Roya C. Kambin
Project Manager
Marketing Business Unit

Chevron Environmental Management Company
6101 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 790-6270
RKambin@chevron.com

January 21, 2013

Alameda County Health Care Services Agency
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

RECEIVED
By Alameda County Environmental Health at 7:53 am, Jan 23, 2013

Re: **Chevron Facility No. 351641 (Former Unocal Service Station No. 4625)**
3070 Fruitvale Avenue, Oakland, California

ACEH Fuel Leak Case No. RO0000298
RWQCB Case No. 01-2346
GeoTracker Global ID T0600102156

I have reviewed the attached report dated January 21, 2013.

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,

Roya Kambin
Project Manager

Attachment: *Second Semi-Annual 2012 Groundwater Monitoring Report* by AECOM Environment, Inc.

AECOM
10461 Old Placerville Road
Suite 170
Sacramento, CA 95827
www.aecom.com

916 361 6400 tel
916 361 6401 fax

January 21, 2013

Mr. Keith Nowell
Alameda County Environmental Health (ACEH)
1131 Harbor Bay Parkway, Suite 250
Alameda CA 94502

Subject: Second Semi-Annual 2012 Groundwater Monitoring Report
Chevron Facility No. 351641 (Former Unocal Service Station No. 4625)
3070 Fruitvale Avenue, Oakland, California
Fuel Leak Case RO0000298

Dear Mr. Nowell,

On behalf of Chevron Environmental Management Company, for itself and as Attorney-in-Fact for Union Oil Company of California (hereinafter "CEMC"), AECOM Environment, Inc. (AECOM) has been authorized by CEMC to prepare the fourth quarter 2012 semi-annual groundwater monitoring report for the site located at 3070 Fruitvale Avenue in Oakland, California (Site) (**Figure 1**). The locations of former and current site features are illustrated on **Figure 2**. Semi-annual groundwater monitoring is intended to evaluate the distribution of petroleum hydrocarbon constituents in groundwater beneath the site. Groundwater sampling was performed by TRC Solutions (TRC) of Irvine, California. This report summarizes sample results collected from the Site during the fourth quarter of 2012.

Site Background and History

In April and May 1998, two 10,000-gallon gasoline underground storage tanks (USTs), one 550-gallon waste oil tank, associated piping, four dispenser islands, and the station building were removed. Over 1,160 tons of excavated soils were transported to Forward Landfill in Stockton, California. Approximately 40,000 gallons of water were removed from the gasoline UST excavation and transported to the Tosco Refinery in Rodeo, California for treatment and disposal. A conductor cased well (USTW) was installed in the excavation backfill during installation of the replacement gasoline USTs. The former gasoline USTs were replaced with two 12,000-gallon gasoline USTs and the waste oil UST was replaced with an aboveground storage tank. Concentrations of total petroleum hydrocarbons as gasoline in soil (TPHg) ranged from 4.2 milligrams per kilogram (mg/kg) below product lines to a maximum of 1,700 mg/kg in soil beneath the UST excavation. Benzene ranged from 0.013 mg/kg beneath product lines to 17 mg/kg below the UST excavation. Methyl tert butyl ether (MTBE) ranged from 0.071 mg/kg to a maximum of 150 mg/kg beneath product lines. Chromium and Nickel were reported at concentrations of 700 mg/kg and 1,400 mg/kg, respectively beneath the waste oil UST excavation and remote fill line.

From April 2000 four monitoring wells (MW-1 through MW-4) were installed at the site. MTBE was not detected in any of the soil samples, benzene, toluene, ethylbenzene, and xylenes (BTEX) were detected in MW-2 and MW-3 soil only.

In November 2002, four exploratory borings were advanced to between 12 and 25 feet below ground surface (bgs). The borings drilled to 25 feet were converted to MW-5 and MW-6. The shallower borings were B-1 (12 feet bgs) and B-2 (14.5 feet bgs); grab groundwater samples were collected from both borings. Soil samples contained concentrations of benzene, MTBE, and tertiary butyl alcohol (TBA), and TPHg. Grab groundwater samples collected from the two soil borings contained low concentrations of petroleum hydrocarbons in both samples.

In February and March 2006, TRC conducted a hydropunch groundwater investigation at the site which involved the advancement of three onsite and seven offsite hydropunch borings using a cone penetrometer

testing (CPT) rig. No petroleum hydrocarbons or fuel oxygenates were detected in the shallow or deep offsite borings. Detections were found in the onsite borings consistent with existing monitoring well data.

In July 2007, TRC installed one additional onsite groundwater monitoring well (MW-7) to a total depth of 55 feet bgs and two offsite groundwater monitoring wells (MW-8 and MW-9) to a total depth of 20 feet bgs. TPHg, BTEX, and MTBE were detected in MW-7, MW-8 and MW-9. Soil samples were not analyzed based on photo-ionization detector screening.

Groundwater Monitoring Field Data

Groundwater elevation data was recorded in ten monitoring wells, MW-1 through MW-9, and the USTW well on December 7, 2012 (**Table 1**). Groundwater stabilization parameters including; temperature, pH, and electrical conductivity readings were collected during purging. Copies of the groundwater sampling/purge logs are included in **Attachment A**. Groundwater elevation data from well MW-7 was not used in contouring because it is screened in the deeper aquifer. The groundwater flow direction was calculated to flow to the west/southwest with an average hydraulic gradient of approximately 0.05 feet per foot (**Figure 2**). The depth to groundwater ranged from 5.01 to 8.92 feet below the top of well casings (133.98 to 128.37 feet above mean sea level). A summary of historical groundwater elevation is presented in **Attachment B**.

Groundwater Sampling and Analytical Results

Groundwater samples were collected from monitoring wells MW-1 through MW-9 on December 7, 2012. Laboratory analyses were performed by BC Laboratories, Inc. (BC Labs) of Bakersfield, California. The BC Labs analytical report dated January 7, 2013 is included as **Attachment C**. Samples were analyzed for the following analytes based on historic trends in each monitoring well:

- total petroleum hydrocarbons as diesel (TPHd) by United States Environmental Protection Agency (USEPA) Method 8015B;
- TPH as oil and grease (TPHmo) by USEPA method 1664;
- semi-volatile organic compounds (SVOCs) by USEPA method 8270C;
- total chromium by USEPA method 6010B;
- BTEX by USEPA method 8260B;
- TPHg by USEPA method 8260B;
- volatile organic compounds (VOCs) by USEPA method 8260B; and
- fuel oxygenates including MTBE, tertiary-amyl methyl ether (TAME), TBA, di-isopropyl ether (DIPE), and ethyl tertiary-butyl ether (ETBE), ethanol, ethylene dibromide (EDB), and 1,2-Dichloroethane (1,2-DCA or ethylene dichloride [EDC]) by USEPA method 8260B.

Analytical results for this semi-annual groundwater monitoring event are consistent with previous reporting periods (**Table 1** and **Figure 3**). The following presents a brief summary of the analytical sample results:

- TPHd, ETBE, DIPE, TAME, EDB, 1,2-DCA, ethanol, TPHmo, and SVOCs were not detected in any of the samples analyzed.
- Total chromium was detected in MW-3 at a concentration of 12 µg/L.
- MTBE was only detected in two wells, MW-5 and MW-6, at 70 µg/L and 3.1 µg/L, respectively.
- Monitoring wells MW-5 and MW-6 continue to have elevated concentrations of TPHg and BTEX.
- TBA was detected only in MW-5 at a concentration of 130 µg/L .

A summary of historical groundwater analytical data is presented in **Attachment B.**

Approximately 99 gallons of groundwater were generated during purging activities. Purged water was transported by TRC to their Concord, CA field yard as non-hazardous waste for future disposal.

Conclusions and Recommendations

The sample results of the groundwater monitoring activities at the site indicate the following:

- Elevated concentrations of fuel constituents remain localized around MW-5 and MW-6 in the western portion of the Site.
- Fuel constituents have not been detected in offsite monitoring wells supporting localization of impacts onsite.
- No impacts have been observed in the deep groundwater monitoring well MW-7 since 1998.

AECOM recommends completion of a Conceptual Site Model to evaluate the site relative to the California Low Threat Closure Criteria.

Future Activities

Groundwater Monitoring

AECOM will coordinate monitoring and sampling activities as per the established schedule. AECOM will submit semiannual groundwater monitoring and sampling reports.

Additional Activity

AECOM will prepare a conceptual site model (CSM) that will evaluate potential data gaps that exist at the Site. The CSM will be submitted by the end of the first quarter 2013.

Remarks/Signatures

The interpretations in this report represent our professional opinions and are based, in part, on the information supplied by the client. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

If you have any questions regarding this project, please contact either of the undersigned at (916) 361-6400.

Sincerely,

James Harms
Project Manager

Brett Lehman, P.G.
Project Geologist

cc: Roya Kambin, CEMC (electronic)
Jamee Inc., Property Owner

Tables

Figures

Attachments

TABLES

TABLE 1

GROUNDWATER MONITORING AND SAMPLING DATA
UNOCAL #4625
3070 FRUITVALE AVENUE
OAKLAND, CALIFORNIA

					HYDROCARBONS		PRIMARY VOCS												GENERAL CHEMISTRY			
Location	Date	TOC	DTW	GWE	TPH - Diesel	TPH - Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE by SW8260	TBA	ETBE	DIPE	TAME	EDB	1,2-DCA	Ethanol	Oil and grease, Total by 1664	VOCs by EPA Method 8260	SVOCs by EPA Method 8270	Total Chromium by 6010B
		ft-amsl	ft-btoc	ft-amsl	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L
MW-1	06/10/2011	137.57	7.58	129.99	-	<50	<0.50	<0.50	<0.50	<1.0	<0.50	-	-	-	-	<0.50	<0.50	<250	-	-	-	-
	12/13/2011	137.57	7.55	130.02	-	<50	<0.50	<0.50	<0.50	<1.0	<0.50	-	-	-	-	-	-	<250	-	-	-	-
	06/04/2012	137.57	7.53	130.04	-	<50	<0.50	<0.50	<0.50	<1.0	<0.50	-	-	-	-	<0.50	<0.50	<250	-	-	-	-
	12/07/2012	**137.57**	**6.19**	**131.38**	**-**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**	**-**	**-**	**-**	**-**	**<0.50**	**<0.50**	**<250**	**-**	**-**	**-**	**-**
MW-2	06/10/2011	139.85	7.78	132.07	-	260	0.58	<0.50	<0.50	<1.0	1.7	-	-	-	-	<0.50	<0.50	<250	-	-	-	-
	12/13/2011	139.85	9.32	130.53	-	470	<0.50	<0.50	<0.50	<1.0	1.1	-	-	-	-	-	-	<250	-	-	-	-
	06/04/2012	139.85	9.12	130.73	-	460	<0.50	<0.50	<0.50	<1.0	3.9	-	-	-	-	<0.50	<0.50	<250	-	-	-	-
	12/07/2012	**139.85**	**5.87**	**133.98**	**-**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**	**-**	**-**	**-**	**-**	**<0.50**	**<0.50**	**<250**	**-**	**-**	**-**	**-**
MW-3	06/10/2011	138.89	6.78	132.11	<40	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	<5.0	ND	ND	81
	12/13/2011	138.89	8.32	130.57	<40	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	<5.0	ND	ND	<10
	06/04/2012	138.89	8.00	130.89	<40	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	<5.0	ND	ND	34
	12/07/2012	**138.89**	**5.39**	**133.50**	**<40**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<250**	**<5.0**	**ND**	**ND**	**12**
MW-4	06/10/2011	137.81	6.95	130.86	-	<50	<0.50	<0.50	<0.50	<1.0	<0.50	-	-	-	-	<0.50	<0.50	<250	-	-	-	-
	12/13/2011	137.81	8.72	129.09	-	<50	<0.50	<0.50	<0.50	<1.0	<0.50	-	-	-	-	-	-	<250	-	-	-	-
	06/04/2012	137.81	9.13	128.68	-	<50	<0.50	<0.50	<0.50	<1.0	<0.50	-	-	-	-	<0.50	<0.50	<250	-	-	-	-
	12/07/2012	**137.81**	**7.89**	**129.92**	**-**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**	**-**	**-**	**-**	**-**	**<0.50**	**<0.50**	**<250**	**-**	**-**	**-**	**-**
MW-5	06/10/2011	137.35	7.60	129.75	-	5,500	180	38	410	1,000	170	160	<0.50	<0.50	<0.50	<0.50	<0.50	<250	-	-	-	-
	12/13/2011	137.35	8.98	128.37	-	1,700	53	3.0	100	86	60	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	-	-	-	-
	06/04/2012	137.35	8.50	128.85	-	1,800	32	1.0	79	53	84	79	<0.50	<0.50	<0.50	<0.50	<0.50	<250	-	-	-	-
	12/07/2012	**137.35**	**6.37**	**130.98**	**-**	**3,300**	**92**	**60**	**260**	**590**	**70**	**130**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<250**	**-**	**-**	**-**	**-**
MW-6	06/10/2011	138.69	7.35	131.34	-	380	14	8.9	5.6	13	45	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	-	-	-	-
	12/13/2011	138.69	8.83	129.86	-	59	<0.50	<0.50	<0.50	<1.0	12	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	-	-	-	-
	06/04/2012	138.69	8.57	130.12	-	93	<0.50	<0.50	<0.50	<1.0	82	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	-	-	-	-
	12/07/2012	**138.69**	**5.49**	**133.20**	**-**	**62**	**3.5**	**3.1**	**1.0**	**4.1**	**3.1**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<250**	**-**	**-**	**-**	**-**

TABLE 1

GROUNDWATER MONITORING AND SAMPLING DATA
UNOCAL #4625
3070 FRUITVALE AVENUE
OAKLAND, CALIFORNIA

					HYDROCARBONS		PRIMARY VOCS												GENERAL CHEMISTRY			
Location	Date	TOC	DTW	GWE	TPH - Diesel	TPH - Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE by SW8260	TBA	ETBE	DIPE	TAME	EDB	1,2-DCA	Ethanol	Oil and grease, Total by 1664	VOCs by EPA Method 8260	SVOCs by EPA Method 8270	Total Chromium by 6010B
		ft-amsl	ft-btoc	ft-amsl	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L
MW-7	06/10/2011	138.74	8.55	130.19	-	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	-	-	-	-
	12/13/2011	138.74	9.17	129.57	-	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	-	-	-	-
	06/04/2012	138.74	8.74	130.00	-	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	-	-	-	-
	12/07/2012	**138.74**	**8.92**	**129.82**	**-**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<250**	**-**	**-**	**-**	**-**

TABLE 1

GROUNDWATER MONITORING AND SAMPLING DATA
UNOCAL #4625
3070 FRUITVALE AVENUE
OAKLAND, CALIFORNIA

					HYDROCARBONS		PRIMARY VOCS												GENERAL CHEMISTRY			
Location	Date	TOC	DTW	GWE	TPH - Diesel	TPH - Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE by SW8260	TBA	ETBE	DIPE	TAME	EDB	1,2-DCA	Ethanol	Oil and grease, Total by 1664	VOCs by EPA Method 8260	SVOCs by EPA Method 8270	Total Chromium by 6010B
		ft-amsl	ft-btoc	ft-amsl	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L
MW-8	06/10/2011	136.22	9.12	127.10	-	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	-	-	-	-
	12/13/2011	136.22	9.65	126.57	-	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	-	-	-	-
	06/04/2012	136.22	9.53	126.69	-	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	-	-	-	-
	12/07/2012	**136.22**	**7.85**	**128.37**	**-**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<250**	**-**	**-**	**-**	**-**
MW-9	06/10/2011	137.11	9.56	127.55	-	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	-	-	-	-
	12/13/2011	137.11	10.15	126.96	-	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	-	-	-	-
	06/04/2012	137.11	10.03	127.08	-	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	-	-	-	-
	12/07/2012	**137.11**	**8.32**	**128.79**	**-**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<250**	**-**	**-**	**-**	**-**
USTW	06/10/2011[1]	-	7.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/13/2011[1]	-	7.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/04/2012[1]	-	7.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/7/2012[1]	-	**5.01**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations and Notes:

TOC = Top of Casing
DTW = Depth to Water
GWE = Groundwater elevation
ft-amsl = Feet above mean sea level
ft-btoc= Feet below top of casing
µg/L = Micrograms per Liter
TPH - Total Petroleum Hydrocarbons
VOCs = Volatile Organic Compounds
SVOCs = Semi-Volatile Organic Compounds
MTBE = Methyl tert butyl ether
TBA = Tert-Butyl alcohol
DIPE = Diisopropyl ether
ETBE = Tert-Butyl ethyl ether
TAME = Tert-Amyl methyl ether
EDB = 1,2-Dibromoethane (Ethylene dibromide)
1,2-DCA = 1,2-Dichloroethane (EDC)
-- = Not available / not applicable
<x = Not detected above laboratory method detection limit
ND = Not detected above laboratory detected limits
1 Gauge depth to water only, top of casing not surveyed.

FIGURES

North

0 900 1800 FT

SCALE

SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, OAKLAND EAST QUADRANGLE (1973)
BASE MAP PROVIDED BY DELTA CONSULTANTS, INC.

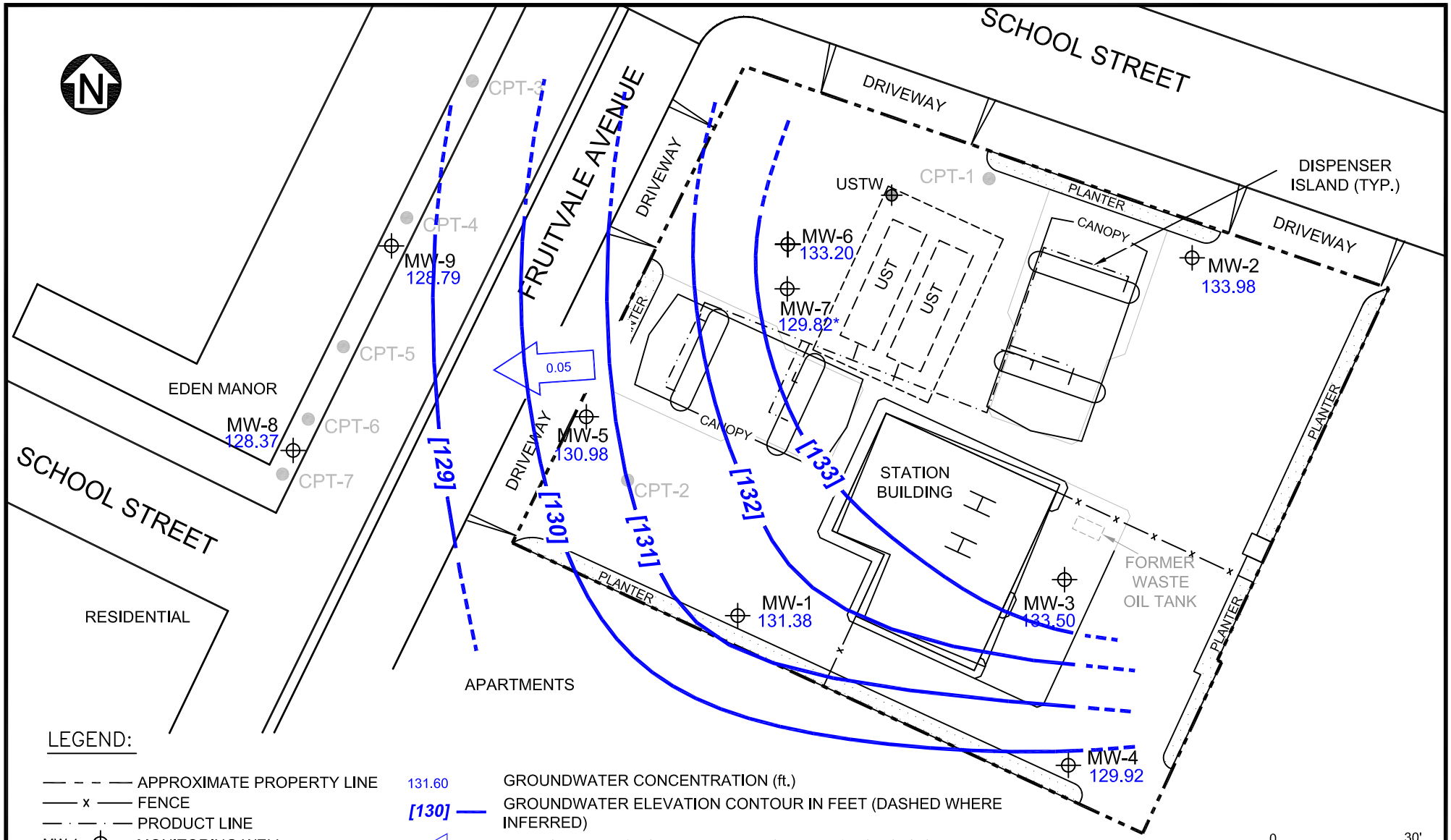
FIGURE 1

SITE LOCATION MAP

CHEVRON #351641
76 SERVICE STATION NO.4625
3070 FRUITVALE AVENUE
OAKLAND, CALIFORNIA

PROJECT NO. 60267017	DRAWN BY CD 06/28/2012
FILE NO. 351641	PREPARED BY CD
REVISION NO.	REVIEWED BY JH

AECOM



GROUNDWATER CONTOUR MAP

Second Semi-Annual 2012 Groundwater Monitoring Report

Chevron Site #351641 Unocal #4625

3070 Fruitvale Avenue, Oakland, California

SCALE:	DATE:	PROJECT NUMBER:
1" = 30'	01/14/2012	60267017

AECOM

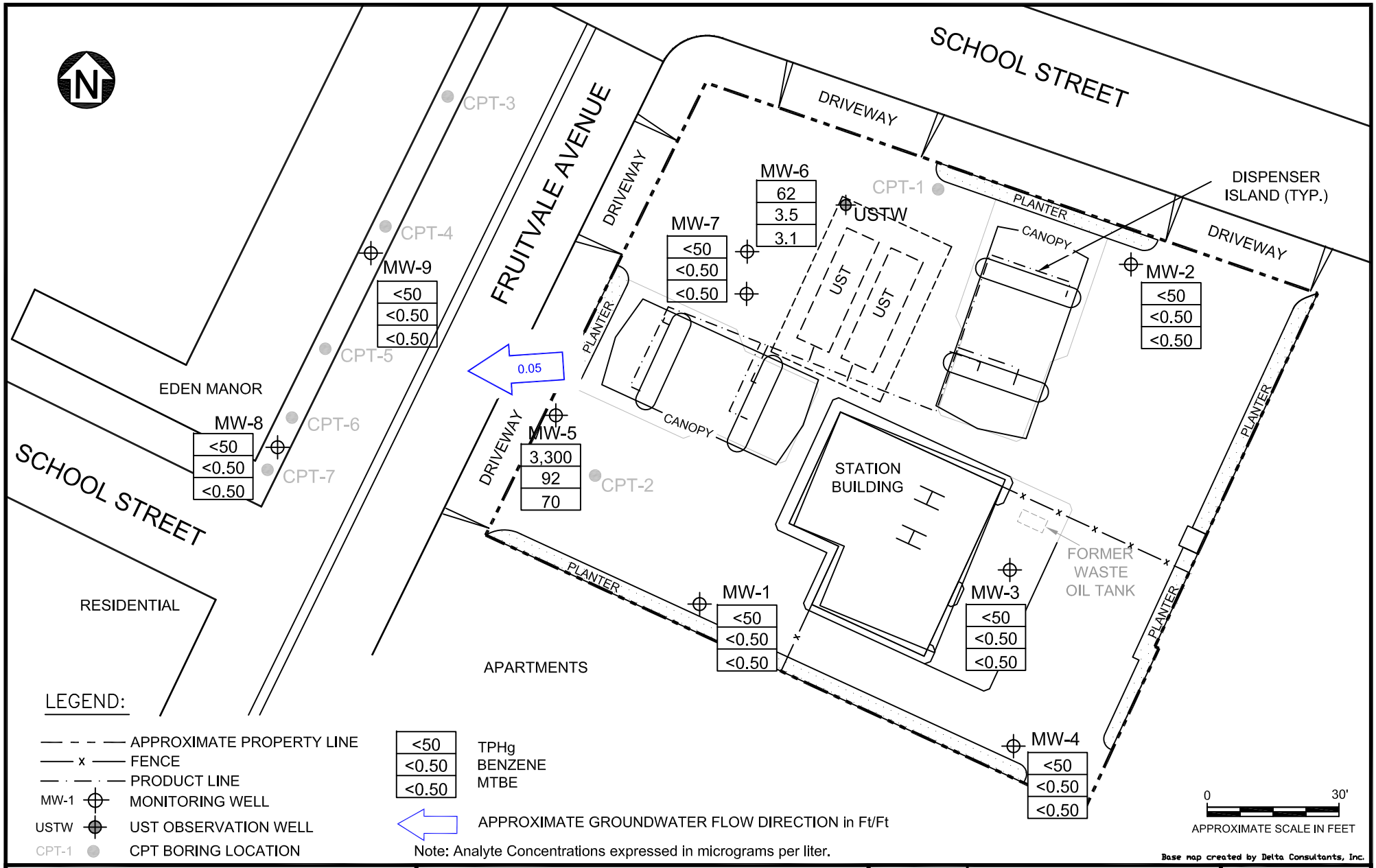
AECOM
10461 OLD PLACERVILLE ROAD SUITE 170
SACRAMENTO, CALIFORNIA 95827
PHONE: (916) 361-6400
FAX: (916) 361-6401
WEB: HTTP://WWW.AECOM.COM

DESIGNED BY:	
DRAWN BY:	JH
CHECKED BY:	
APPROVED BY:	

REVISIONS			
NO.:	DESCRIPTION:	DATE:	BY:

FIGURE NUMBER:

2



GROUNDWATER CONCENTRATION MAP

Second Semi-Annual 2012 Groundwater Monitoring Repor

Chevron Site #351641 Unocal #4625

3070 Fruitvale Avenue, Oakland, California

SCALE:	DATE:	PROJECT NUMBER:
1" = 30'	1/14/2013	60267017

AECOM

AECOM
10461 OLD PLACERVILLE ROAD SUITE 170
SACRAMENTO, CALIFORNIA 95827
PHONE: (916) 361-6400
FAX: (916) 361-6401
WEB: HTTP://WWW.AECOM.COM

DESIGNED BY:	
DRAWN BY:	JH
CHECKED BY:	
APPROVED BY:	

REVISIONS

NO.:	DESCRIPTION:	DATE:	BY:

FIGURE NUMBER:

3

ATTACHMENT A

December 7, 2012
Groundwater Data
Field Sheets

123 Technology Drive
Irvine, California 92618

949.727.9336 PHONE
949.727.7399 FAX

www.TRCsolutions.com

DATE: December 17, 2012

TO: Jim Harms, AECOM

SITE: Unocal Site 4625
Facility 351641
3070 Fruitvale Avenue, Oakland, CA

RE: Transmittal of Groundwater Monitoring Data

Please find attached the field data sheets, chain of custody (COC) forms, and technical services request (TSR) form for the monitoring event that was completed on December 7, 2012. Field measurements and collection of samples submitted to the laboratory were completed in general accordance with our usual groundwater monitoring protocol which is also attached for your reference.

Please call me at 949-341-7440 if you have questions.

Sincerely,

Anju Farfan
Groundwater Program Operations Manager

GENERAL FIELD PROCEDURES

Groundwater Gauging and Sampling Assignments

For each site, TRC technicians are provided with a Technical Service Request (TSR) that specifies activities required to complete the groundwater gauging and sampling assignment for the site. TSRs are based on client directives, instructions from the primary environmental consultant for the site, regulatory requirements, and TRC's previous experience with the site.

Fluid Level Measurements (Gauging)

Initial site activities include determination of well locations based on a site map provided with the TSR. Well boxes are opened and caps are removed. Indications of well or well box damage or of pressure buildup in the well are noted.

Fluid levels in each well are measured using a coated cloth tape equipped with an electronic interface probe, which distinguishes between liquid phase hydrocarbon (LPH) and water. The depth to LPH (if it is present), to water, and to the bottom of the well are measured from the top of the well casing (surveyors mark or notch if present) to the nearest 0.01 foot. Unless otherwise instructed, a well with less than 0.67 foot between the measured top of water and the measured bottom of the well casing is considered dry, and is not sampled. If the well contains 0.67 foot or more of water, an attempt is made to bail and/or sample as specified on the TSR.

Unless otherwise instructed, a well that is found to contain a measureable amount of LPH (0.01 foot) is not purged or sampled. Instead, one casing volume of fluid is bailed from the well and the well is re-sealed.

Purging and Groundwater Parameter Measurement

TSR instructions may specify that a well not be purged (no-purge sampling), be purged using low-flow methods, or be purged using conventional pump and/or bail methods. Conventional purging generally consists of pumping or bailing until a minimum of three casing volumes of water have been removed or until the well has been pumped dry. Pumping is generally accomplished using submersible electric or pneumatic diaphragm pumps. The pump intake is initially set at about 5 feet below the level of water in the casing, and is lowered as needed to compensate for falling water level. Pump depths are recorded in Field Notes.

During conventional purging, three groundwater parameters (temperature, pH, and conductivity) are measured after removal of each casing volume. Stabilization of these parameters, to within 10 percent, confirm that sufficient purging has been completed. In some cases, the TSR indicates that other parameters are also to be measured during purging. TRC commonly measures dissolved oxygen (DO), oxidation-reduction potential (ORP), and/or turbidity. Instruments used for groundwater parameter measurements are calibrated daily according to manufacturer's instructions.

Low-flow purging utilizes a bladder or peristaltic pump to remove water from the well at a low rate. Groundwater parameters specified by the TSR are measured continuously, using a flow cell, until they become stable in general accordance with EPA guidelines.

Groundwater Sample Collection

After wells are purged, or not purged, according to TSR instructions, samples are collected for laboratory analysis. For wells that have been purged using conventional pump or bail methods, sampling is conducted after the well has recovered to 80 percent of its original volume or after two hours if the well does not recover to at least 80 percent. If there is insufficient recharge of water in the well after two hours, the well is not sampled.

GENERAL FIELD PROCEDURES

Samples are collected by lowering a new, disposable polyethylene bottom-fill bailer to just below the water level in the well. The bailer is retrieved and the water sample is carefully transferred to containers specified for the laboratory analytical methods indicated by the TSR. Particular care is given to containers for volatile organic analysis (VOAs) which require filling to zero headspace and fitting with Teflon-sealed caps.

Sample containers are labeled with project number (or site number), well designation, sample date, sample time, and the sampler's initials, and placed in an insulated chest with ice. Samples remain chilled prior to and during transport to a state-certified laboratory for analysis. Sample container descriptions and requested analyses are entered onto a chain-of-custody form in order to provide instructions to the laboratory. The chain-of-custody form accompanies the samples during transportation to provide a continuous record of possession from the field to the laboratory. If a freight or overnight carrier transports the samples, the carrier is noted on the form.

For wells that have been purged using low-flow methods, sample containers are filled from the effluent stream of the bladder or peristaltic pump. In some cases, if so specified by the TSR, samples are taken from the sample ports of actively pumping remediation wells.

Sequence of Gauging, Purging and Sampling

The sequence in which monitoring activities are conducted is specified on the TSR. In general, wells are gauged beginning with the least affected well and ending with the well that has the highest concentration based on previous analytic results. After all gauging for the site is completed, wells are purged and/or sampled from the least-affected to the most-affected well. If wells must be gauged or sampled out of order, alternate interface probes and/or pumps are utilized and are noted in field documentation.

Decontamination

In order to reduce the possibility of cross contamination between wells, strict isolation and decontamination procedures are observed. Portable pumps are not used in wells with LPH. Technicians wear nitrile gloves during all gauging, purging, and sampling activities. Gloves are changed between wells and more often if warranted. Any equipment that could come in contact with fluids are either dedicated a particular well, decontaminated prior to each use, or discarded after a single use. Decontamination consists of washing in a solution of Liquinox and water and rinsing twice. The final rinse is in deionized water.

Purge Water Disposal

Purge water is generally collected in labeled drums for disposal as non-hazardous waste. Drums may be left on site for disposal by others, or transported to a collection location at a TRC field office, in either Fullerton, California or Concord, California, for eventual transfer to a licensed treatment or recycling facility. Alternatively, purge water may be collected directly from the site by a licensed vacuum truck company, or may be treated on site by an active remediation system, if so directed.

Exceptions

Additional tasks or non-standard procedures, if any, that may be requested or required for a particular site, are documented in field notes on the following pages.

FIELD MONITORING DATA SHEET

Technician: A. Vidvers Job #/Task #: 189791.0035 1641 Date: 12/7/12

Site # 4625 Project Manager AF Page 1 of 1

Well #	TOC	Time Gauged	Total Depth	Depth to Water	Depth to Product	Product Thickness (feet)	Time Sampled	Misc. Well Notes
USTW	✓	0614	15.18	5.01	—	—	N/S	6" Monitor Only
MW-9	✓	0620	19.59	8.32	—	—	0837	2"
MW-8	✓	0625	19.56	7.85	—	—	0851	2"
MW-7	✓	0636	54.68	8.92	—	—	1104	2"
MW-1	✓	0631	24.84	6.19	—	—	1055	2"
MW-4	✓	0915	24.25	7.89	—	—	1120	2"
MW-3	✓	0911	25.14	5.39	—	—	0944	2"
MW-2	✓	0648	24.95	5.87	—	—	1010	2"
MW-6	✓	0657	23.42	5.49	—	—	1030	2"
MW-5	✓	0702	24.41	6.37	—	—	1133	2"

FIELD DATA COMPLETE QA/QC COC WELL BOX CONDITION SHEETS

MANIFEST DRUM INVENTORY TRAFFIC CONTROL

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Vickers

Site: 4425 Project No.: 189791.0035.1641 Date: 12/7/12

Well No. MW-9 Purge Method: Sub

Depth to Water (feet): 8.32 Depth to Product (feet): —

Total Depth (feet) 19.59 LPH & Water Recovered (gallons): —

Water Column (feet): 11.27 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 10.57 1 Well Volume (gallons): 2

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0827			2	514.8	17.1	6.99			
			4	519.1	18.1	6.90			
	0831		6	524.9	18.7	6.81			

Static at Time Sampled	Total Gallons Purged	Sample Time
8.68	6	0837

Comments:

Well No. MW-8 Purge Method: Sub

Depth to Water (feet): 7.85 Depth to Product (feet): —

Total Depth (feet) 19.56 LPH & Water Recovered (gallons): —

Water Column (feet): 11.71 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 10.19 1 Well Volume (gallons): 2

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0842			2	505.9	17.5	6.68			
			4	513.6	18.1	6.65			
	0845		6	517.7	18.6	6.62			

Static at Time Sampled	Total Gallons Purged	Sample Time
8.00	6	0851

Comments:

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Villers

Site: 4625 Project No.: 18979.0035.1641 Date: 12/7/12

Well No. MW-4 Purge Method: Sub

Depth to Water (feet): 7.89 Depth to Product (feet): —

Total Depth (feet) 24.25 LPH & Water Recovered (gallons): —

Water Column (feet): 16.36 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 11.16 1 Well Volume (gallons): 3

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0921			3	536.8	16.7	7.02			
			6	543.3	17.2	7.00			
	0926		9	592.1	17.5	7.06			

Static at Time Sampled	Total Gallons Purged	Sample Time
11.16	9	1120

Comments:

Well No. MW-3 Purge Method: Sub

Depth to Water (feet): 5.39 Depth to Product (feet): —

Total Depth (feet) 25.14 LPH & Water Recovered (gallons): —

Water Column (feet): 19.75 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 9.34 1 Well Volume (gallons): 4

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0931			4	358.6	19.0	6.85			
			8	360.6	19.7	6.74			
	0937		12	358.2	19.9	6.64			

Static at Time Sampled	Total Gallons Purged	Sample Time
5.97	12	0944

Comments:

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Vickers

Site: 4625 Project No.: 18791.0035.164 Date: 12/7/12

Well No. MW-2 Purge Method: Sub

Depth to Water (feet): 5.87 Depth to Product (feet): —

Total Depth (feet) 24.95 LPH & Water Recovered (gallons): —

Water Column (feet): 19.08 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 9.69 1 Well Volume (gallons): 4

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
1000			4	399.4	20.4	6.59			
			8	394.4	21.2	6.55			
	1005		12	392.3	21.3	6.55			

Static at Time Sampled	Total Gallons Purged	Sample Time
6.08	12	1010

Comments:

Well No. MW-6 Purge Method: Sub

Depth to Water (feet): 5.49 Depth to Product (feet): —

Total Depth (feet) 23.42 LPH & Water Recovered (gallons): —

Water Column (feet): 17.93 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 9.08 1 Well Volume (gallons): 4

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
1021			4	475.5	19.6	6.64			
			8	465.3	19.9	6.65			
	1025		12	446.0	20.1	6.68			

Static at Time Sampled	Total Gallons Purged	Sample Time
6.83	12	1030

Comments:

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Vidaurre

Site: 4625 Project No.: 189791.0035.1641 Date: 12/7/12

Well No. MW-7 Purge Method: Sub

Depth to Water (feet): 8.92 Depth to Product (feet): —

Total Depth (feet) 54.68 LPH & Water Recovered (gallons): —

Water Column (feet): 45.76 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 18.07 1 Well Volume (gallons): 8

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0755	0802		8	815.7	18.3	7.49			
			16						
			24						

Static at Time Sampled	Total Gallons Purged	Sample Time
12.58	14	1104

Comments: Dry at 14 gals., did not recover in 45 minutes.

Well No. MW-1 Purge Method: Sub

Depth to Water (feet): 6.19 Depth to Product (feet): —

Total Depth (feet) 24.84 LPH & Water Recovered (gallons): —

Water Column (feet): 18.65 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 9.92 1 Well Volume (gallons): 4

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0739			4	697.6	16.3	6.75			
			8	629.1	17.7	6.77			
	0745		12	667.4	18.6	6.78			

Static at Time Sampled	Total Gallons Purged	Sample Time
18.73	12	1055

Comments: Did not recover in 2 hours.

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Vidaurre

Site: 4625 Project No.: 189791.0035.1641 Date: 12/7/12

Well No. MW-5 Purge Method: Sub

Depth to Water (feet): 6.37 Depth to Product (feet): —

Total Depth (feet) 24.41 LPH & Water Recovered (gallons): —

Water Column (feet): 18.04 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 9.98 1 Well Volume (gallons): 4

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
1038			4	776.1	20.7	6.66			
			8	925.3	21.2	6.60			
			12	926.5	21.5	6.65			
	1046		16	978.8	21.1	6.67			

Static at Time Sampled	Total Gallons Purged	Sample Time
9.98	16	1133

Comments: Dry at 16 gals.

Well No. Purge Method:

Depth to Water (feet): Depth to Product (feet):

Total Depth (feet) LPH & Water Recovered (gallons):

Water Column (feet): Casing Diameter (Inches):

80% Recharge Depth(feet): 1 Well Volume (gallons):

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									

Static at Time Sampled	Total Gallons Purged	Sample Time

Comments:

TRC

WELL BOX CONDITION REPORT

SITE NO. 4625

ADDRESS 3070 Fruitvale Ave. Oakland, CA

DATE 12/7/12

PERFOMED BY: A. Vidwans

PAGE 1 OF 1

Well Name	Current Well Box Size	# of Ears	# of Stripped Ears	# of Broken Ears	# of Broken Bolts	# of Missing Bolts	Seal Damaged	Missing Lid	Broken Lid	Well Box is Exposed	Well Box is Below Grade	Unable to Access	Unable to Locate	Foundation Damaged	Paved Over	Street Well	Saw Cut Needed	System Well	USA Marked Well	Comments
USTW	12"	2																		
MW-9	12"	2																		
MW-8	12"	2																		
MW-7	~~8~~ 12"	~~3~~ 2			1									X						
MW-1	8"	3																		
MW-4	8"	3																		
MW-3	8"	3																		
MW-2	8"	3																		
MW-6	8"	2								X				X						
MW-5	8"	2																		

TRC

CHAIN OF CUSTODY FORM

Union Oil Company of California ■ 6101 Bollinger Canyon Road ■ San Ramon, CA 94583

COC 1 of 1

Union Oil Site ID: 4625
Site Global ID: T0600102156
Site Address: 3070 Fruitvale Ave. Oakland, CA
Union Oil PM: Rosa Kambin
Union Oil PM Phone No.: 925 790 6270

Charge Code: NWRTB- 0 351641 **-0- LAB**

This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.

Union Oil Consultant: AECOM
Consultant Contact: Jim Harms
Consultant Phone No.: 916 361 6412
Sampling Company: TRC
Sampled By (PRINT): Andrew Vilhers
Sampler Signature:

BC Laboratories, Inc.
Project Manager: Molly Meyers
4100 Atlas Court, Bakersfield, CA 93308
Phone No. 661-327-4911

ANALYSES REQUIRED

Turnaround Time (TAT):
Standard ☒ 24 Hours ☐
48 Hours ☐ 72 Hours ☐

Special Instructions
Run 6 OXYs by 8260 on all 8260 MTBE hits.

SAMPLE ID						TPH - Diesel by EPA 8015M	TPH - G by GC/MS	BTEX/MTBE/OXYS by EPA 8260B	Ethanol by EPA 8260B	EPA 8260B Full List with OXYS	BTEX/MTBE by 8260B	EDB/EDC by 8260B	SVOCs by 8270	TOG	Total Chromium		Notes / Comments
Field Point Name	Matrix	DTW	Date (yymmdd)	Sample Time	# of Containers												
MW-9	W-S-A		121207	0837	3		X	X	X			X					
MW-8	W-S-A			0851				X				X					
MW-7	W-S-A			1104				X				X					
MW-1	W-S-A			1055							X	X					
MW-4	W-S-A			1120							X	X					
MW-3	W-S-A			0944	9	X				X			X	X	X		
MW-2	W-S-A			1010	3						X	X					
MW-6	W-S-A			1030				X				X					
MW-5	W-S-A			1133				X				X					
	W-S-A																
	W-S-A																
	W-S-A																

Relinquished By	Company	Date / Time:
	TRC	12/7/12

Received By	Company	Date / Time:
Gary Bogan	BC LAB	12-7-12 1410

Relinquished By	Company	Date / Time :

Received By	Company	Date / Time :

Relinquished By	Company	Date / Time:

Received By	Company	Date / Time:

TRC SOLUTIONS

TECHNICAL SERVICES REQUEST FORM

13-Nov-12

Site ID:	4625	**Project No.:**	189791.0035.1641 / 00TA01
Address	3070 Fruitvale Avenue	**Client:**	Roya Kambin
City:	Oakland	**Contact #:**	925-790-6270
Cross Street:	School Street	**PM:**	Jim Harms AECOM
		PM Contact #:	916-361-6412

Total number of wells:	10	**Min. Well Diameter (in.):**	2	**# of Techs, # of Hrs:**	1, 6
Depth to Water (ft.):	7	**Max. Well Diameter (in.):**	2	**Travel Time (hrs):**	
		Max. Well Depth (ft):	25	**Hotel PO#:**	

ACTIVITIES:		**Frequency**	**Notes**
Gauging:	☑	Semi Q2/Q4	
Purge/Sampling:	☑	Semi Q2/Q4	
No Purge/Sample	☐		

RELATED ACTIVITIES		**Note**
Drums:	☑	
Other Activities:	☐	
Traffic Control:	☑	City of Oakland Permit Needed

PERMIT INFORMATION:

NOTIFICATIONS:

Fruitvale 76 - Kham Thai: 510-533-7900

SITE INFORMATION:

MW-3 & MW-4 are located behind a locked fence that does not open until 8:30AM.

TRC SOLUTIONS

TECHNICAL SERVICES REQUEST FORM

13-Nov-12

Site ID:	4625	**Project No.:**	189791.0035.1641 / 00TA01
Address	3070 Fruitvale Avenue	**Client:**	Roya Kambin
City:	Oakland	**Contact #:**	925-790-6270
Cross Street:	School Street	**PM:**	Jim Harms AECOM
		PM Contact #:	916-361-6412

LAB INFORMATION:

Global ID: T0600102156

Lab WO: 351641

Lab Used: BC Labs

Lab Notes: Lab Analyses for wells MW-1, MW-2, MW-4:
TPH-G by GC/MS, BTEX/MTBE by 8260B, Ethanol by 8260B, EDB/EDC by 8260B [Containers: 3 voas w/ HCl]

Lab Analyses for well MW-3:
TPH-D by 8015M [Containers: two 1L ambers unpreserved]
SVOCS by 8270 [Containers: one 1L amber unpreserved]
TOG [Containers: two 1L ambers w/HCl]
TPH-G by GC/MS, Full Scan 8260B including OXYS, Ethanol by 8260B [Containers: 3 voas w/HCl]
Total Chromium [Containers: one 500mL poly w/ HNO3]

Lab Analyses for wells MW-5, MW-6, MW-7, MW-8 & MW-9:
TPH-G by GC/MS, BTEX/MTBE/OXYS by 8260B, EDB/EDC by 8260B, Ethanol by 8260B [Containers: 3 voas w/ HCl]

Note on COC: "Run 8 OXYS by 8260 on all 8260 MTBE hits."

TRC SOLUTIONS

TECHNICAL SERVICES REQUEST FORM

13-Nov-12

Site ID.: 4625
Address 3070 Fruitvale Avenue
City: Oakland
Cross Street School Street

			Gauging				Sampling				Field Measurements			
Well IDs	Benz.	MTBE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Pre-Purge	Post-Purge	Type	**Comments**
USTW			☐	☑	☐	☑	☐	☐	☐	☐	☐	☐		6" casing
MW-9	0	0	☐	☑	☐	☑	☐	☑	☐	☑	☐	☐		2" casing
MW-8	0	0	☐	☑	☐	☑	☐	☑	☐	☑	☐	☐		2" casing
MW-7	0	0	☐	☑	☐	☑	☐	☑	☐	☑	☐	☐		2" casing
MW-4	0	0	☐	☑	☐	☑	☐	☑	☐	☑	☐	☐		2" casing
MW-3	0	0	☐	☑	☐	☑	☐	☑	☐	☑	☐	☐		2" casing
MW-1	0	0	☐	☑	☐	☑	☐	☑	☐	☑	☐	☐		2" casing
MW-2	0	3.9	☐	☑	☐	☑	☐	☑	☐	☑	☐	☐		2" casing
MW-6	0	82	☐	☑	☐	☑	☐	☑	☐	☑	☐	☐		2" casing
MW-5	32	84	☐	☑	☐	☑	☐	☑	☐	☑	☐	☐		2" casing

ATTACHMENT B

Historic Groundwater Data

Table 2
HISTORIC Groundwater Data
Chevron Station # 351641
Former Unocal Station # 4625
3070 Fruitvale Avenue, Oakland, CA

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-1														
5/3/2000	136.36	11.81	0	124.55	--	ND	--	ND	ND	ND	ND	11	14	
7/28/2000	136.36	7.79	0	128.57	4.02	ND	--	ND	ND	ND	ND	21	19	
10/29/2000	136.36	7.90	0	128.46	-0.11	62	--	ND	ND	ND	ND	6.5	3.9	
2/9/2001	136.36	7.95	0	128.41	-0.05	ND	--	ND	ND	ND	ND	9.0	9.0	
5/11/2001	136.36	7.22	0	129.14	0.73	ND	--	ND	ND	ND	ND	12.7	16.3	
8/10/2001	136.36	8.47	0	127.89	-1.25	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	17	19	
11/7/2001	136.36	8.10	0	128.26	0.37	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	22	26	
2/6/2002	136.36	6.84	0	129.52	1.26	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	14	18	
5/8/2002	136.36	7.29	0	129.07	-0.45	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	20	19	
8/9/2002	136.36	8.20	0	128.16	-0.91	--	57	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	22	
11/26/2002	136.36	7.78	0	128.58	0.42	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	23	
2/14/2003	137.57	6.90	0	130.67	2.09	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	8.8	
5/3/2003	137.57	7.36	0	130.21	-0.46	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	3.4	
8/1/2003	137.57	7.48	0	130.09	-0.12	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	9.7	
10/30/2003	137.57	8.74	0	128.83	-1.26	--	300	35	41	21	71	--	8.5	
1/29/2004	137.57	6.72	0	130.85	2.02	--	74	ND<0.50	4.3	ND<0.50	ND<1.0	--	12	
5/27/2004	137.57	7.98	0	129.59	-1.26	--	ND<50	ND<0.50	ND<0.50	ND<0.50	1.0	--	16	
8/31/2004	137.57	8.42	0	129.15	-0.44	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	23	
11/18/2004	137.57	6.91	0	130.66	1.51	--	ND<50	ND<0.50	ND<0.50	ND<0.50	1.4	--	7.2	
3/25/2005	137.57	6.23	0	131.34	0.68	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	6.2	
6/22/2005	137.57	6.83	0	130.74	-0.60	--	ND<50	ND<0.50	0.23J	ND<0.50	ND<1.0	--	11	
9/26/2005	137.57	7.97	0	129.60	-1.14	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5.6	
12/20/2005	137.57	6.73	0	130.84	1.24	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	3.2	
3/29/2006	137.57	6.41	0	131.16	0.32	--	79	1.3	ND<0.50	1.4	4.2	--	3.4	
6/12/2006	137.57	7.10	0	130.47	-0.69	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.0	
9/27/2006	137.57	7.85	0	129.72	-0.75	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
12/27/2006	137.57	6.90	0	130.67	0.95	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
3/16/2007	137.57	7.07	0	130.50	-0.17	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
6/27/2007	137.57	7.53	0	130.04	-0.46	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
9/27/2007	137.57	8.42	0	129.15	-0.89	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
12/26/2007	137.57	6.96	0	130.61	1.46	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	

Table 2
HISTORIC Groundwater Data
Chevron Station # 351641
Former Unocal Station # 4625
3070 Fruitvale Avenue, Oakland, CA

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
3/26/2008	137.57	7.08	0	130.49	-0.12	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/17/2008	137.57	8.26	0	129.31	-1.18	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
9/15/2008	137.57	8.75	0	128.82	-0.49	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/30/2008	137.57	7.30	0	130.27	1.45	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
3/30/2009	137.57	6.42	0	131.15	0.88	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/25/2009	137.57	7.72	0	129.85	-1.30	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/17/2009	137.57	7.21	0	130.36	0.51	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/29/2010	137.57	7.77	0	129.80	-0.56	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/30/2010	137.57	6.65	0	130.92	1.12	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
MW-2														
5/3/2000	138.64	8.59	0	130.05	--	2400	--	53	ND	ND	240	ND	ND	
7/28/2000	138.64	9.95	0	128.69	-1.36	2200	--	680	4.1	57	270	24	ND	
10/29/2000	138.64	8.38	0	130.26	1.57	490	--	67	ND	23	22	ND	--	
2/9/2001	138.64	8.41	0	130.23	-0.03	ND	--	3.1	ND	0.52	1.1	ND	--	
5/11/2001	138.64	8.93	0	129.71	-0.52	ND	--	1.99	ND	ND	ND	ND	--	
8/10/2001	138.64	10.68	0	127.96	-1.75	96	--	20	ND<0.50	2.1	9.4	ND<5.0	--	
11/7/2001	138.64	10.01	0	128.63	0.67	480	--	110	ND<1.0	26	42	ND<10	--	
2/6/2002	138.64	8.10	0	130.54	1.91	69	--	13	ND<0.50	0.84	4.4	ND<5.0	--	
5/8/2002	138.64	9.16	0	129.48	-1.06	53	--	13	ND<0.50	1.2	1.5	ND<5.0	--	
8/9/2002	138.64	10.39	0	128.25	-1.23	--	140	20	ND<0.50	10	11	--	ND<2.0	
11/26/2002	138.64	9.81	0	128.83	0.58	--	340	87	ND<0.50	33	23	--	ND<2.0	
2/14/2003	139.85	8.19	0	131.66	2.83	--	130	12	ND<0.50	7.4	5.4	--	ND<2.0	
5/3/2003	139.85	6.77	0	133.08	1.42	--	ND<50	2.5	ND<0.50	1.7	ND<1.0	--	ND<2.0	
8/1/2003	139.85	9.63	0	130.22	-2.86	--	270	55	ND<0.50	23	6.0	--	ND<2.0	
10/30/2003	139.85	11.06	0	128.79	-1.43	--	180	17	4.8	6.1	13	--	ND<2.0	
1/29/2004	139.85	8.35	0	131.50	2.71	--	98	4.3	ND<0.50	1.5	3.6	--	ND<2.0	
5/27/2004	139.85	9.66	0	130.19	-1.31	--	58	1.2	ND<0.50	0.87	1.1	--	ND<0.50	
8/31/2004	139.85	10.45	0	129.40	-0.79	--	99	2.7	ND<0.50	1.8	2.8	--	ND<0.50	
11/18/2004	139.85	8.21	0	131.64	2.24	--	220	2.4	ND<0.50	2.1	1.7	--	ND<0.50	
3/25/2005	139.85	5.85	0	134.00	2.36	--	240	3.5	ND<0.50	4.4	6.5	--	ND<0.50	
6/22/2005	139.85	8.21	0	131.64	-2.36	--	56	1.1	ND<0.50	1.3	1.5	--	ND<0.50	
9/26/2005	139.85	9.98	0	129.87	-1.77	--	83	0.56	ND<0.50	0.86	ND<1.0	--	ND<0.50	

Table 2
HISTORIC Groundwater Data
Chevron Station # 351641
Former Unocal Station # 4625
3070 Fruitvale Avenue, Oakland, CA

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
12/20/2005	139.85	6.59	0	133.26	3.39	--	63	2.6	ND<0.50	2.4	3.7	--	ND<0.50	
3/29/2006	139.85	5.79	0	134.06	0.80	--	94	2.0	ND<0.50	1.7	2.0	--	ND<0.50	
6/12/2006	139.85	8.72	0	131.13	-2.93	--	140	1.1	ND<0.50	0.94	2.8	--	ND<0.50	
9/27/2006	139.85	9.86	0	129.99	-1.14	--	55	0.55	ND<0.50	0.80	ND<0.50	--	ND<0.50	
12/27/2006	139.85	6.98	0	132.87	2.88	--	72	0.61	ND<0.50	0.52	ND<0.50	--	ND<0.50	
3/16/2007	139.85	8.10	0	131.75	-1.12	--	62	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
6/27/2007	139.85	9.48	0	130.37	-1.38	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
9/27/2007	139.85	10.50	0	129.35	-1.02	--	280	0.65	ND<0.50	1.8	ND<0.50	--	0.70	
12/26/2007	139.85	7.84	0	132.01	2.66	--	64	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.56	
3/26/2008	139.85	8.75	0	131.10	-0.91	--	64	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/17/2008	139.85	10.19	0	129.66	-1.44	--	56	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
9/15/2008	139.85	10.79	0	129.06	-0.60	--	74	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/30/2008	139.85	8.36	0	131.49	2.43	--	52	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
3/30/2009	139.85	8.11	0	131.74	0.25	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/25/2009	139.85	9.65	0	130.20	-1.54	--	67	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/17/2009	139.85	7.57	0	132.28	2.08	--	99	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.81	
6/29/2010	139.85	9.06	0	130.79	-1.49	--	150	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.86	
12/30/2010	139.85	5.67	0	134.18	3.39	--	54	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.62	
MW-3														
5/3/2000	137.68	7.60	0	130.08	--	ND	--	ND	ND	ND	ND	ND	ND	
7/28/2000	137.68	8.82	0	128.86	-1.22	ND	--	ND	ND	ND	ND	ND	ND	
10/29/2000	137.68	7.33	0	130.35	1.49	ND	--	ND	ND	ND	ND	ND	--	
2/9/2001	137.68	7.40	0	130.28	-0.07	ND	--	ND	ND	ND	ND	ND	--	
5/11/2001	137.68	7.90	0	129.78	-0.50	ND	--	ND	ND	ND	ND	ND	--	
8/10/2001	137.68	9.09	0	128.59	-1.19	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
11/7/2001	137.68	9.03	0	128.65	0.06	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
2/6/2002	137.68	7.16	0	130.52	1.87	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
5/8/2002	137.68	8.04	0	129.64	-0.88	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
8/9/2002	137.68	9.27	0	128.41	-1.23	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
11/26/2002	137.68	8.79	0	128.89	0.48	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
2/14/2003	138.89	7.18	0	131.71	2.82	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
5/3/2003	138.89	5.88	0	133.01	1.30	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	

Table 2
HISTORIC Groundwater Data
Chevron Station # 351641
Former Unocal Station # 4625
3070 Fruitvale Avenue, Oakland, CA

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
8/1/2003	138.89	8.52	0	130.37	-2.64	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
10/30/2003	138.89	10.05	0	128.84	-1.53	--	ND<50	0.62	0.83	ND<0.50	ND<1.0	--	ND<5.0	
1/29/2004	138.89	6.58	0	132.31	3.47	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
5/27/2004	138.89	8.51	0	130.38	-1.93	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
8/31/2004	138.89	9.72	0	129.17	-1.21	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<5.0	
11/18/2004	138.89	7.20	0	131.69	2.52	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
11/18/2004	138.89	7.20	0	131.69	2.52	--	--	--	--	--	--	--	ND<5.0	
3/25/2005	138.89	5.39	0	133.50	1.81	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.97	
6/22/2005	138.89	7.31	0	131.58	-1.92	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
9/26/2005	138.89	8.99	0	129.90	-1.68	--	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
9/26/2005	138.89	8.99	0	129.90	-1.68	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/20/2005	138.89	8.03	0	130.86	0.96	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
3/29/2006	138.89	8.55	0	130.34	-0.52	--	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.54	Duplicates obtained by EPA method 8240
3/29/2006	138.89	8.55	0	130.34	-0.52	--	61	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.54	Duplicates obtained by EPA method 8240
6/12/2006	138.89	7.70	0	131.19	0.85	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/12/2006	138.89	7.70	0	131.19	0.85	--	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
9/27/2006	138.89	8.87	0	130.02	-1.17	--	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
9/27/2006	138.89	8.87	0	130.02	-1.17	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
12/27/2006	138.89	6.10	0	132.79	2.77	--	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
12/27/2006	138.89	6.10	0	132.79	2.77	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
3/16/2007	138.89	7.14	0	131.75	-1.04	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
3/16/2007	138.89	7.14	0	131.75	-1.04	--	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
6/27/2007	138.89	8.58	0	130.31	-1.44	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
9/27/2007	138.89	9.47	0	129.42	-0.89	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
12/26/2007	138.89	7.00	0	131.89	2.47	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
3/26/2008	138.89	7.77	0	131.12	-0.77	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/17/2008	138.89	9.15	0	129.74	-1.38	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
9/15/2008	138.89	9.79	0	129.10	-0.64	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/30/2008	138.89	7.24	0	131.65	2.55	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
3/30/2009	138.89	7.04	0	131.85	0.20	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	

Table 2
HISTORIC Groundwater Data
Chevron Station # 351641
Former Unocal Station # 4625
3070 Fruitvale Avenue, Oakland, CA

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
6/25/2009	138.89	8.60	0	130.29	-1.56	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/17/2009	138.89	6.58	0	132.31	2.02	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/29/2010	138.89	7.98	0	130.91	-1.40	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/30/2010	138.89	5.12	0	133.77	2.86	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
MW-4														
5/3/2000	136.60	6.48	0	130.12	--	ND	--	ND	ND	ND	ND	ND	ND	
7/28/2000	136.60	7.55	0	129.05	-1.07	ND	--	ND	ND	ND	ND	ND	--	
10/29/2000	136.60	6.12	0	130.48	1.43	ND	--	ND	ND	ND	ND	ND	--	
2/9/2001	136.60	6.14	0	130.46	-0.02	ND	--	ND	ND	ND	ND	ND	--	
5/11/2001	136.60	7.51	0	129.09	-1.37	ND	--	ND	ND	ND	ND	ND	--	
8/10/2001	136.60	8.66	0	127.94	-1.15	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
11/7/2001	136.60	7.92	0	128.68	0.74	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
2/6/2002	136.60	7.18	0	129.42	0.74	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
5/8/2002	136.60	6.86	0	129.74	0.32	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
8/9/2002	136.60	7.67	0	128.93	-0.81	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
11/26/2002	136.60	8.08	0	128.52	-0.41	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
5/3/2003	137.81	6.05	0	131.76	1.38	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
8/1/2003	137.81	8.21	0	129.60	-2.16	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
10/30/2003	137.81	9.04	0	128.77	-0.83	--	ND<50	1.1	2.3	2.2	7.0	--	ND<2.0	
1/29/2004	137.81	8.22	0	129.59	0.82	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
5/27/2004	137.81	7.43	0	130.38	0.79	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
8/31/2004	137.81	8.35	0	129.46	-0.92	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
11/18/2004	137.81	8.26	0	129.55	0.09	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
3/25/2005	137.81	4.40	0	133.41	3.86	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/22/2005	137.81	8.44	0	129.37	-4.04	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
9/26/2005	137.81	7.93	0	129.88	0.51	--	ND<50	0.51	ND<0.50	0.53	2.3	--	ND<0.50	
12/20/2005	137.81	5.65	0	132.16	2.28	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
3/29/2006	137.81	5.15	0	132.66	0.50	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/12/2006	137.81	5.68	0	132.13	-0.53	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
9/27/2006	137.81	7.52	0	130.29	-1.84	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
12/27/2006	137.81	6.95	0	130.86	0.57	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
3/16/2007	137.81	7.20	0	130.61	-0.25	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	

Table 2
HISTORIC Groundwater Data
Chevron Station # 351641
Former Unocal Station # 4625
3070 Fruitvale Avenue, Oakland, CA

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
6/27/2007	137.81	7.68	0	130.13	-0.48	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
9/27/2007	137.81	9.01	0	128.80	-1.33	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
12/26/2007	137.81	5.98	0	131.83	3.03	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
3/26/2008	137.81	8.83	0	128.98	-2.85	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/17/2008	137.81	9.05	0	128.76	-0.22	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
9/15/2008	137.81	9.03	0	128.78	0.02	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/30/2008	137.81	8.22	0	129.59	0.81	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
3/30/2009	137.81	8.14	0	129.67	0.08	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/25/2009	137.81	8.10	0	129.71	0.04	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/17/2009	137.81	7.08	0	130.73	1.02	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/29/2010	137.81	6.94	0	130.87	0.14	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/30/2010	137.81	7.82	0	129.99	-0.88	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
MW-5														
11/26/2002	--	9.89	0	--	--	--	2500	350	39	32	640	--	470	
2/14/2003	137.66	8.65	0	129.01	--	--	6600	920	210	430	1300	--	960	
5/3/2003	137.66	8.23	0	129.43	0.42	--	33000	2400	2200	2000	7600	--	1500	
8/1/2003	137.66	9.63	0	128.03	-1.40	--	14000	880	130	630	2000	--	630	
10/30/2003	137.66	10.58	0	127.08	-0.95	--	1400	75	43	39	140	--	330	
1/29/2004	137.66	8.70	0	128.96	1.88	--	6300	750	56	400	1000	--	1100	
5/27/2004	137.66	9.59	0	128.07	-0.89	--	4600	260	15	300	840	--	400	
8/31/2004	137.66	10.05	0	127.61	-0.46	--	1500	53	ND<2.5	48	49	--	250	
11/18/2004	137.66	8.54	0	129.12	1.51	--	22000	1300	900	1100	4600	--	1100	
3/25/2005	137.66	7.12	0	130.54	1.42	--	53000	1400	660	1600	6400	--	1000	
6/22/2005	137.66	8.62	0	129.04	-1.50	--	5100	240	110	320	1100	--	420	
9/26/2005	137.66	9.70	0	127.96	-1.08	--	2500	81	ND<0.50	85	200	--	180	
12/20/2005	137.66	8.23	0	129.43	1.47	--	3800	220	42	240	620	--	300	
3/29/2006	137.66	6.70	0	130.96	1.53	--	7100	520	150	470	1500	--	680	
6/12/2006	137.66	8.68	0	128.98	-1.98	--	7500	290	97	500	1600	--	500	
9/27/2006	137.66	9.45	0	128.21	-0.77	--	2200	55	ND<0.50	85	170	--	220	
12/27/2006	137.66	7.57	0	130.09	1.88	--	13000	560	160	750	1900	--	580	
3/16/2007	137.66	8.10	0	129.56	-0.53	--	8000	340	62	400	700	--	480	
6/27/2007	137.66	9.56	0	128.10	-1.46	--	8900	330	14	690	1400	--	370	

Table 2
HISTORIC Groundwater Data
Chevron Station # 351641
Former Unocal Station # 4625
3070 Fruitvale Avenue, Oakland, CA

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
9/27/2007	137.35	9.85	0	127.50	-0.60	--	1300	31	ND<0.50	47	23	--	140	
12/26/2007	137.35	8.99	0	128.36	0.86	--	5700	410	44	470	760	--	650	
3/26/2008	137.35	9.22	0	128.13	-0.23	--	5400	360	ND<5.0	420	350	--	500	
6/17/2008	137.35	9.67	0	127.68	-0.45	--	2000	160	ND<0.50	99	64	--	290	
9/15/2008	137.35	10.09	0	127.26	-0.42	--	230	5.3	ND<0.50	4.5	2.9	--	99	
12/30/2008	137.35	8.14	0	129.21	1.95	--	5700	230	32	350	650	--	150	
3/30/2009	137.35	8.01	0	129.34	0.13	--	2600	140	10	180	280	--	130	
6/25/2009	137.35	9.00	0	128.35	-0.99	--	1400	40	1.3	71	96	--	110	
12/17/2009	137.35	7.62	0	129.73	1.38	--	12000	540	94	820	1900	--	190	
6/29/2010	137.35	8.82	0	128.53	-1.20	--	2200	77	5.2	150	290	--	88	
12/30/2010	137.35	6.15	0	131.20	2.67	--	7400	330	110	550	1300	--	120	
MW-6														
11/26/2002	--	9.19	0	--	--	--	11000	1200	2000	400	2300	--	490	
2/14/2003	138.88	7.76	0	131.12	--	--	13000	2300	1900	560	2300	--	360	
5/3/2003	138.88	6.62	0	132.26	1.14	--	4300	1000	640	260	990	--	300	
8/1/2003	138.88	9.05	0	129.83	-2.43	--	16000	2600	2300	740	2900	--	660	
10/30/2003	138.88	10.43	0	128.45	-1.38	--	2900	420	260	120	480	--	450	
1/29/2004	138.88	7.81	0	131.07	2.62	--	400	58	21	14	65	--	62	
5/27/2004	138.88	9.11	0	129.77	-1.30	--	580	58	14	20	69	--	410	
8/31/2004	138.88	9.76	0	129.12	-0.65	--	660	77	7.0	19	65	--	360	
11/18/2004	138.88	7.68	0	131.20	2.08	--	660	92	19	20	80	--	130	
3/25/2005	138.88	5.83	0	133.05	1.85	--	870	82	13	15	73	--	90	
6/22/2005	138.88	7.83	0	131.05	-2.00	--	480	84	2.4	23	72	--	360	
9/26/2005	138.88	9.50	0	129.38	-1.67	--	440	72	0.65	12	52	--	160	
12/20/2005	138.88	6.91	0	131.97	2.59	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
3/29/2006	138.88	6.48	0	132.40	0.43	--	430	61	13	11	41	--	130	
6/12/2006	138.88	8.10	0	130.78	-1.62	--	1000	190	8.0	28	130	--	310	
9/27/2006	138.88	9.25	0	129.63	-1.15	--	330	19	0.87	5.4	29	--	220	
12/27/2006	138.88	6.88	0	132.00	2.37	--	220	13	2.4	3.8	9.6	--	75	
3/16/2007	138.88	7.73	0	131.15	-0.85	--	160	22	8.7	3.5	12	--	82	
6/27/2007	138.88	8.98	0	129.90	-1.25	--	310	2.9	ND<0.50	1.4	2.0	--	370	
9/27/2007	138.69	9.82	0	128.87	-1.03	--	500	14	ND<0.50	7.3	3.5	--	190	

Table 2
HISTORIC Groundwater Data
Chevron Station # 351641
Former Unocal Station # 4625
3070 Fruitvale Avenue, Oakland, CA

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
12/26/2007	138.69	7.44	0	131.25	2.38	--	64	4.8	1.2	1.6	2.8	--	51	
3/26/2008	138.69	8.32	0	130.37	-0.88	--	200	21	1.1	4.0	2.6	--	97	
6/17/2008	138.69	9.63	0	129.06	-1.31	--	180	7.1	ND<0.50	2.8	2.0	--	250	
9/15/2008	138.69	10.08	0	128.61	-0.45	--	150	0.90	ND<0.50	ND<0.50	ND<1.0	--	200	
12/30/2008	138.69	7.62	0	131.07	2.46	--	ND<50	4.2	0.83	0.98	2.0	--	16	
3/30/2009	138.69	7.71	0	130.98	-0.09	--	58	6.5	0.61	1.1	1.8	--	9.8	
6/25/2009	138.69	9.09	0	129.60	-1.38	--	280	3.5	0.54	3.0	3.8	--	270	
12/17/2009	138.69	7.12	0	131.57	1.97	--	77	1.4	1.4	ND<0.50	1.4	--	16	
6/29/2010	138.69	8.58	0	130.11	-1.46	--	91	2.3	ND<0.50	ND<0.50	ND<1.0	--	200	
12/30/2010	138.69	5.43	0	133.26	3.15	--	ND<50	3.0	3.0	0.73	2.8	--	3.9	
MW-7														
9/27/2007	138.74	9.62	0	129.12	--	--	240	6.7	ND<0.50	24	5.0	--	16	
12/26/2007	138.74	8.60	0	130.14	1.02	--	73	ND<0.50	ND<0.50	9.5	ND<1.0	--	12	
3/26/2008	138.74	13.70	0	125.04	-5.10	--	ND<50	ND<0.50	ND<0.50	0.70	ND<1.0	--	7.0	
6/17/2008	138.74	9.81	0	128.93	3.89	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	2.4	
9/15/2008	138.74	10.57	0	128.17	-0.76	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.4	
12/30/2008	138.74	10.21	0	128.53	0.36	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.70	
3/30/2009	138.74	9.22	0	129.52	0.99	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/25/2009	138.74	8.97	0	129.77	0.25	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/17/2009	138.74	8.80	0	129.94	0.17	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/29/2010	138.74	8.64	0	130.10	0.16	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/30/2010	138.74	8.23	0	130.51	0.41	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
MW-8														
9/27/2007	136.22	10.02	0	126.20	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
12/26/2007	136.22	9.02	0	127.20	1.00	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
3/26/2008	136.22	9.41	0	126.81	-0.39	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/17/2008	136.22	10.00	0	126.22	-0.59	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
9/15/2008	136.22	10.29	0	125.93	-0.29	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/30/2008	136.22	9.13	0	127.09	1.16	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
3/30/2009	136.22	9.13	0	127.09	0.00	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/25/2009	136.22	9.55	0	126.67	-0.42	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/17/2009	136.22	8.84	0	127.38	0.71	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	

Table 2
HISTORIC Groundwater Data
Chevron Station # 351641
Former Unocal Station # 4625
3070 Fruitvale Avenue, Oakland, CA

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
6/29/2010	136.22	9.56	0	126.66	-0.72	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/30/2010	136.22	7.57	0	128.65	1.99	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
MW-9														
9/27/2007	137.11	10.60	0	126.51	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
12/26/2007	137.11	9.46	0	127.65	1.14	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
3/26/2008	137.11	9.89	0	127.22	-0.43	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/17/2008	137.11	10.58	0	126.53	-0.69	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
9/15/2008	137.11	10.89	0	126.22	-0.31	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/30/2008	137.11	9.51	0	127.60	1.38	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
3/30/2009	137.11	9.57	0	127.54	-0.06	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/25/2009	137.11	10.22	0	126.89	-0.65	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/17/2009	137.11	9.27	0	127.84	0.95	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/29/2010	137.11	10.04	0	127.07	-0.77	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/30/2010	137.11	8.03	0	129.08	2.01	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
USTW														
5/3/2000	--	8.00	0	--	--	--	--	--	--	--	--	--	--	
7/28/2000	--	9.28	0	--	--	--	--	--	--	--	--	--	--	
10/29/2000	--	7.75	0	--	--	--	--	--	--	--	--	--	--	
2/9/2001	--	6.14	0	--	--	--	--	--	--	--	--	--	--	
5/11/2001	--	7.96	0	--	--	--	--	--	--	--	--	--	--	
8/10/2001	--	9.54	0	--	--	--	--	--	--	--	--	--	--	
11/7/2001	--	9.33	0	--	--	--	--	--	--	--	--	--	--	
2/6/2002	--	8.08	0	--	--	--	--	--	--	--	--	--	--	
5/8/2002	--	8.51	0	--	--	--	--	--	--	--	--	--	--	
8/9/2002	--	9.56	0	--	--	--	--	--	--	--	--	--	--	
11/26/2002	--	9.16	0	--	--	--	--	--	--	--	--	--	--	
5/3/2003	--	6.25	0	--	--	--	--	--	--	--	--	--	--	
8/1/2003	--	8.99	--	--	--	--	--	--	--	--	--	--	--	
10/30/2003	--	10.44	0	--	--	--	--	--	--	--	--	--	--	Monitored Only
1/29/2004	--	6.52	0	--	--	--	--	--	--	--	--	--	--	Monitored Only
5/27/2004	--	8.98	0	--	--	--	--	--	--	--	--	--	--	Monitored Only
8/31/2004	--	9.75	0	--	--	--	--	--	--	--	--	--	--	Monitored Only

Table 2
HISTORIC Groundwater Data
Chevron Station # 351641
Former Unocal Station # 4625
3070 Fruitvale Avenue, Oakland, CA

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
11/18/2004	--	7.39	0	--	--	--	--	--	--	--	--	--	--	Monitored Only-UST well
3/25/2005	--	5.01	0	--	--	--	--	--	--	--	--	--	--	Monitor only
6/22/2005	--	7.63	0	--	--	--	--	--	--	--	--	--	--	Monitored Only
9/26/2005	--	9.45	0	--	--	--	--	--	--	--	--	--	--	Monitored Only
12/20/2005	--	5.35	0	--	--	--	--	--	--	--	--	--	--	Monitored Only
3/29/2006	--	4.83	0	--	--	--	--	--	--	--	--	--	--	Monitored Only
6/12/2006	--	8.05	0	--	--	--	--	--	--	--	--	--	--	Monitored Only
9/27/2006	--	9.21	0	--	--	--	--	--	--	--	--	--	--	Monitored Only
12/27/2006	--	6.37	0	--	--	--	--	--	--	--	--	--	--	Monitored Only
3/16/2007	--	7.43	0	--	--	--	--	--	--	--	--	--	--	Monitored Only
6/27/2007	--	8.92	0	--	--	--	--	--	--	--	--	--	--	Monitored Only
9/27/2007	--	9.80	0	--	--	--	--	--	--	--	--	--	--	Monitored Only
12/26/2007	--	9.72	0	--	--	--	--	--	--	--	--	--	--	Monitored only
3/26/2008	--	8.10	0	--	--	--	--	--	--	--	--	--	--	Monitored Only
6/17/2008	--	9.59	0	--	--	--	--	--	--	--	--	--	--	Monitored Only
9/15/2008	--	10.08	0	--	--	--	--	--	--	--	--	--	--	Monitored only
12/30/2008	--	7.34	0	--	--	--	--	--	--	--	--	--	--	Monitored only
3/30/2009	--	7.41	0	--	--	--	--	--	--	--	--	--	--	Monitored only
6/25/2009	--	8.99	0	--	--	--	--	--	--	--	--	--	--	Monitored only
12/17/2009	--	6.79	0	--	--	--	--	--	--	--	--	--	--	Gauged only
6/29/2010	--	8.42	0	--	--	--	--	--	--	--	--	--	--	Gauged only
12/30/2010	--	4.85	0	--	--	--	--	--	--	--	--	--	--	Gauged only

Attachment C

BC Laboratories Analytical Report

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 01/07/2013

Jim Harms

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Project:	4625
BC Work Order:	1223733
Invoice ID:	B137317

Enclosed are the results of analyses for samples received by the laboratory on 12/7/2012. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Molly Meyers

Contact Person: Molly Meyers
Client Service Rep

Authorized Signature

Table of Contents

CHAIN OF CUSTODY FORM

12-23733

Union Oil Company of California ■ 6101 Bollinger Canyon Road ■ San Ramon, CA 94583

COC 1 of 1

Union Oil Site ID: 4625	Union Oil Consultant: AECOM
Site Global ID: T0600102156	Consultant Contact: Jim Harms
Site Address: 3070 Fruitvale Ave. Oakland, CA	Consultant Phone No.: 916 361 6442
	Sampling Company: TRC
Union Oil PM: Raja Rambim	Sampled By (PRINT): Andrew Villiers
Union Oil PM Phone No.: 925 790 6270	
Charge Code: NWRTB-0351641-0-LAB	Sampler Signature:
	BC Laboratories, Inc.
This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.	Project Manager: Molly Meyers 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911

Turnaround Time (TAT): Standard X 24 Hours ☐ 48 Hours ☐ 72 Hours ☐

Special Instructions: Run 8 OXYs by 8260 on all 8260 MTBE hits.

SAMPLE ID: Field Point Name	Matrix	DTW	Date (yymmdd)	Sample Time	# of Containers	TPH - Diesel by EPA 8015M	TPH - G by GC/MS	BTEX/MTBE/OXYS by EPA 8260B	Ethanol by EPA 8260B	EPA 8260B Full List with OXYS	BTEX/MTBE by 8260B	EDB/EDC by 8260B	SVOCs by 8270	TOG	Total Chromium		Notes / Comments
MW-9 -1	W-S-A		121207	0837	3		X	X	X			X					
MW-8 -2	W-S-A			0851				X				X					
MW-7 -3	W-S-A			1104				X				X					
MW-1 -4	W-S-A			1055							X	X					
MW-4 -5	W-S-A			1120							X	X					
MW-3 -6	W-S-A			0944	9	X				X			X	X	X		
MW-2 -7	W-S-A			1010	3						X	X					
MW-6 -8	W-S-A			1030				X				X					
MW-5 -9	W-S-A			1133				X				X					
	W-S-A																
	W-S-A																
	W-S-A																

CHK BY: RLT

DISTRIBUTION: WHITE YELLOW PINK GOLD SUB-OUT

Relinquished By	Company	Date / Time:	Relinquished By	Company	Date / Time:	Relinquished By	Company	Date / Time:
	TRC	12/7/12	Gary Bogan		12-7-12 1715		BCLDB	12-7-12 20:20
Received By	**Company**	**Date / Time:**	**Received By**	**Company**	**Date / Time:**	**Received By**	**Company**	**Date / Time:**
Gary Bogan	BcLAB	12-7-12 1410		BCLDB	12-7-12 17:15	KON	BCLAB	12-7-12 2020

Chain of Custody and Cooler Receipt Form for 1223733 Page 2 of 2

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 13 08/17/12 Page 1 Of 1

Submission #: 12-23733

SHIPPING INFORMATION	SHIPPING CONTAINER
Federal Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☑ None ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments:

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: QtA Thermometer ID: 207

Temperature: (A) 2.7 °C / (C) 2.8 °C

Date/Time 12-7-12

Analyst Init JHW 2020

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS						B				
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	A 3	A 3	A 3	A 3	A 3	A 3	A 3	A 3	A 3	
QT EPA 413.1, 413.2, 418.1						CD				
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER						EFG				
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										

Comments:

Sample Numbering Completed By: BLT Date/Time: 12/10/12 @ 1000

A = Actual / C = Corrected

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1223733-01	**COC Number:**	---	**Receive Date:**	12/07/2012 20:20
	Project Number:	4625	**Sampling Date:**	12/07/2012 08:37
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-9-W-121207	**Lab Matrix:**	Water
	Sampled By:	TRCI	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600102156	
			Location ID (FieldPoint): MW-9	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1223733-02	**COC Number:**	---	**Receive Date:**	12/07/2012 20:20
	Project Number:	4625	**Sampling Date:**	12/07/2012 08:51
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-8-W-121207	**Lab Matrix:**	Water
	Sampled By:	TRCI	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600102156	
			Location ID (FieldPoint): MW-8	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1223733-03	**COC Number:**	---	**Receive Date:**	12/07/2012 20:20
	Project Number:	4625	**Sampling Date:**	12/07/2012 11:04
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-7-W-121207	**Lab Matrix:**	Water
	Sampled By:	TRCI	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600102156	
			Location ID (FieldPoint): MW-7	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1223733-04	**COC Number:**	---	**Receive Date:**	12/07/2012 20:20
	Project Number:	4625	**Sampling Date:**	12/07/2012 10:55
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-1-W-121207	**Lab Matrix:**	Water
	Sampled By:	TRCI	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600102156	
			Location ID (FieldPoint): MW-1	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1223733-05	**COC Number:**	---	**Receive Date:**	12/07/2012 20:20
	Project Number:	4625	**Sampling Date:**	12/07/2012 11:20
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-4-W-121207	**Lab Matrix:**	Water
	Sampled By:	TRCI	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600102156	
			Location ID (FieldPoint): MW-4	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1223733-06	**COC Number:**	---	**Receive Date:**	12/07/2012 20:20
	Project Number:	4625	**Sampling Date:**	12/07/2012 09:44
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-3-W-121207	**Lab Matrix:**	Water
	Sampled By:	TRCI	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600102156	
			Location ID (FieldPoint): MW-3	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1223733-07	**COC Number:**	---	**Receive Date:**	12/07/2012 20:20
	Project Number:	4625	**Sampling Date:**	12/07/2012 10:10
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-2-W-121207	**Lab Matrix:**	Water
	Sampled By:	TRCI	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600102156	
			Location ID (FieldPoint): MW-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1223733-08	**COC Number:**	---	**Receive Date:**	12/07/2012 20:20
	Project Number:	4625	**Sampling Date:**	12/07/2012 10:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-6-W-121207	**Lab Matrix:**	Water
	Sampled By:	TRCI	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600102156	
			Location ID (FieldPoint): MW-6	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1223733-09	**COC Number:**	---	**Receive Date:**	12/07/2012 20:20
	Project Number:	4625	**Sampling Date:**	12/07/2012 11:33
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-5-W-121207	**Lab Matrix:**	Water
	Sampled By:	TRCI	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600102156	
			Location ID (FieldPoint): MW-5	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1223733-01 | **Client Sample Name:** 4625, MW-9-W-121207, 12/7/2012 8:37:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260B	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	102	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	99.8	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.9	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/14/12	12/15/12 21:23	KEA	HPCHEM	1	BVL1085

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1223733-02 | **Client Sample Name:** 4625, MW-8-W-121207, 12/7/2012 8:51:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260B	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	101	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.5	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/14/12	12/15/12 20:59	KEA	HPCHEM	1	BVL1085

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1223733-03 | **Client Sample Name:** 4625, MW-7-W-121207, 12/7/2012 11:04:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260B	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	99.7	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	98.1	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	100	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/14/12	12/15/12 20:34	KEA	HPCHEM	1	BVL1085

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1223733-04 | **Client Sample Name:** 4625, MW-1-W-121207, 12/7/2012 10:55:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	100	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	102	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/14/12	12/15/12 20:10	KEA	HPCHEM	1	BVL1085

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1223733-05 | **Client Sample Name:** 4625, MW-4-W-121207, 12/7/2012 11:20:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.3	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.7	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/14/12	12/15/12 19:46	KEA	HPCHEM	1	BVL1085

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1223733-06 | **Client Sample Name:** 4625, MW-3-W-121207, 12/7/2012 9:44:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND		1
Bromobenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	EPA-8260B	ND		1
n-Butylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
sec-Butylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
tert-Butylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	EPA-8260B	ND		1
2-Chlorotoluene	ND	ug/L	0.50	EPA-8260B	ND		1
4-Chlorotoluene	ND	ug/L	0.50	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	EPA-8260B	ND		1
Total 1,2-Dichloroethene	ND	ug/L	1.0	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	EPA-8260B	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	EPA-8260B	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	EPA-8260B	ND		1

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1223733-06 | **Client Sample Name:** 4625, MW-3-W-121207, 12/7/2012 9:44:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
1,1-Dichloropropene	ND	ug/L	0.50	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	EPA-8260B	ND		1
Total 1,3-Dichloropropene	ND	ug/L	1.0	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	EPA-8260B	ND		1
Isopropylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Naphthalene	ND	ug/L	0.50	EPA-8260B	ND		1
n-Propylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	EPA-8260B	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Trichloroethene	ND	ug/L	0.50	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260B	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1223733-06 | **Client Sample Name:** 4625, MW-3-W-121207, 12/7/2012 9:44:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.1	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	99.2	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/14/12	12/15/12 19:21	KEA	HPCHEM	1	BVL1085

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID: 1223733-06 | **Client Sample Name:** 4625, MW-3-W-121207, 12/7/2012 9:44:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	ug/L	2.0	EPA-8270C	ND		1
Acenaphthylene	ND	ug/L	2.0	EPA-8270C	ND		1
Anthracene	ND	ug/L	2.0	EPA-8270C	ND		1
Benzo[a]anthracene	ND	ug/L	2.0	EPA-8270C	ND		1
Benzo[b]fluoranthene	ND	ug/L	2.0	EPA-8270C	ND		1
Benzo[k]fluoranthene	ND	ug/L	2.0	EPA-8270C	ND		1
Benzo[a]pyrene	ND	ug/L	2.0	EPA-8270C	ND		1
Benzo[g,h,i]perylene	ND	ug/L	2.0	EPA-8270C	ND		1
Benzoic acid	ND	ug/L	10	EPA-8270C	ND		1
Benzyl alcohol	ND	ug/L	2.0	EPA-8270C	ND		1
Benzyl butyl phthalate	ND	ug/L	2.0	EPA-8270C	ND		1
bis(2-Chloroethoxy)methane	ND	ug/L	2.0	EPA-8270C	ND		1
bis(2-Chloroethyl) ether	ND	ug/L	2.0	EPA-8270C	ND		1
bis(2-Chloroisopropyl)ether	ND	ug/L	2.0	EPA-8270C	ND		1
bis(2-Ethylhexyl)phthalate	ND	ug/L	4.0	EPA-8270C	ND		1
4-Bromophenyl phenyl ether	ND	ug/L	2.0	EPA-8270C	ND		1
4-Chloroaniline	ND	ug/L	2.0	EPA-8270C	ND		1
2-Chloronaphthalene	ND	ug/L	2.0	EPA-8270C	ND		1
4-Chlorophenyl phenyl ether	ND	ug/L	2.0	EPA-8270C	ND		1
Chrysene	ND	ug/L	2.0	EPA-8270C	ND		1
Dibenzo[a,h]anthracene	ND	ug/L	3.0	EPA-8270C	ND		1
Dibenzofuran	ND	ug/L	2.0	EPA-8270C	ND		1
1,2-Dichlorobenzene	ND	ug/L	2.0	EPA-8270C	ND		1
1,3-Dichlorobenzene	ND	ug/L	2.0	EPA-8270C	ND		1
1,4-Dichlorobenzene	ND	ug/L	2.0	EPA-8270C	ND		1
3,3-Dichlorobenzidine	ND	ug/L	10	EPA-8270C	ND		1
Diethyl phthalate	ND	ug/L	2.0	EPA-8270C	ND		1
Dimethyl phthalate	ND	ug/L	2.0	EPA-8270C	ND		1
Di-n-butyl phthalate	ND	ug/L	2.0	EPA-8270C	ND		1
2,4-Dinitrotoluene	ND	ug/L	2.0	EPA-8270C	ND		1
2,6-Dinitrotoluene	ND	ug/L	2.0	EPA-8270C	ND		1
Di-n-octyl phthalate	ND	ug/L	2.0	EPA-8270C	ND		1
Fluoranthene	ND	ug/L	2.0	EPA-8270C	ND		1

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID: 1223733-06 | **Client Sample Name:** 4625, MW-3-W-121207, 12/7/2012 9:44:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Fluorene	ND	ug/L	2.0	EPA-8270C	ND		1
Hexachlorobenzene	ND	ug/L	2.0	EPA-8270C	ND		1
Hexachlorobutadiene	ND	ug/L	2.0	EPA-8270C	ND		1
Hexachlorocyclopentadiene	ND	ug/L	2.0	EPA-8270C	ND		1
Hexachloroethane	ND	ug/L	2.0	EPA-8270C	ND		1
Indeno[1,2,3-cd]pyrene	ND	ug/L	2.0	EPA-8270C	ND		1
Isophorone	ND	ug/L	2.0	EPA-8270C	ND		1
2-Methylnaphthalene	ND	ug/L	2.0	EPA-8270C	ND		1
Naphthalene	ND	ug/L	2.0	EPA-8270C	ND		1
2-Nitroaniline	ND	ug/L	2.0	EPA-8270C	ND		1
3-Nitroaniline	ND	ug/L	2.0	EPA-8270C	ND		1
4-Nitroaniline	ND	ug/L	5.0	EPA-8270C	ND		1
Nitrobenzene	ND	ug/L	2.0	EPA-8270C	ND		1
N-Nitrosodi-N-propylamine	ND	ug/L	2.0	EPA-8270C	ND		1
N-Nitrosodiphenylamine	ND	ug/L	2.0	EPA-8270C	ND		1
Phenanthrene	ND	ug/L	2.0	EPA-8270C	ND		1
Pyrene	ND	ug/L	2.0	EPA-8270C	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	2.0	EPA-8270C	ND		1
4-Chloro-3-methylphenol	ND	ug/L	5.0	EPA-8270C	ND		1
2-Chlorophenol	ND	ug/L	2.0	EPA-8270C	ND		1
2,4-Dichlorophenol	ND	ug/L	2.0	EPA-8270C	ND		1
2,4-Dimethylphenol	ND	ug/L	2.0	EPA-8270C	ND		1
4,6-Dinitro-2-methylphenol	ND	ug/L	10	EPA-8270C	ND		1
2,4-Dinitrophenol	ND	ug/L	10	EPA-8270C	ND		1
2-Methylphenol	ND	ug/L	2.0	EPA-8270C	ND		1
3- & 4-Methylphenol	ND	ug/L	2.0	EPA-8270C	ND		1
2-Nitrophenol	ND	ug/L	2.0	EPA-8270C	ND		1
4-Nitrophenol	ND	ug/L	2.0	EPA-8270C	ND		1
Pentachlorophenol	ND	ug/L	10	EPA-8270C	ND		1
Phenol	ND	ug/L	2.0	EPA-8270C	ND		1
2,4,5-Trichlorophenol	ND	ug/L	5.0	EPA-8270C	ND		1
2,4,6-Trichlorophenol	ND	ug/L	5.0	EPA-8270C	ND		1
2-Fluorophenol (Surrogate)	53.5	%	30 - 120 (LCL - UCL)	EPA-8270C			1

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID: 1223733-06 | **Client Sample Name:** 4625, MW-3-W-121207, 12/7/2012 9:44:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Phenol-d5 (Surrogate)	37.3	%	12 - 110 (LCL - UCL)	EPA-8270C			1
Nitrobenzene-d5 (Surrogate)	97.2	%	60 - 130 (LCL - UCL)	EPA-8270C			1
2-Fluorobiphenyl (Surrogate)	116	%	55 - 125 (LCL - UCL)	EPA-8270C			1
2,4,6-Tribromophenol (Surrogate)	105	%	40 - 150 (LCL - UCL)	EPA-8270C			1
p-Terphenyl-d14 (Surrogate)	91.0	%	40 - 150 (LCL - UCL)	EPA-8270C			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C	12/14/12	12/19/12 19:36	SKC	MS-B2	0.980	BVL1542

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Total Petroleum Hydrocarbons

BCL Sample ID: 1223733-06 | **Client Sample Name:** 4625, MW-3-W-121207, 12/7/2012 9:44:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Diesel Range Organics (C12 - C24)	ND	ug/L	40	EPA-8015B/TPHd	ND		1
Tetracosane (Surrogate)	68.9	%	30 - 150 (LCL - UCL)	EPA-8015B/TPHd		V11	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/TPHd	12/13/12	12/20/12 07:42	JAR	GC-5	1	BVL1596

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

EPA Method 1664

BCL Sample ID: 1223733-06 | **Client Sample Name:** 4625, MW-3-W-121207, 12/7/2012 9:44:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/L	5.0	EPA-1664HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664HEM	12/13/12	12/13/12 11:20	JAK	MAN-SV	1	BVL1444

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Metals Analysis

BCL Sample ID: 1223733-06 | **Client Sample Name:** 4625, MW-3-W-121207, 12/7/2012 9:44:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Total Chromium	**12**	**ug/L**	**10**	**EPA-6010B**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/11/12	12/12/12 11:32	ARD	PE-OP2	1	BVL0711

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1223733-07 | **Client Sample Name:** 4625, MW-2-W-121207, 12/7/2012 10:10:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.4	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	100	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/14/12	12/15/12 18:57	KEA	HPCHEM	1	BVL1085

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1223733-08 | **Client Sample Name:** 4625, MW-6-W-121207, 12/7/2012 10:30:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	**3.5**	**ug/L**	**0.50**	**EPA-8260B**	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	**1.0**	**ug/L**	**0.50**	**EPA-8260B**	ND		1
Methyl t-butyl ether	**3.1**	**ug/L**	**0.50**	**EPA-8260B**	ND		1
Toluene	**3.1**	**ug/L**	**0.50**	**EPA-8260B**	ND		1
Total Xylenes	**4.1**	**ug/L**	**1.0**	**EPA-8260B**	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260B	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	**62**	**ug/L**	**50**	**Luft-GC/MS**	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.2	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.8	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/14/12	12/17/12 14:55	KEA	HPCHEM	1	BVL1085

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1223733-09 | **Client Sample Name:** 4625, MW-5-W-121207, 12/7/2012 11:33:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	**92**	**ug/L**	**2.5**	**EPA-8260B**	ND	**A01**	1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		2
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		2
Ethylbenzene	**260**	**ug/L**	**2.5**	**EPA-8260B**	ND	**A01**	1
Methyl t-butyl ether	**70**	**ug/L**	**0.50**	**EPA-8260B**	ND		2
Toluene	**60**	**ug/L**	**0.50**	**EPA-8260B**	ND		2
Total Xylenes	**590**	**ug/L**	**5.0**	**EPA-8260B**	ND	**A01**	1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		2
t-Butyl alcohol	**130**	**ug/L**	**10**	**EPA-8260B**	ND		2
Diisopropyl ether	ND	ug/L	0.50	EPA-8260B	ND		2
Ethanol	ND	ug/L	250	EPA-8260B	ND		2
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		2
Total Purgeable Petroleum Hydrocarbons	**3300**	**ug/L**	**250**	**Luft-GC/MS**	ND	**A01**	1
1,2-Dichloroethane-d4 (Surrogate)	90.9	%	75 - 125 (LCL - UCL)	EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	89.6	%	75 - 125 (LCL - UCL)	EPA-8260B			2
Toluene-d8 (Surrogate)	98.8	%	80 - 120 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	105	%	80 - 120 (LCL - UCL)	EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	99.2	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.2	%	80 - 120 (LCL - UCL)	EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/14/12	12/17/12 15:19	KEA	HPCHEM	5	BVL1085
2	EPA-8260B	12/14/12	12/15/12 18:08	KEA	HPCHEM	1	BVL1085

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVL1085						
Benzene	BVL1085-BLK1	ND	ug/L	0.50		
Bromobenzene	BVL1085-BLK1	ND	ug/L	0.50		
Bromochloromethane	BVL1085-BLK1	ND	ug/L	0.50		
Bromodichloromethane	BVL1085-BLK1	ND	ug/L	0.50		
Bromoform	BVL1085-BLK1	ND	ug/L	0.50		
Bromomethane	BVL1085-BLK1	ND	ug/L	1.0		
n-Butylbenzene	BVL1085-BLK1	ND	ug/L	0.50		
sec-Butylbenzene	BVL1085-BLK1	ND	ug/L	0.50		
tert-Butylbenzene	BVL1085-BLK1	ND	ug/L	0.50		
Carbon tetrachloride	BVL1085-BLK1	ND	ug/L	0.50		
Chlorobenzene	BVL1085-BLK1	ND	ug/L	0.50		
Chloroethane	BVL1085-BLK1	ND	ug/L	0.50		
Chloroform	BVL1085-BLK1	ND	ug/L	0.50		
Chloromethane	BVL1085-BLK1	ND	ug/L	0.50		
2-Chlorotoluene	BVL1085-BLK1	ND	ug/L	0.50		
4-Chlorotoluene	BVL1085-BLK1	ND	ug/L	0.50		
Dibromochloromethane	BVL1085-BLK1	ND	ug/L	0.50		
1,2-Dibromo-3-chloropropane	BVL1085-BLK1	ND	ug/L	1.0		
1,2-Dibromoethane	BVL1085-BLK1	ND	ug/L	0.50		
Dibromomethane	BVL1085-BLK1	ND	ug/L	0.50		
1,2-Dichlorobenzene	BVL1085-BLK1	ND	ug/L	0.50		
1,3-Dichlorobenzene	BVL1085-BLK1	ND	ug/L	0.50		
1,4-Dichlorobenzene	BVL1085-BLK1	ND	ug/L	0.50		
Dichlorodifluoromethane	BVL1085-BLK1	ND	ug/L	0.50		
1,1-Dichloroethane	BVL1085-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane	BVL1085-BLK1	ND	ug/L	0.50		
1,1-Dichloroethene	BVL1085-BLK1	ND	ug/L	0.50		
cis-1,2-Dichloroethene	BVL1085-BLK1	ND	ug/L	0.50		
trans-1,2-Dichloroethene	BVL1085-BLK1	ND	ug/L	0.50		
Total 1,2-Dichloroethene	BVL1085-BLK1	ND	ug/L	1.0		
1,2-Dichloropropane	BVL1085-BLK1	ND	ug/L	0.50		
1,3-Dichloropropane	BVL1085-BLK1	ND	ug/L	0.50		
2,2-Dichloropropane	BVL1085-BLK1	ND	ug/L	0.50		
1,1-Dichloropropene	BVL1085-BLK1	ND	ug/L	0.50		

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVL1085						
cis-1,3-Dichloropropene	BVL1085-BLK1	ND	ug/L	0.50		
trans-1,3-Dichloropropene	BVL1085-BLK1	ND	ug/L	0.50		
Total 1,3-Dichloropropene	BVL1085-BLK1	ND	ug/L	1.0		
Ethylbenzene	BVL1085-BLK1	ND	ug/L	0.50		
Hexachlorobutadiene	BVL1085-BLK1	ND	ug/L	0.50		
Isopropylbenzene	BVL1085-BLK1	ND	ug/L	0.50		
p-Isopropyltoluene	BVL1085-BLK1	ND	ug/L	0.50		
Methylene chloride	BVL1085-BLK1	ND	ug/L	1.0		
Methyl t-butyl ether	BVL1085-BLK1	ND	ug/L	0.50		
Naphthalene	BVL1085-BLK1	ND	ug/L	0.50		
n-Propylbenzene	BVL1085-BLK1	ND	ug/L	0.50		
Styrene	BVL1085-BLK1	ND	ug/L	0.50		
1,1,1,2-Tetrachloroethane	BVL1085-BLK1	ND	ug/L	0.50		
1,1,2,2-Tetrachloroethane	BVL1085-BLK1	ND	ug/L	0.50		
Tetrachloroethene	BVL1085-BLK1	ND	ug/L	0.50		
Toluene	BVL1085-BLK1	ND	ug/L	0.50		
1,2,3-Trichlorobenzene	BVL1085-BLK1	ND	ug/L	0.50		
1,2,4-Trichlorobenzene	BVL1085-BLK1	ND	ug/L	0.50		
1,1,1-Trichloroethane	BVL1085-BLK1	ND	ug/L	0.50		
1,1,2-Trichloroethane	BVL1085-BLK1	ND	ug/L	0.50		
Trichloroethene	BVL1085-BLK1	ND	ug/L	0.50		
Trichlorofluoromethane	BVL1085-BLK1	ND	ug/L	0.50		
1,2,3-Trichloropropane	BVL1085-BLK1	ND	ug/L	1.0		
1,1,2-Trichloro-1,2,2-trifluoroethane	BVL1085-BLK1	ND	ug/L	0.50		
1,2,4-Trimethylbenzene	BVL1085-BLK1	ND	ug/L	0.50		
1,3,5-Trimethylbenzene	BVL1085-BLK1	ND	ug/L	0.50		
Vinyl chloride	BVL1085-BLK1	ND	ug/L	0.50		
Total Xylenes	BVL1085-BLK1	ND	ug/L	1.0		
t-Amyl Methyl ether	BVL1085-BLK1	ND	ug/L	0.50		
t-Butyl alcohol	BVL1085-BLK1	ND	ug/L	10		
Diisopropyl ether	BVL1085-BLK1	ND	ug/L	0.50		
Ethanol	BVL1085-BLK1	ND	ug/L	250		
Ethyl t-butyl ether	BVL1085-BLK1	ND	ug/L	0.50		
Total Purgeable Petroleum Hydrocarbons	BVL1085-BLK1	ND	ug/L	50		

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVL1085						
1,2-Dichloroethane-d4 (Surrogate)	BVL1085-BLK1	95.8	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BVL1085-BLK1	96.7	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BVL1085-BLK1	96.4	%	80 - 120 (LCL - UCL)		

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BVL1085										
Benzene	BVL1085-BS1	LCS	23.280	25.000	ug/L	93.1		70 - 130		
Bromodichloromethane	BVL1085-BS1	LCS	23.840	25.000	ug/L	95.4		70 - 130		
Chlorobenzene	BVL1085-BS1	LCS	24.470	25.000	ug/L	97.9		70 - 130		
Chloroethane	BVL1085-BS1	LCS	25.970	25.000	ug/L	104		70 - 130		
1,4-Dichlorobenzene	BVL1085-BS1	LCS	24.070	25.000	ug/L	96.3		70 - 130		
1,1-Dichloroethane	BVL1085-BS1	LCS	25.450	25.000	ug/L	102		70 - 130		
1,1-Dichloroethene	BVL1085-BS1	LCS	25.670	25.000	ug/L	103		70 - 130		
Toluene	BVL1085-BS1	LCS	23.510	25.000	ug/L	94.0		70 - 130		
Trichloroethene	BVL1085-BS1	LCS	27.240	25.000	ug/L	109		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BVL1085-BS1	LCS	10.110	10.000	ug/L	101		75 - 125		
Toluene-d8 (Surrogate)	BVL1085-BS1	LCS	10.020	10.000	ug/L	100		80 - 120		
4-Bromofluorobenzene (Surrogate)	BVL1085-BS1	LCS	10.130	10.000	ug/L	101		80 - 120		

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BVL1085	Used client sample: N										
Benzene	MS	1222450-61	ND	22.950	25.000	ug/L		91.8		70 - 130	
	MSD	1222450-61	ND	25.120	25.000	ug/L	9.0	100	20	70 - 130	
Bromodichloromethane	MS	1222450-61	ND	23.790	25.000	ug/L		95.2		70 - 130	
	MSD	1222450-61	ND	25.590	25.000	ug/L	7.3	102	20	70 - 130	
Chlorobenzene	MS	1222450-61	ND	23.920	25.000	ug/L		95.7		70 - 130	
	MSD	1222450-61	ND	25.930	25.000	ug/L	8.1	104	20	70 - 130	
Chloroethane	MS	1222450-61	ND	15.940	25.000	ug/L		63.8		70 - 130	Q03
	MSD	1222450-61	ND	16.380	25.000	ug/L	2.7	65.5	20	70 - 130	Q03
1,4-Dichlorobenzene	MS	1222450-61	ND	24.740	25.000	ug/L		99.0		70 - 130	
	MSD	1222450-61	ND	26.020	25.000	ug/L	5.0	104	20	70 - 130	
1,1-Dichloroethane	MS	1222450-61	ND	23.900	25.000	ug/L		95.6		70 - 130	
	MSD	1222450-61	ND	27.740	25.000	ug/L	14.9	111	20	70 - 130	
1,1-Dichloroethene	MS	1222450-61	ND	24.710	25.000	ug/L		98.8		70 - 130	
	MSD	1222450-61	ND	27.670	25.000	ug/L	11.3	111	20	70 - 130	
Toluene	MS	1222450-61	ND	23.360	25.000	ug/L		93.4		70 - 130	
	MSD	1222450-61	ND	24.890	25.000	ug/L	6.3	99.6	20	70 - 130	
Trichloroethene	MS	1222450-61	ND	25.990	25.000	ug/L		104		70 - 130	
	MSD	1222450-61	ND	29.000	25.000	ug/L	10.9	116	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1222450-61	ND	9.9800	10.000	ug/L		99.8		75 - 125	
	MSD	1222450-61	ND	10.080	10.000	ug/L	1.0	101		75 - 125	
Toluene-d8 (Surrogate)	MS	1222450-61	ND	9.9400	10.000	ug/L		99.4		80 - 120	
	MSD	1222450-61	ND	10.030	10.000	ug/L	0.9	100		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1222450-61	ND	10.200	10.000	ug/L		102		80 - 120	
	MSD	1222450-61	ND	10.180	10.000	ug/L	0.2	102		80 - 120	

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVL1542						
Acenaphthene	BVL1542-BLK1	ND	ug/L	2.0		
Acenaphthylene	BVL1542-BLK1	ND	ug/L	2.0		
Anthracene	BVL1542-BLK1	ND	ug/L	2.0		
Benzo[a]anthracene	BVL1542-BLK1	ND	ug/L	2.0		
Benzo[b]fluoranthene	BVL1542-BLK1	ND	ug/L	2.0		
Benzo[k]fluoranthene	BVL1542-BLK1	ND	ug/L	2.0		
Benzo[a]pyrene	BVL1542-BLK1	ND	ug/L	2.0		
Benzo[g,h,i]perylene	BVL1542-BLK1	ND	ug/L	2.0		
Benzoic acid	BVL1542-BLK1	ND	ug/L	10		
Benzyl alcohol	BVL1542-BLK1	ND	ug/L	2.0		
Benzyl butyl phthalate	BVL1542-BLK1	ND	ug/L	2.0		
bis(2-Chloroethoxy)methane	BVL1542-BLK1	ND	ug/L	2.0		
bis(2-Chloroethyl) ether	BVL1542-BLK1	ND	ug/L	2.0		
bis(2-Chloroisopropyl)ether	BVL1542-BLK1	ND	ug/L	2.0		
bis(2-Ethylhexyl)phthalate	BVL1542-BLK1	ND	ug/L	4.0		
4-Bromophenyl phenyl ether	BVL1542-BLK1	ND	ug/L	2.0		
4-Chloroaniline	BVL1542-BLK1	ND	ug/L	2.0		
2-Chloronaphthalene	BVL1542-BLK1	ND	ug/L	2.0		
4-Chlorophenyl phenyl ether	BVL1542-BLK1	ND	ug/L	2.0		
Chrysene	BVL1542-BLK1	ND	ug/L	2.0		
Dibenzo[a,h]anthracene	BVL1542-BLK1	ND	ug/L	3.0		
Dibenzofuran	BVL1542-BLK1	ND	ug/L	2.0		
1,2-Dichlorobenzene	BVL1542-BLK1	ND	ug/L	2.0		
1,3-Dichlorobenzene	BVL1542-BLK1	ND	ug/L	2.0		
1,4-Dichlorobenzene	BVL1542-BLK1	ND	ug/L	2.0		
3,3-Dichlorobenzidine	BVL1542-BLK1	ND	ug/L	10		
Diethyl phthalate	BVL1542-BLK1	ND	ug/L	2.0		
Dimethyl phthalate	BVL1542-BLK1	ND	ug/L	2.0		
Di-n-butyl phthalate	BVL1542-BLK1	ND	ug/L	2.0		
2,4-Dinitrotoluene	BVL1542-BLK1	ND	ug/L	2.0		
2,6-Dinitrotoluene	BVL1542-BLK1	ND	ug/L	2.0		
Di-n-octyl phthalate	BVL1542-BLK1	ND	ug/L	2.0		
Fluoranthene	BVL1542-BLK1	ND	ug/L	2.0		
Fluorene	BVL1542-BLK1	ND	ug/L	2.0		

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVL1542						
Hexachlorobenzene	BVL1542-BLK1	ND	ug/L	2.0		
Hexachlorobutadiene	BVL1542-BLK1	ND	ug/L	2.0		
Hexachlorocyclopentadiene	BVL1542-BLK1	ND	ug/L	2.0		
Hexachloroethane	BVL1542-BLK1	ND	ug/L	2.0		
Indeno[1,2,3-cd]pyrene	BVL1542-BLK1	ND	ug/L	2.0		
Isophorone	BVL1542-BLK1	ND	ug/L	2.0		
2-Methylnaphthalene	BVL1542-BLK1	ND	ug/L	2.0		
Naphthalene	BVL1542-BLK1	ND	ug/L	2.0		
2-Nitroaniline	BVL1542-BLK1	ND	ug/L	2.0		
3-Nitroaniline	BVL1542-BLK1	ND	ug/L	2.0		
4-Nitroaniline	BVL1542-BLK1	ND	ug/L	5.0		
Nitrobenzene	BVL1542-BLK1	ND	ug/L	2.0		
N-Nitrosodi-N-propylamine	BVL1542-BLK1	ND	ug/L	2.0		
N-Nitrosodiphenylamine	BVL1542-BLK1	ND	ug/L	2.0		
Phenanthrene	BVL1542-BLK1	ND	ug/L	2.0		
Pyrene	BVL1542-BLK1	ND	ug/L	2.0		
1,2,4-Trichlorobenzene	BVL1542-BLK1	ND	ug/L	2.0		
4-Chloro-3-methylphenol	BVL1542-BLK1	ND	ug/L	5.0		
2-Chlorophenol	BVL1542-BLK1	ND	ug/L	2.0		
2,4-Dichlorophenol	BVL1542-BLK1	ND	ug/L	2.0		
2,4-Dimethylphenol	BVL1542-BLK1	ND	ug/L	2.0		
4,6-Dinitro-2-methylphenol	BVL1542-BLK1	ND	ug/L	10		
2,4-Dinitrophenol	BVL1542-BLK1	ND	ug/L	10		
2-Methylphenol	BVL1542-BLK1	ND	ug/L	2.0		
3- & 4-Methylphenol	BVL1542-BLK1	ND	ug/L	2.0		
2-Nitrophenol	BVL1542-BLK1	ND	ug/L	2.0		
4-Nitrophenol	BVL1542-BLK1	ND	ug/L	2.0		
Pentachlorophenol	BVL1542-BLK1	ND	ug/L	10		
Phenol	BVL1542-BLK1	ND	ug/L	2.0		
2,4,5-Trichlorophenol	BVL1542-BLK1	ND	ug/L	5.0		
2,4,6-Trichlorophenol	BVL1542-BLK1	ND	ug/L	5.0		
2-Fluorophenol (Surrogate)	BVL1542-BLK1	122	%	30 - 120 (LCL - UCL)		S09
Phenol-d5 (Surrogate)	BVL1542-BLK1	44.3	%	12 - 110 (LCL - UCL)		
Nitrobenzene-d5 (Surrogate)	BVL1542-BLK1	101	%	60 - 130 (LCL - UCL)		

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVL1542						
2-Fluorobiphenyl (Surrogate)	BVL1542-BLK1	121	%	55 - 125 (LCL - UCL)		
2,4,6-Tribromophenol (Surrogate)	BVL1542-BLK1	139	%	40 - 150 (LCL - UCL)		
p-Terphenyl-d14 (Surrogate)	BVL1542-BLK1	98.9	%	40 - 150 (LCL - UCL)		

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BVL1542										
Acenaphthene	BVL1542-BS1	LCS	60.576	50.000	ug/L	121		50 - 120		L01
1,4-Dichlorobenzene	BVL1542-BS1	LCS	50.556	50.000	ug/L	101		50 - 120		
2,4-Dinitrotoluene	BVL1542-BS1	LCS	62.332	50.000	ug/L	125		50 - 120		L01
Hexachlorobenzene	BVL1542-BS1	LCS	63.545	50.000	ug/L	127		60 - 120		L01
Hexachlorobutadiene	BVL1542-BS1	LCS	39.295	50.000	ug/L	78.6		40 - 110		
Hexachloroethane	BVL1542-BS1	LCS	47.899	50.000	ug/L	95.8		40 - 120		
Nitrobenzene	BVL1542-BS1	LCS	53.369	50.000	ug/L	107		50 - 120		
N-Nitrosodi-N-propylamine	BVL1542-BS1	LCS	43.223	50.000	ug/L	86.4		50 - 120		
Pyrene	BVL1542-BS1	LCS	52.225	50.000	ug/L	104		40 - 140		
1,2,4-Trichlorobenzene	BVL1542-BS1	LCS	44.387	50.000	ug/L	88.8		45 - 120		
4-Chloro-3-methylphenol	BVL1542-BS1	LCS	51.429	50.000	ug/L	103		50 - 120		
2-Chlorophenol	BVL1542-BS1	LCS	51.973	50.000	ug/L	104		50 - 120		
2-Methylphenol	BVL1542-BS1	LCS	48.122	50.000	ug/L	96.2		40 - 110		
3- & 4-Methylphenol	BVL1542-BS1	LCS	83.100	100.00	ug/L	83.1		40 - 110		
4-Nitrophenol	BVL1542-BS1	LCS	27.684	50.000	ug/L	55.4		10 - 110		
Pentachlorophenol	BVL1542-BS1	LCS	66.697	50.000	ug/L	133		30 - 120		L01
Phenol	BVL1542-BS1	LCS	23.328	50.000	ug/L	46.7		20 - 110		
2,4,6-Trichlorophenol	BVL1542-BS1	LCS	57.560	50.000	ug/L	115		54 - 120		
2-Fluorophenol (Surrogate)	BVL1542-BS1	LCS	105.38	80.000	ug/L	132		30 - 120		S09
Phenol-d5 (Surrogate)	BVL1542-BS1	LCS	37.471	80.000	ug/L	46.8		12 - 110		
Nitrobenzene-d5 (Surrogate)	BVL1542-BS1	LCS	85.176	80.000	ug/L	106		60 - 130		
2-Fluorobiphenyl (Surrogate)	BVL1542-BS1	LCS	98.542	80.000	ug/L	123		55 - 125		
2,4,6-Tribromophenol (Surrogate)	BVL1542-BS1	LCS	110.06	80.000	ug/L	138		40 - 150		
p-Terphenyl-d14 (Surrogate)	BVL1542-BS1	LCS	42.564	40.000	ug/L	106		40 - 150		

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BVL1542	Used client sample: N										
Acenaphthene	MS	1222450-19	ND	67.560	50.000	ug/L		135		50 - 120	Q03
	MSD	1222450-19	ND	62.310	50.000	ug/L	8.1	125	30	50 - 120	Q03
1,4-Dichlorobenzene	MS	1222450-19	ND	56.470	50.000	ug/L		113		47 - 120	
	MSD	1222450-19	ND	52.240	50.000	ug/L	7.8	104	30	47 - 120	
2,4-Dinitrotoluene	MS	1222450-19	ND	65.230	50.000	ug/L		130		50 - 130	
	MSD	1222450-19	ND	59.910	50.000	ug/L	8.5	120	30	50 - 130	
Hexachlorobenzene	MS	1222450-19	ND	64.510	50.000	ug/L		129		62 - 120	Q03
	MSD	1222450-19	ND	61.530	50.000	ug/L	4.7	123	30	62 - 120	Q03
Hexachlorobutadiene	MS	1222450-19	ND	42.750	50.000	ug/L		85.5		40 - 110	
	MSD	1222450-19	ND	40.280	50.000	ug/L	5.9	80.6	30	40 - 110	
Hexachloroethane	MS	1222450-19	ND	47.540	50.000	ug/L		95.1		40 - 120	
	MSD	1222450-19	ND	47.830	50.000	ug/L	0.6	95.7	30	40 - 120	
Nitrobenzene	MS	1222450-19	ND	84.040	50.000	ug/L		168		50 - 120	Q03
	MSD	1222450-19	ND	55.760	50.000	ug/L	40.5	112	30	50 - 120	Q03
N-Nitrosodi-N-propylamine	MS	1222450-19	ND	42.570	50.000	ug/L		85.1		50 - 120	
	MSD	1222450-19	ND	43.500	50.000	ug/L	2.2	87.0	30	50 - 120	
Pyrene	MS	1222450-19	ND	59.550	50.000	ug/L		119		40 - 140	
	MSD	1222450-19	ND	54.390	50.000	ug/L	9.1	109	30	40 - 140	
1,2,4-Trichlorobenzene	MS	1222450-19	ND	49.410	50.000	ug/L		98.8		43 - 120	
	MSD	1222450-19	ND	46.840	50.000	ug/L	5.3	93.7	30	43 - 120	
4-Chloro-3-methylphenol	MS	1222450-19	ND	55.830	50.000	ug/L		112		50 - 120	
	MSD	1222450-19	ND	52.650	50.000	ug/L	5.9	105	30	50 - 120	
2-Chlorophenol	MS	1222450-19	ND	57.960	50.000	ug/L		116		50 - 120	
	MSD	1222450-19	ND	53.020	50.000	ug/L	8.9	106	30	50 - 120	
2-Methylphenol	MS	1222450-19	ND	48.640	50.000	ug/L		97.3		40 - 110	
	MSD	1222450-19	ND	49.230	50.000	ug/L	1.2	98.5	30	40 - 110	
3- & 4-Methylphenol	MS	1222450-19	ND	82.370	100.00	ug/L		82.4		40 - 110	
	MSD	1222450-19	ND	82.690	100.00	ug/L	0.4	82.7	30	40 - 110	
4-Nitrophenol	MS	1222450-19	ND	29.220	50.000	ug/L		58.4		10 - 110	
	MSD	1222450-19	ND	26.660	50.000	ug/L	9.2	53.3	30	10 - 110	
Pentachlorophenol	MS	1222450-19	ND	66.790	50.000	ug/L		134		30 - 120	Q03
	MSD	1222450-19	ND	63.570	50.000	ug/L	4.9	127	30	30 - 120	Q03
Phenol	MS	1222450-19	ND	24.870	50.000	ug/L		49.7		20 - 110	
	MSD	1222450-19	ND	22.970	50.000	ug/L	7.9	45.9	30	20 - 110	
2,4,6-Trichlorophenol	MS	1222450-19	ND	61.470	50.000	ug/L		123		50 - 120	Q03
	MSD	1222450-19	ND	58.720	50.000	ug/L	4.6	117	30	50 - 120	

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BVL1542	Used client sample: N										
2-Fluorophenol (Surrogate)	MS	1222450-19	ND	69.770	80.000	ug/L		87.2		30 - 120	
	MSD	1222450-19	ND	112.54	80.000	ug/L	46.9	141		30 - 120	S09
Phenol-d5 (Surrogate)	MS	1222450-19	ND	40.830	80.000	ug/L		51.0		12 - 110	
	MSD	1222450-19	ND	37.550	80.000	ug/L	8.4	46.9		12 - 110	
Nitrobenzene-d5 (Surrogate)	MS	1222450-19	ND	80.650	80.000	ug/L		101		60 - 130	
	MSD	1222450-19	ND	84.840	80.000	ug/L	5.1	106		60 - 130	
2-Fluorobiphenyl (Surrogate)	MS	1222450-19	ND	103.33	80.000	ug/L		129		55 - 125	S09
	MSD	1222450-19	ND	96.270	80.000	ug/L	7.1	120		55 - 125	
2,4,6-Tribromophenol (Surrogate)	MS	1222450-19	ND	113.30	80.000	ug/L		142		40 - 150	
	MSD	1222450-19	ND	106.26	80.000	ug/L	6.4	133		40 - 150	
p-Terphenyl-d14 (Surrogate)	MS	1222450-19	ND	43.930	40.000	ug/L		110		40 - 150	
	MSD	1222450-19	ND	43.560	40.000	ug/L	0.8	109		40 - 150	

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVL1596						
Diesel Range Organics (C12 - C24)	BVL1596-BLK1	ND	ug/L	40		
Tetracosane (Surrogate)	BVL1596-BLK1	78.7	%	30 - 150 (LCL - UCL)		

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BVL1596										
Diesel Range Organics (C12 - C24)	BVL1596-BS1	LCS	446.06	500.00	ug/L	89.2		50 - 140		
Tetracosane (Surrogate)	BVL1596-BS1	LCS	15.067	20.000	ug/L	75.3		30 - 150		

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BVL1596	Used client sample: N										
Diesel Range Organics (C12 - C24)	MS	1222450-85	ND	404.03	500.00	ug/L		80.8		50 - 140	
	MSD	1222450-85	ND	421.20	500.00	ug/L	4.2	84.2	30	50 - 140	
Tetracosane (Surrogate)	MS	1222450-85	ND	6.4110	20.000	ug/L		32.1		30 - 150	
	MSD	1222450-85	ND	6.8540	20.000	ug/L	6.7	34.3		30 - 150	

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

EPA Method 1664

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVL1444						
Oil and Grease	BVL1444-BLK1	ND	mg/L	5.0		

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

EPA Method 1664

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BVL1444										
Oil and Grease	BVL1444-BS1	LCS	32.150	40.200	mg/L	80.0		78 - 114		

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

EPA Method 1664

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BVL1444	Used client sample: Y - Description: MW-3-W-121207, 12/07/2012 09:44										
Oil and Grease	DUP	1223733-06	ND	ND		mg/L			18		
	MS	1222450-71	ND	33.250	40.200	mg/L		82.7		78 - 114	
	MSD	1222450-71	ND	31.400	40.200	mg/L	5.7	78.1	18	78 - 114	

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVL0711						
Total Chromium	BVL0711-BLK1	ND	ug/L	10		

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BVL0711										
Total Chromium	BVL0711-BS1	LCS	217.45	200.00	ug/L	109		85 - 115		

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BVL0711	Used client sample: N										
Total Chromium	DUP	1223680-01	4.7574	ND		ug/L			20		
	MS	1223680-01	4.7574	215.78	200.00	ug/L		106		75 - 125	
	MSD	1223680-01	4.7574	209.89	200.00	ug/L	2.8	103	20	75 - 125	

AECOM
10461 Old Placerville Rd, Suite 170
Sacramento, CA 95827

Reported: 01/07/2013 10:11
Project: 4625
Project Number: 351641
Project Manager: Jim Harms

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.
L01	The Laboratory Control Sample Water (LCSW) recovery is not within laboratory established control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S09	The surrogate recovery on the sample for this compound was not within the control limits.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.