodifluoromethane	BXF1155-BLK1	ND	mg/kg	0.0050		
1,1-Dichloroethane	BXF1155-BLK1	ND	mg/kg	0.0050		
1,2-Dichloroethane	BXF1155-BLK1	ND	mg/kg	0.0050		
1,1-Dichloroethene	BXF1155-BLK1	ND	mg/kg	0.0050		
cis-1,2-Dichloroethene	BXF1155-BLK1	ND	mg/kg	0.0050		
trans-1,2-Dichloroethene	BXF1155-BLK1	ND	mg/kg	0.0050		
1,2-Dichloropropane	BXF1155-BLK1	ND	mg/kg	0.0050		
1,3-Dichloropropane	BXF1155-BLK1	ND	mg/kg	0.0050		
2,2-Dichloropropane	BXF1155-BLK1	ND	mg/kg	0.0050		
1,1-Dichloropropene	BXF1155-BLK1	ND	mg/kg	0.0050		
cis-1,3-Dichloropropene	BXF1155-BLK1	ND	mg/kg	0.0050		
trans-1,3-Dichloropropene	BXF1155-BLK1	ND	mg/kg	0.0050		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXF1155						
Ethylbenzene	BXF1155-BLK1	ND	mg/kg	0.0050		
Hexachlorobutadiene	BXF1155-BLK1	ND	mg/kg	0.0050		
Isopropylbenzene	BXF1155-BLK1	ND	mg/kg	0.0050		
p-Isopropyltoluene	BXF1155-BLK1	ND	mg/kg	0.0050		
Methylene chloride	BXF1155-BLK1	ND	mg/kg	0.010		
Methyl t-butyl ether	BXF1155-BLK1	ND	mg/kg	0.0050		
Naphthalene	BXF1155-BLK1	ND	mg/kg	0.0050		
n-Propylbenzene	BXF1155-BLK1	ND	mg/kg	0.0050		
Styrene	BXF1155-BLK1	ND	mg/kg	0.0050		
1,1,1,2-Tetrachloroethane	BXF1155-BLK1	ND	mg/kg	0.0050		
1,1,2,2-Tetrachloroethane	BXF1155-BLK1	ND	mg/kg	0.0050		
Tetrachloroethene	BXF1155-BLK1	ND	mg/kg	0.0050		
Toluene	BXF1155-BLK1	ND	mg/kg	0.0050		
1,2,3-Trichlorobenzene	BXF1155-BLK1	ND	mg/kg	0.0050		
1,2,4-Trichlorobenzene	BXF1155-BLK1	ND	mg/kg	0.0050		
1,1,1-Trichloroethane	BXF1155-BLK1	ND	mg/kg	0.0050		
1,1,2-Trichloroethane	BXF1155-BLK1	ND	mg/kg	0.0050		
Trichloroethene	BXF1155-BLK1	ND	mg/kg	0.0050		
Trichlorofluoromethane	BXF1155-BLK1	ND	mg/kg	0.0050		
1,2,3-Trichloropropane	BXF1155-BLK1	ND	mg/kg	0.0050		
1,1,2-Trichloro-1,2,2-trifluoroethane	BXF1155-BLK1	ND	mg/kg	0.0050		
1,2,4-Trimethylbenzene	BXF1155-BLK1	ND	mg/kg	0.0050		
1,3,5-Trimethylbenzene	BXF1155-BLK1	ND	mg/kg	0.0050		
Vinyl chloride	BXF1155-BLK1	ND	mg/kg	0.0050		
Total Xylenes	BXF1155-BLK1	ND	mg/kg	0.010		
p- & m-Xylenes	BXF1155-BLK1	ND	mg/kg	0.0050		
o-Xylene	BXF1155-BLK1	ND	mg/kg	0.0050		
1,2-Dichloroethane-d4 (Surrogate)	BXF1155-BLK1	84.6	%	70 - 121 (LCL - UCL)		
Toluene-d8 (Surrogate)	BXF1155-BLK1	95.8	%	81 - 117 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BXF1155-BLK1	88.2	%	74 - 121 (LCL - UCL)		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
QC Batch ID: BXF1154										
Benzene	BXF1154-BS1	LCS	0.12776	0.12500	mg/kg	102		70 - 130		
Bromodichloromethane	BXF1154-BS1	LCS	0.10026	0.12500	mg/kg	80.2		70 - 130		
Chlorobenzene	BXF1154-BS1	LCS	0.11437	0.12500	mg/kg	91.5		70 - 130		
Chloroethane	BXF1154-BS1	LCS	0.12138	0.12500	mg/kg	97.1		70 - 130		
1,4-Dichlorobenzene	BXF1154-BS1	LCS	0.12363	0.12500	mg/kg	98.9		70 - 130		
1,1-Dichloroethane	BXF1154-BS1	LCS	0.12029	0.12500	mg/kg	96.2		70 - 130		
1,1-Dichloroethene	BXF1154-BS1	LCS	0.13317	0.12500	mg/kg	107		70 - 130		
Toluene	BXF1154-BS1	LCS	0.11345	0.12500	mg/kg	90.8		70 - 130		
Trichloroethene	BXF1154-BS1	LCS	0.10824	0.12500	mg/kg	86.6		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BXF1154-BS1	LCS	0.043240	0.050000	mg/kg	86.5		70 - 121		
Toluene-d8 (Surrogate)	BXF1154-BS1	LCS	0.048970	0.050000	mg/kg	97.9		81 - 117		
4-Bromofluorobenzene (Surrogate)	BXF1154-BS1	LCS	0.047410	0.050000	mg/kg	94.8		74 - 121		

QC Batch ID: BXF1155										
Benzene	BXF1155-BS1	LCS	0.13115	0.12500	mg/kg	105		70 - 130		
Bromodichloromethane	BXF1155-BS1	LCS	0.10073	0.12500	mg/kg	80.6		70 - 130		
Chlorobenzene	BXF1155-BS1	LCS	0.11480	0.12500	mg/kg	91.8		70 - 130		
Chloroethane	BXF1155-BS1	LCS	0.12790	0.12500	mg/kg	102		70 - 130		
1,4-Dichlorobenzene	BXF1155-BS1	LCS	0.12350	0.12500	mg/kg	98.8		70 - 130		
1,1-Dichloroethane	BXF1155-BS1	LCS	0.12091	0.12500	mg/kg	96.7		70 - 130		
1,1-Dichloroethene	BXF1155-BS1	LCS	0.13283	0.12500	mg/kg	106		70 - 130		
Toluene	BXF1155-BS1	LCS	0.11606	0.12500	mg/kg	92.8		70 - 130		
Trichloroethene	BXF1155-BS1	LCS	0.10735	0.12500	mg/kg	85.9		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BXF1155-BS1	LCS	0.043040	0.050000	mg/kg	86.1		70 - 121		
Toluene-d8 (Surrogate)	BXF1155-BS1	LCS	0.048670	0.050000	mg/kg	97.3		81 - 117		
4-Bromofluorobenzene (Surrogate)	BXF1155-BS1	LCS	0.047130	0.050000	mg/kg	94.3		74 - 121		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: BXF1154		Used client sample: N								
Benzene	MS	1408395-64	ND	0.13089	0.12500	mg/kg		105		70 - 130
	MSD	1408395-64	ND	0.12924	0.12500	mg/kg	1.3	103	20	70 - 130
Bromodichloromethane	MS	1408395-64	ND	0.10291	0.12500	mg/kg		82.3		70 - 130
	MSD	1408395-64	ND	0.10350	0.12500	mg/kg	0.6	82.8	20	70 - 130
Chlorobenzene	MS	1408395-64	ND	0.11869	0.12500	mg/kg		95.0		70 - 130
	MSD	1408395-64	ND	0.12072	0.12500	mg/kg	1.7	96.6	20	70 - 130
Chloroethane	MS	1408395-64	ND	0.12347	0.12500	mg/kg		98.8		70 - 130
	MSD	1408395-64	ND	0.12043	0.12500	mg/kg	2.5	96.3	20	70 - 130
1,4-Dichlorobenzene	MS	1408395-64	ND	0.12729	0.12500	mg/kg		102		70 - 130
	MSD	1408395-64	ND	0.12951	0.12500	mg/kg	1.7	104	20	70 - 130
1,1-Dichloroethane	MS	1408395-64	ND	0.12308	0.12500	mg/kg		98.5		70 - 130
	MSD	1408395-64	ND	0.12010	0.12500	mg/kg	2.5	96.1	20	70 - 130
1,1-Dichloroethene	MS	1408395-64	ND	0.13939	0.12500	mg/kg		112		70 - 130
	MSD	1408395-64	ND	0.13716	0.12500	mg/kg	1.6	110	20	70 - 130
Toluene	MS	1408395-64	ND	0.11888	0.12500	mg/kg		95.1		70 - 130
	MSD	1408395-64	ND	0.11943	0.12500	mg/kg	0.5	95.5	20	70 - 130
Trichloroethene	MS	1408395-64	ND	0.11379	0.12500	mg/kg		91.0		70 - 130
	MSD	1408395-64	ND	0.11453	0.12500	mg/kg	0.6	91.6	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1408395-64	ND	0.042480	0.050000	mg/kg		85.0		70 - 121
	MSD	1408395-64	ND	0.041960	0.050000	mg/kg	1.2	83.9		70 - 121
Toluene-d8 (Surrogate)	MS	1408395-64	ND	0.048910	0.050000	mg/kg		97.8		81 - 117
	MSD	1408395-64	ND	0.048440	0.050000	mg/kg	1.0	96.9		81 - 117
4-Bromofluorobenzene (Surrogate)	MS	1408395-64	ND	0.047440	0.050000	mg/kg		94.9		74 - 121
	MSD	1408395-64	ND	0.048470	0.050000	mg/kg	2.1	96.9		74 - 121
QC Batch ID: BXF1155		Used client sample: N								
Benzene	MS	1408395-67	ND	0.12517	0.12500	mg/kg		100		70 - 130
	MSD	1408395-67	ND	0.12640	0.12500	mg/kg	1.0	101	20	70 - 130
Bromodichloromethane	MS	1408395-67	ND	0.098970	0.12500	mg/kg		79.2		70 - 130
	MSD	1408395-67	ND	0.099660	0.12500	mg/kg	0.7	79.7	20	70 - 130
Chlorobenzene	MS	1408395-67	ND	0.11625	0.12500	mg/kg		93.0		70 - 130
	MSD	1408395-67	ND	0.11724	0.12500	mg/kg	0.8	93.8	20	70 - 130
Chloroethane	MS	1408395-67	ND	0.12041	0.12500	mg/kg		96.3		70 - 130
	MSD	1408395-67	ND	0.12036	0.12500	mg/kg	0.0	96.3	20	70 - 130
1,4-Dichlorobenzene	MS	1408395-67	ND	0.12280	0.12500	mg/kg		98.2		70 - 130
	MSD	1408395-67	ND	0.12488	0.12500	mg/kg	1.7	99.9	20	70 - 130
1,1-Dichloroethane	MS	1408395-67	ND	0.11683	0.12500	mg/kg		93.5		70 - 130
	MSD	1408395-67	ND	0.11926	0.12500	mg/kg	2.1	95.4	20	70 - 130

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Volatile Organic Analysis (EPA Method 8260B/5035)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: BXF1155		Used client sample: N								
1,1-Dichloroethene	MS	1408395-67	ND	0.12733	0.12500	mg/kg		102		70 - 130
	MSD	1408395-67	ND	0.13087	0.12500	mg/kg	2.7	105	20	70 - 130
Toluene	MS	1408395-67	ND	0.11333	0.12500	mg/kg		90.7		70 - 130
	MSD	1408395-67	ND	0.11396	0.12500	mg/kg	0.6	91.2	20	70 - 130
Trichloroethene	MS	1408395-67	ND	0.10735	0.12500	mg/kg		85.9		70 - 130
	MSD	1408395-67	ND	0.10806	0.12500	mg/kg	0.7	86.4	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1408395-67	ND	0.040470	0.050000	mg/kg		80.9		70 - 121
	MSD	1408395-67	ND	0.041500	0.050000	mg/kg	2.5	83.0		70 - 121
Toluene-d8 (Surrogate)	MS	1408395-67	ND	0.048390	0.050000	mg/kg		96.8		81 - 117
	MSD	1408395-67	ND	0.048810	0.050000	mg/kg	0.9	97.6		81 - 117
4-Bromofluorobenzene (Surrogate)	MS	1408395-67	ND	0.047210	0.050000	mg/kg		94.4		74 - 121
	MSD	1408395-67	ND	0.046510	0.050000	mg/kg	1.5	93.0		74 - 121

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXF1756						
TPH - C8 - C9	BXF1756-BLK1	ND	mg/kg	1.0		
TPH - C10 - C11	BXF1756-BLK1	ND	mg/kg	1.0		
TPH - C12 - C14	BXF1756-BLK1	ND	mg/kg	1.0		
TPH - C15 - C16	BXF1756-BLK1	ND	mg/kg	1.0		
TPH - C17 - C18	BXF1756-BLK1	ND	mg/kg	1.0		
TPH - C19 - C20	BXF1756-BLK1	ND	mg/kg	1.0		
TPH - C21 - C22	BXF1756-BLK1	ND	mg/kg	1.0		
TPH - C23 - C28	BXF1756-BLK1	ND	mg/kg	1.0		
TPH - C29 - C32	BXF1756-BLK1	ND	mg/kg	1.0		
TPH - C33 - C36	BXF1756-BLK1	ND	mg/kg	1.0		
TPH - C37 - C40	BXF1756-BLK1	ND	mg/kg	1.0		
TPH - C41 - C43	BXF1756-BLK1	ND	mg/kg	1.0		
TPH - C44 plus	BXF1756-BLK1	ND	mg/kg	1.0		
TPH (Total)	BXF1756-BLK1	ND	mg/kg	10		
TPH - Diesel (FFP)	BXF1756-BLK1	ND	mg/kg	10		
Tetracosane (Surrogate)	BXF1756-BLK1	87.7	%	20 - 145 (LCL - UCL)		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: BXF1756										
TPH - Diesel (FFP)	BXF1756-BS1	LCS	73.932	81.433	mg/kg	90.8		64 - 124		
Tetracosane (Surrogate)	BXF1756-BS1	LCS	2.9072	3.2573	mg/kg	89.3		20 - 145		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent		Lab Quals
								Recovery	RPD	
QC Batch ID: BXF1756		Used client sample: Y - Description: MW-11S-S-N-2-140611, 06/11/2014 13:30								
TPH - Diesel (FFP)	MS	1413204-01	ND	70.910	83.056	mg/kg		85.4		52 - 131
	MSD	1413204-01	ND	74.080	83.333	mg/kg	4.4	88.9	30	52 - 131
Tetracosane (Surrogate)	MS	1413204-01	ND	2.8684	3.3223	mg/kg		86.3		20 - 145
	MSD	1413204-01	ND	2.9502	3.3333	mg/kg	2.8	88.5		20 - 145

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 06/24/2014 16:39
Project: 1156
Project Number: 351645
Project Manager: Brenda Evans

Notes And Definitions

- MDL Method Detection Limit
- ND Analyte Not Detected at or above the reporting limit
- PQL Practical Quantitation Limit
- RPD Relative Percent Difference
- A01 PQL's and MDL's are raised due to sample dilution.

Appendix D

Boring Logs and Well Construction Diagrams



1220 Avenida Acaso
Camarillo, CA 93012
(805) 388-3775
www.aecom.com

Client: Chevron EMC

Project Number: 60314377

Site Description/Location: 4276 MacArthur Blvd, Oakland, California

Coordinates: See Survey Elevation: Datum:

Drilling Equipment/Method: DPT Combo Rig/HSA Weather:

Sample Type(s): Direct Push Boring Diameter: 10 IN.

Boring No. MW-10S

Ambient PID Reading: NS

Sheet: 1 of 1

Monitoring Well Installed: Yes

Screened Interval: 6.5-10 ft.

Approved By:

Logged By: J. Harms

Date/Time Started: 06-12-14 / 10:15

Depth of Boring: 10 FT BGS

Drilling Contractor: Penecore

Backfill: NA

Date/Time Finished: 06-12-14 / 10:45

Water Level: dry FT BGS

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	PID Reading (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay), description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.	Well Diagram
								3 INCH ASPHALT	
					0.4	ML		LEAN CLAY WITH SAND AND GRAVEL, brown (5YR 5/4), 70% low-plastic clay, 20% fine-to medium-grained sand, 10% fine-grained gravel (max size 0.25"), subangular, medium dense, dry, HC odor	Concrete
	MW-10S-2			1	2.6	CH		FAT CLAY, olive gray (5Y5/2) with orange mottling, 90% medium-plastic clay, 10% silt, stiff, dry, HC odor	Bentonite Chips
					0.7				
					4.1	CL		LEAN CLAY, olive gray (5Y5/2), 80% low-plastic clay, 10% fine-to medium-grained sand, 10% silt, stiff, dry, HC odor	
5	MW-10S-5			1	8.1	ML		SILT WITH SAND, olive gray and brown mottled (5Y 5/2 and 5YR 5/4), 60% silt, 20% low-plastic clay, 20% fine-to coarse-grained sand, dense, dry, odor decreases, gravel at 5.5' to 5.7'	Sand - Monterey #3
					0.4				
	MW-10S-7			1	28.1	CH		FAT CLAY, brown (10 YR 6/4) with grey staining, 90% medium-plastic clay, 10% silt, stiff, dry, HC odor and staining	
	MW-10S-8			1	2.9				0.020 Slot size
					24				
10	MW-10S-10			1	3.5			, 85% medium-plastic clay, 10% silt, 5% gravel	

Notes:



1220 Avenida Acaso
Camarillo, CA 93012
(805) 388-3775
www.aecom.com

Client: Chevron EMC

Project Number: 60314377

Site Description/Location: 4276 MacArthur Blvd, Oakland, California

Coordinates: See Survey Elevation: Datum:

Drilling Equipment/Method: DPT Combo Rig/HSA Weather:

Sample Type(s): Direct Push Boring Diameter: 10 IN.

Boring No. MW-11S

Ambient PID Reading: NS

Sheet: 1 of 1

Monitoring Well Installed: Yes

Screened Interval: 6.5-10 ft.

Approved By:

Logged By: J. Harms

Date/Time Started: 06-11-14 / 13:40

Depth of Boring: 10 FT BGS

Drilling Contractor: Penecore

Backfill: NA

Date/Time Finished: 06-11-14 / 13:40

Water Level: 8.68 FT BGS

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	PID Reading (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay), description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.	Well Diagram
								6 INCH ASPHALT	
					0.0	SM		FILL, SILTY GRAVEL, brownish yellow (10YR 6/6), 60% fine-to coarse-grained gravel (max size 2"), 30% silt, 10% fine-grained sand, subangular, dry, no odor	Concrete
	MW-11S-2			1	0.0			, 60% fine-to coarse-grained gravel (max size 1.5"), 20% silt, 10% fine-grained sand, 10% clay	Bentonite Chips
					0.0	ML		LEAN CLAY WITH SILT, brown (10YR 5/3), 70% low-plastic clay, 20% silt, 10% fine-grained sand, medium dense, dry	
	MW-11S-4			1	0.4			, slight HC odor	
5					4.6			, moist at 5'-5.5'	Sand - Monterey #3
	MW-11S-6			1	16.0	CL		LEAN CLAY WITH SILT AND TRACE GRAVEL, gray HC stained, 60% low-plastic clay, 25% fine-to medium-grained sand, 10% silt, 5% fine-grained gravel (max size 0.25"), medium dense, dry, HC odor	
					15.8	ML		LEAN CLAY WITH SILT, gray HC stained, 55% low-plastic clay, 35% fine-to medium-grained sand, 10% silt, medium dense, dry, HC odor	
	MW-11S-8			1	47.5	ML		SILT WITH SAND, brown (7.5YR 5/4), 60% silt, 30% fine-to medium-grained sand, 5% non-plastic clay, 5% fine-grained gravel (max size 0.25"), medium dense, dry, HC odor	0.020 Slot size
					325				
10	MW-11S-10			1	361				

Notes:

Appendix E

Well Development Logs

Well/Piezometer Development Record

Client: Chevron Site Location: 4276 MacArthur Blvd, Oakland CA
 Project No: _____ Date: 7-3-14 Developer: Jim Harms

WELL/PIEZOMETER DATA

Well Piezometer Diameter 4" Material 316SS
 Measuring Point Description N top casing Geology at Screen Interval _____
 Depth to Top of Screen (ft.) 3.5 (if known) _____
 Depth to Bottom of Screen (ft.) 10.0 Time of Water Level Measurement _____
 Total Well Depth (ft.) 10.33 Calculate Purge Volume (gal.) _____
 Depth to Static Water Level (ft.) 10.13 Disposal Method _____
 Wellhead PID/FID _____
 Original Well Development Redevelopment Date of Original Development _____

DEVELOPMENT METHOD

PURGE METHOD

Field Testing Equipment Used: _____
 Make ultra meter II Model _____ Serial Number _____
ys: 650A

Field Testing Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	Color	Odor	Other
<u>Not enough water to develop well</u>									

ACCEPTANCE CRITERIA (from workplan)

Min. Purge Volume (_____ well volumes) _____ gallons
 Maximum Turbidity Allowed _____ NTUs
 Stabilization of parameters _____%

Has required volume been removed
 Has required turbidity been reached
 Have parameters stabilized
 If no or N/A explain below:

Yes	No	N/A
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Signature _____

Date: _____

Well/Piezometer Development Record

Client: Chevron Site Location: 4276 MacArthur Blvd, Oakland
 Project No: _____ Date: 7/3/14 Developer: Jim Harms

WELL/PIEZOMETER DATA

Well Piezometer Diameter 4" Material 316 SS
 Measuring Point Description North Top Casing Geology at Screen Interval _____
 Depth to Top of Screen (ft.) 3.5 (if known) _____
 Depth to Bottom of Screen (ft.) 10.0 Time of Water Level Measurement 0840
 Total Well Depth (ft.) 10.16 Calculate Purge Volume (gal.) 4.14 x .65 = 2.69
 Depth to Static Water Level (ft.) 6.02 Disposal Method drum
 Wellhead PID/FID _____
 Original Well Development Redevelopment Date of Original Development 7/3/14

DEVELOPMENT METHOD

Bailer & inertial pump

PURGE METHOD

Field Testing Equipment Used: _____
 Make Hydrameter II Model _____ Serial Number 8589
Jsi SSD A DOT III

Field Testing Calibration Documentation Found in Field Notebook # _____ Page # _____

Time	Volume Removed (gal)	T° (C/F)	pH	Spec. Cond (umhos)	Color Turbidity (NTUs)	DO	Color	Odor	ORP - Other
0848	2.0	71.9	7.46	2186	brn - cloudy	0.46	brn	HC	-14
0906	2.0 4.0	72.2	6.75	2210	cloudy	0.41	brn	HG	-12
0907	6.0	68.5	6.67	2251	silty	0.39	brn	HC	-16
0950	6.25	67.8	6.92	2224			brn	HC	+25

dry @ 6 gal
dry @ 6.25

ACCEPTANCE CRITERIA (from workplan)

Min. Purge Volume (_____ well volumes) _____ gallons
 Maximum Turbidity Allowed _____ NTUs
 Stabilization of parameters _____ %

Yes No N/A

 If no or N/A explain below:

Well only recharges to 9.71 feet

Signature [Signature] Date: _____

**Equipment Calibration Daily Log
Water Equipment**

Project Name <u>351645 Oakland</u>	Date: <u>7/3/14</u>
Project No. _____ Location <u>4276 MacArthur</u>	Time: AM <u>8:45</u>
Positive response checks will be done every 4 hrs.; AM, Midday and PM	
PM _____	

pH Meter

Model ultra meter II Serial No. _____

	AM	Adjustment	PM		
pH 7.00 Buffer Solution: pH	<u>7.40</u>	<u>7.02</u>		Exp. Date	Lot #
pH 4.00 Buffer Solution: pH	<u>4.43</u>	<u>4.01</u>		Exp. Date	Lot #
pH 10.00 Buffer Solution: pH	<u>10.61</u>	<u>10.03</u>		Exp. Date	Lot #
Temperature <u>67.0°F</u>	(AM)		(PM)	Comments _____	
Operator Signature <u>[Signature]</u>	(AM)		(PM)	_____	

Conductivity Meter

Model ultra meter II Serial No. _____

Calibration Solution _____ Exp. Date _____ Lot # _____

	AM	Adjustment	PM	
Micromho Reading				Comments _____
Temperature _____	(AM)		(PM)	_____
Operator Signature _____	(AM)		(PM)	_____

Turbidimeter

Model _____ Serial No. _____

Calibration Blank	AM	Adjustment	PM	Comments

Operator Signature _____ (AM) _____ (PM)

Dissolved Oxygen Meter

Model ysi 550 A Serial No. DO III

Calibration Method Fresh Air Comments _____

Precalibration (mg/L) 8.45 (AM) _____ (PM) _____

Post-calibration (mg/L) _____ (AM) _____ (PM) _____

Operator Signature [Signature] (AM) _____ (PM) _____

Oxidation/Reduction Potential Meter

Model _____ Serial No. _____

Zobell Solution Expiration Date _____ Zobell Solution Lot No. _____

	Temp.(Zobell Solution)	Expected Reading	Actual Reading
AM			
PM			

Operator Signature _____ (AM) _____ (PM)

Checked By _____ Date _____