



**RECEIVED**

11:51 am, Jul 26, 2011  
Alameda County  
Environmental Health

**Roya C. Kambin**  
Project Manager  
Marketing Business Unit

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

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

Re: Unocal #6129  
Union Oil Company of California Site 351639  
3420 35<sup>th</sup> Avenue  
Oakland, CA

I have reviewed the attached report dated July 21, 2011.

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 Conestoga-Rovers & Associates, upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(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: Report



**CONESTOGA-ROVERS  
& ASSOCIATES**

5900 Hollis Street, Suite A  
Emeryville, California 94608  
Telephone: (510) 420-0700  
<http://www.craworld.com>

Fax: (510) 420-9170

July 21, 2011

Reference No. 060722

Ms. Barbara Jakub  
Alameda County Environmental Health (ACEH)  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502

Re: First Semi-Annual 2011  
Groundwater Monitoring and Sampling Report  
Unocal #6129  
Union Oil Company of California Facility ID No. 35-1639  
3420 35<sup>th</sup> Avenue  
Oakland, California  
Fuel Leak Case No. RO0000058

Dear Ms. Barbara Jakub:

Conestoga-Rovers & Associates (CRA), on behalf of Union Oil Company of California, is submitting this *First Semi-Annual 2011 Groundwater Monitoring and Sampling Report* for the site referenced above (Figure 1). As of February 11, 2011 ("Effective Date"), ConocoPhillips Company transferred the management of the environmental remediation activities at Unocal #6129 to Union Oil Company of California ("Union Oil"). From the Effective Date forward, Union Oil (or its designees or representatives, including Chevron Environmental Management Company) will manage the day-to-day corrective action/remediation obligations related to the referenced case.

TRC Solutions (TRC) of Irvine, California sampled the wells and their June 3, 2011 *Groundwater Monitoring Data* is presented as Attachment A. Current groundwater monitoring and sampling data are presented in Table 1. BC Laboratories of Bakersfield, California, performed the analysis and their June 13, 2011 *Analytical Results* are included as Attachment B. Historical groundwater monitoring and sampling data is included as Attachment C. Groundwater monitoring and sampling was coordinated with the adjacent former Exxon Service Station 70234 and their groundwater data are presented as Attachment D.

---

Equal  
Employment Opportunity  
Employer

---



**CONESTOGA-ROVERS  
& ASSOCIATES**

July 21, 2011

Reference No. 060722

- 2 -

## **RESULTS OF FIRST SEMI-ANNUAL 2011 EVENT**

On May 27, 2011, TRC sampled the wells per the established schedule.

Groundwater data from the current monitoring event indicate the following:

- Groundwater Flow Direction Southwest
  - Hydraulic Gradient 0.02
  - Approximate Depth to Groundwater 26 feet below grade

Summarized analytical results of the current sampling event are presented below in Table A:

TABLE A: GROUNDWATER ANALYTICAL DATA						
Well ID	TPPH (TPHg) (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
ESLs	100	1	40	30	20	5
MW-1	110	<0.50	<0.50	<0.50	<1.0	220
MW-2	560	<0.50	<0.50	<0.50	<1.0	1,100
MW-3	340	<0.50	<0.50	<0.50	<1.0	890

TPPH Total Purgeable Petroleum Hydrocarbons = Total Petroleum Hydrocarbons as Gasoline (TPHg)  
 MTBE Methyl tertiary butyl ether  
 µg/L Micrograms per Liter  
 < x.x Not reported above laboratory Practical Quantitation Limit  
 ESLs Environmental Screening Levels (Table F-1a) for groundwater that is a current or potential drinking water resource; *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*; California Regional Water Quality Control Board - San Francisco Bay Region; Interim Final November 2007, Revised May 2008.

## CONCLUSIONS AND RECOMMENDATIONS

The results of ongoing groundwater monitoring and sampling indicate the following:

- No benzene, toluene, ethylbenzene, or xylenes were detected.
  - The laboratory report narrative indicates that the Total Purgeable Petroleum Hydrocarbon (TPPH) detections are due to methyl tertiary butyl ether (MTBE).
  - MTBE concentrations fluctuated or remained stable.



**CONESTOGA-ROVERS  
& ASSOCIATES**

July 21, 2011

Reference No. 060722

- 3 -

CRA recommends continuing coordinated semi-annual monitoring and sampling with Exxon Service Station 70234 to verify decreasing concentration trends over time.

#### **ANTICIPATED FUTURE ACTIVITIES**

##### ***Groundwater Monitoring***

TRC will sample the wells per the established schedule and CRA will submit a groundwater monitoring and sampling report.

##### ***Downgradient Assessment***

Upon agency approval of Antea Group's January 25, 2010 *Proposed Monitoring Well Addendum Letter*, CRA will install one additional groundwater monitoring well to assess the downgradient extent of MTBE and submit a report documenting the activities.



**CONESTOGA-ROVERS  
& ASSOCIATES**

July 21, 2011

Reference No. 060722

- 4 -

Please contact Kiersten Hoey at (510) 420-3347 if you have any questions or require additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Kiersten Hoey

Jim Schneider, PG 7914



IH/aa/2

Encl.

Figure 1      Vicinity Map

Figure 2      Groundwater Elevation and Hydrocarbon Concentration Map – May 27, 2011

Table 1      Groundwater Monitoring and Sampling Data

Attachment A      Monitoring Data Package

Attachment B      Laboratory Analytical Report

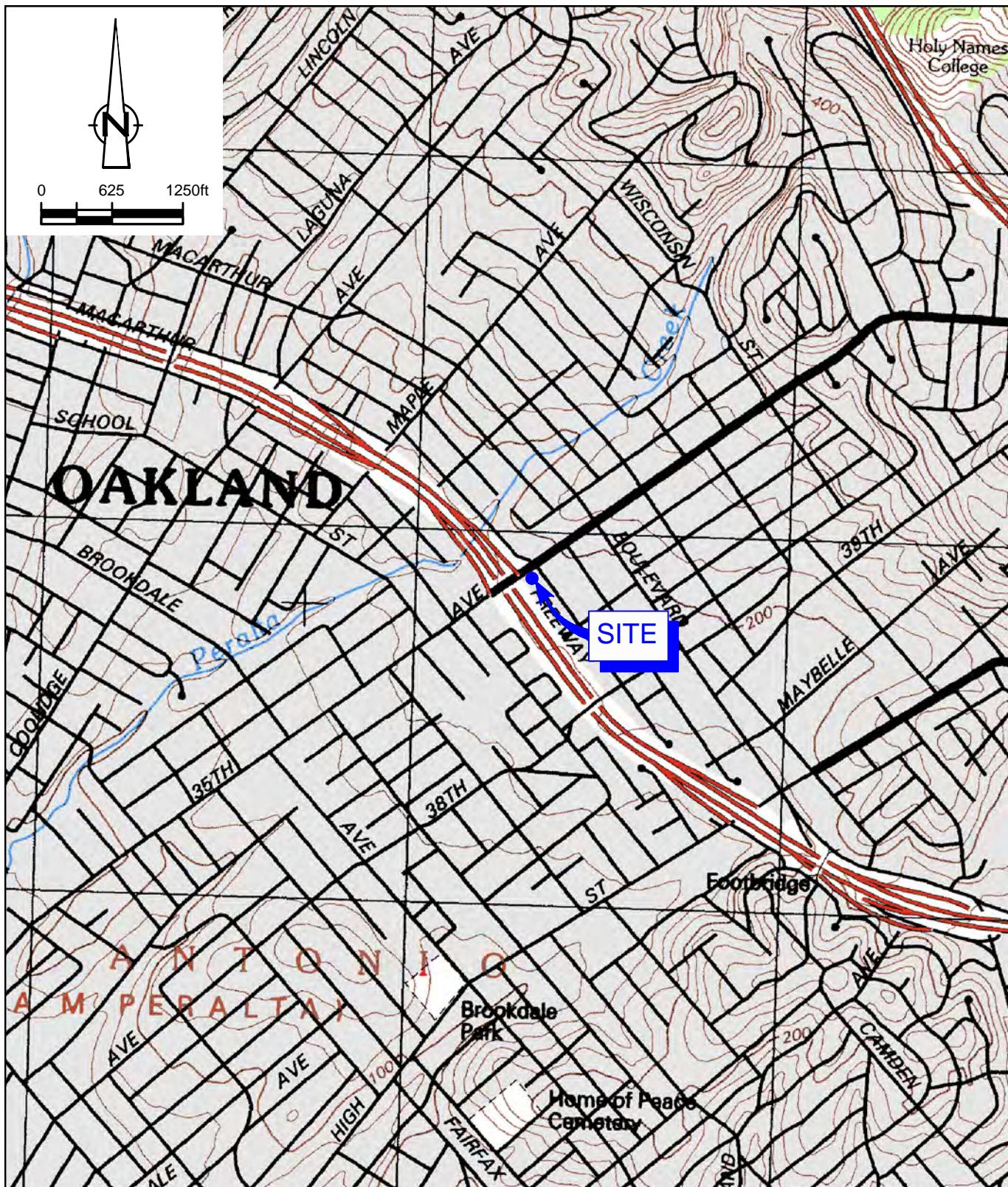
Attachment C      Historical Groundwater Monitoring and Sampling Data

Attachment D      Exxon Groundwater Monitoring and Sampling Data

cc:      Ms. Roya Kambin, Union Oil Company of California

Son Nguyen & Le Pham, Nguyen/Pham Family Trust, Property Owner

## FIGURES

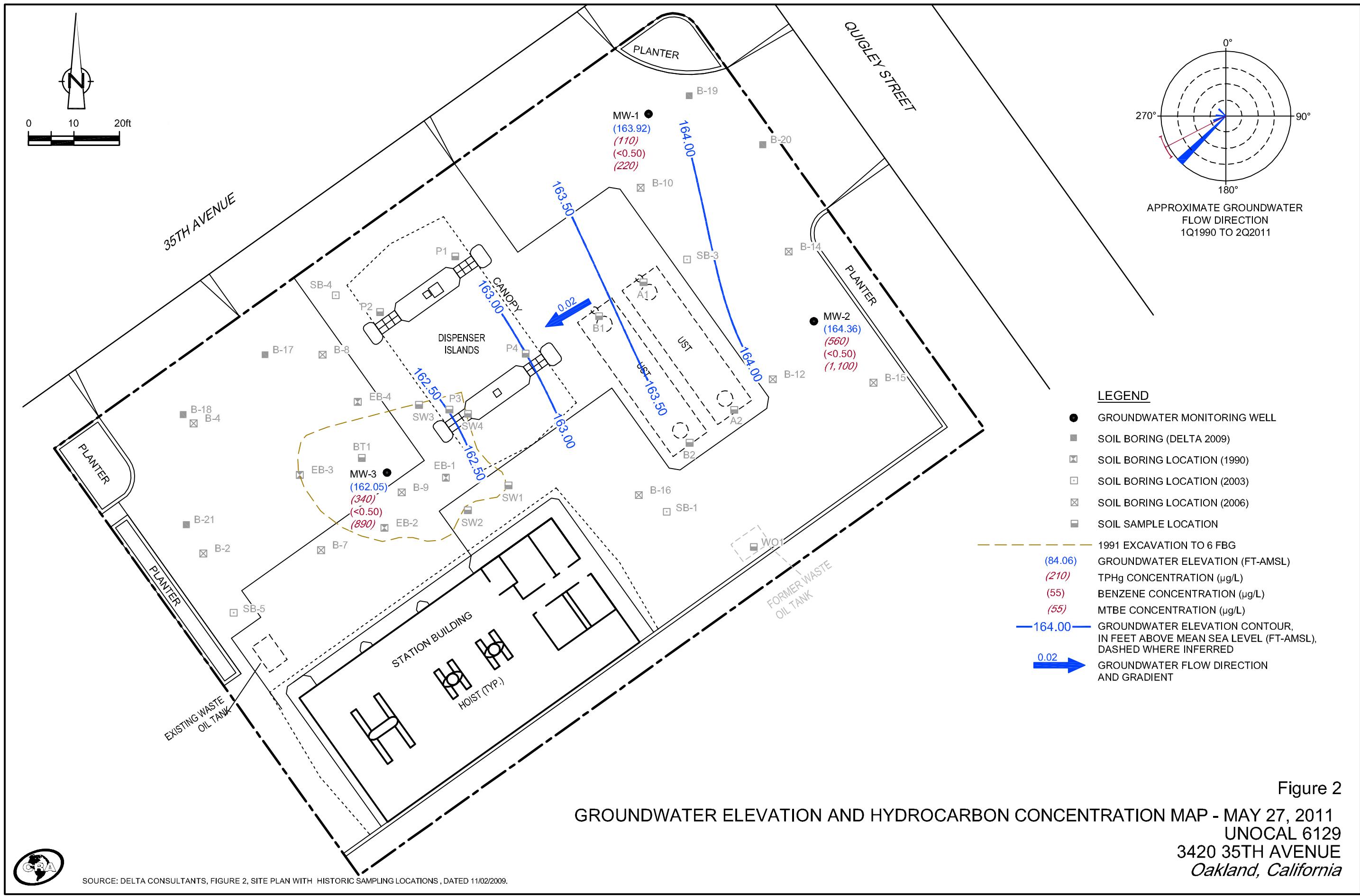


SOURCE: USGS QUADRANGLE MAP: OAKLAND EAST, CA.

Figure 1

VICINITY MAP  
UNOCAL 6129  
3420 35TH AVENUE  
*Oakland, California*





TABLE

TABLE 1

Page 1 of 1

**GROUNDWATER MONITORING AND SAMPLING DATA**  
**UNOCAL SITE #6129**  
**3420 35TH AVENUE**  
**OAKLAND, CALIFORNIA**

Location	Date	HYDROCARBONS					PRIMARY VOCs											
		TOC	DTW	GWE	TPH - Gasoline	B	T	E	X	MTBE by SW8260	TBA	ETBE	DIPE	TAME	EDB	1,2-DCA	Ethanol	
		Units	ft	ft	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
MW-1	05/27/2011	190.79	26.87	163.92		110	<0.50	<0.50	<0.50	<1.0	220	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250
MW-2	05/27/2011	190.80	26.44	164.36		560	<0.50	<0.50	<0.50	<1.0	1,100	210	<0.50	<0.50	<0.50	<0.50	<0.50	<250
MW-3	05/27/2011	188.58	26.53	162.05		340	<0.50	<0.50	<0.50	<1.0	890	73	<0.50	<0.50	<0.50	<0.50	<0.50	<250

**Abbreviations and Notes:**

TOC = Top of Casing

DTW = Depth to Water

GWE = Groundwater elevation

(ft-amsl) = Feet Above Mean sea level

ft = Feet

µg/L = Micrograms per Liter

TPH - Total Petroleum Hydrocarbons

VOCS = Volatile Organic Compounds

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylene

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

-- = Not available / not applicable

&lt;x = Not detected above laboratory method detection limit

ATTACHMENT A

MONITORING DATA PACKAGE



**123 Technology Drive West  
Irvine, CA 92618**

**949.727.9336 PHONE  
949.727.7399 FAX**

**[www.TRCsolutions.com](http://www.TRCsolutions.com)**

**DATE:** June 3, 2011

**TO:** Kiersten Hoey  
CRA  
5900 Hollis Street, Suite A  
Emeryville, California 94608

**SITE:** Unocal Site 6129  
Facility 351639  
3420 35<sup>th</sup> Avenue, Oakland, CA

**RE:** Transmittal of Groundwater Monitoring Data

Dear Ms. Hoey,

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 May 27, 2011. 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,

TRC

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.

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: Rick Rodriguez Job #/Task #: 183487.0035.1639

Date: 5/27/11

Site # 6129

**Project Manager** A. FARJAN

Page 1 of 1

FIELD DATA COMPLETE

QA/QC

COC

## WELL BOX CONDITION SHEETS

MANIFEST

## DRUM INVENTORY

## **TRAFFIC CONTROL**

# GROUNDWATER SAMPLING FIELD NOTES

Technician: Dick Rodriguez

Site: 6129

Project No.: 183487, 0035, 1639

Date: 5/27/11

Well No. MW-1

Depth to Water (feet): 26.87

Total Depth (feet) 413.47

Water Column (feet): 16.60

80% Recharge Depth(feet): 30.19

Purge Method: Sub

Depth to Product (feet): —

LPH & Water Recovered (gallons): —

Casing Diameter (Inches): 2"

1 Well Volume (gallons): 3

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity ( $\mu\text{S}/\text{cm}$ )	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
<b>Pre-Purge</b>									
0815			3	846.9	17.3	6.74	0.71	169	
			6	774.7	18.7	6.68	1.69	176	
	0819		9	807.1	19.3	6.69	1.71	123	
Static at Time Sampled			Total Gallons Purged			Sample Time			
30.19			9			0830			
<b>Comments:</b>									

Well No. MW-3

Depth to Water (feet): 26.53

Total Depth (feet) 39.43

Water Column (feet): 12.90

80% Recharge Depth(feet): 29.11

Purge Method: Sub

Depth to Product (feet): —

LPH & Water Recovered (gallons): —

Casing Diameter (Inches): 2"

1 Well Volume (gallons): 3

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity ( $\mu\text{S}/\text{cm}$ )	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
<b>Pre-Purge</b>									
0847			3	541.1	18.9	7.07	0.82	142	
			6	529.2	19.4	6.96	0.80	119	
	0852		9	539.6	19.6	6.85	0.83	120	
Static at Time Sampled			Total Gallons Purged			Sample Time			
28.05 29.10			9			0910			
<b>Comments:</b>									

# GROUNDWATER SAMPLING FIELD NOTES

Technician: Rick Rodriguez

Site: 6129

Project No.: 183487-0035, 1639

Date: 5/27/11

Well No. MW-2

Depth to Water (feet): 26.44

Total Depth (feet) 43.58

Water Column (feet): 17.14

80% Recharge Depth(feet): 29.87

Purge Method: Sub

Depth to Product (feet): \_\_\_\_\_

LPH & Water Recovered (gallons): \_\_\_\_\_

Casing Diameter (Inches): 2"

1 Well Volume (gallons): 3

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity ( $\mu\text{S}/\text{cm}$ )	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0929			3	904.2	18.8	6.70	0.43	148	
0935	88		8	753.4	19.0	6.64	0.40	140	
0935			9	768.4	19.1	6.61	0.42	140	
0935			12	803.0	19.3	6.56	0.41	141	
Static at Time Sampled		Total Gallons Purged				Sample Time			
28.40		12				0945			
Comments:									

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	Depth to Water (feet)	Volume Purged (gallons)	Conductivity ( $\mu\text{S}/\text{cm}$ )	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
Static at Time Sampled		Total Gallons Purged				Sample Time			
Comments:									

## **WELL BOX CONDITION REPORT (NORTHERN CALIFORNIA)**

SITE NO. 6129

**ADDRESS**

Digitized by srujanika@gmail.com

DATE

5/27/11

PERFORMED BY:

Dix Rodriguez  
PAGE 1 OF 1

		Comments
MW-1	2	12" OK
MW-3	2	12" <del>OK</del>
MW-2	2	12" OK
Well Name		
Street Well		
Paved Over		
Foundation Damaged		
Unable to Locate		
Unable to Access		
Well Box is Below Grade		
Well Box is Exposed		
Broken Lid		
Missing Lid		
Seal Damaged		
# of Missing Bolts		
# of Broken Bolts		
# of Broken Ears,		
# of Stripped Ears		
# of Ears		

TRG

## 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: <u>6129</u>				Union Oil Consultant: <u>Kirsten Hoyer</u>				ANALYSES REQUIRED							
Site Global ID: <u>T0600101465</u>				Consultant Contact: <u>Kirsten Hoyer</u>				Turnaround Time (TAT):							
Site Address: <u>3420 35th Ave, Oakland, CA</u>				Consultant Phone No.: <u>510-420-3342</u>				<input checked="" type="checkbox"/> Standard 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 72 Hours							
Union Oil PM: <u>ROYA KAMVIN</u>				Sampling Company: TRC				Special Instructions							
Union Oil PM Phone No: <u>925-790-6270</u>				Sampled By (PRINT): <u>Rick Purkiser</u>											
Charge Code: NWRTB-0351639 - LAB.				Sampler Signature:											
This is a LEGAL document. All fields must be filled out CORRECTLY and COMPLETELY.				GC Laboratories, Inc. Project manager: Molly Meyers 401 Atlas Court, Bakersfield, CA Phone No.: 661-427-4424											
SAMPLE ID				Sample Time				# of Containers				Notes / Comments			
Field Point Name	Matrix	DTW	Date (yy/mm/dd)												
MW-1	W		<u>5/27/11</u>	<u>0830</u>		<u>3</u>		X	X	X	X				
MW-3	W			<u>0910</u>		<u>3</u>		X	X	X	X				
MW-2	W		<u>▼</u>	<u>0945</u>		<u>3</u>		X	X	X	X				
	W														
	W														
	W														
	W														
	W														
	W														
	W														
Reliinquished By	Company	Date / Time:		Reliinquished By	Company	Date / Time:		Reliinquished By	Company	Date / Time:					
<u>TRC</u>	<u>5/27/11 - 1000</u>														
Received By	Company	Date / Time:		Received By	Company	Date / Time:		Received By	Company	Date / Time:					
<u>Rosie Dudley</u>	<u>RELAB</u>	<u>5/27/11 1327</u>													

**TRC SOLUTIONS**  
**TECHNICAL SERVICES REQUEST FORM**

21-Apr-11

**Site ID:** 6129  
**Address:** 3420 35th Ave.  
**City:** Oakland  
**Cross Street:** Quigley St.

**Project No.:** 183487.0035.1639  
**Client:** Roya Kambin  
**Contact #:** 925-790-6270  
**PM:** Kiersten Hoey      **CRA**  
**PM Contact #:** 510-420-3347

<b>Total number of wells:</b>	3	<b>Min. Well Diameter (in.):</b>	2	<b># of Techs, # of Hrs:</b>	1, 3
<b>Depth to Water (ft.):</b>	28	<b>Max. Well Diameter (in.):</b>	2	<b>Travel Time (hrs):</b>	
		<b>Max. Well Depth (ft):</b>	44		

<b>ACTIVITIES:</b>	<b>Frequency</b>	<b>Notes</b>
Gauging:	<input checked="" type="checkbox"/> Semi Q2/Q4	
Purge/Sampling:	<input checked="" type="checkbox"/> Semi Q2/Q4	
No Purge/Sample	<input type="checkbox"/>	

<b>RELATED ACTIVITIES</b>	<b>Note</b>
Drums:	<input checked="" type="checkbox"/>
Other Activities:	<input type="checkbox"/>
Traffic Control:	<input type="checkbox"/>

**PERMIT INFORMATION:**

**NOTIFICATIONS:**

35th Ave. 76: 510-530-3550

Andy, spoke with Andy at 10:00AM on 5/26

**SITE INFORMATION:**

Coordinated event with Former Exxon Station 7-0234

Take field measurements pre-purge and after each casing volume purged.

**TRC SOLUTIONS**  
**TECHNICAL SERVICES REQUEST FORM**

21-Apr-11

**Site ID:** 6129  
**Address:** 3420 35th Ave.  
**City:** Oakland  
**Cross Street:** Quigley St.

**Project No.:** 183487.0035.1639  
**Client:** Roya Kambin  
**Contact #:** 925-790-6270  
**PM:** Kiersten Hoey      CRA  
**PM Contact #:** 510-420-3347

**LAB INFORMATION:**

**Global ID:** T0600101465  
**Lab WO:** 351639

**Lab Used:** BC Labs

**Lab Notes:** Lab analyses:  
TPH-G by GC/MS, BTEX/MTBE/OXYS by 8260B, EDB/EDC by 8260B, Ethanol by 8260B [Containers: 3 vials w/HCl]

**TRC SOLUTIONS**  
**TECHNICAL SERVICES REQUEST FORM**  
 21-Apr-11

**Site ID.:** 6129  
**Address:** 3420 35th Ave.  
**City:** Oakland  
**Cross Street:** Quigley St.

Well IDs	Benz.	MTBE	Gauging				Sampling				Field Measurements			<b>Comments</b>
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Pre-Purge	Post-Purge	Type	
MW-1	0	92	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D.O., ORP	2" casing						
MW-3	0	490	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D.O., ORP	2" casing						
MW-2	0	730	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D.O., ORP	2" casing						

ATTACHMENT B

LABORATORY ANALYTICAL REPORT



**Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Date of Report: 06/13/2011

Kiersten Hoey

Conestoga-Rovers & Associates

5900 Hollis St. Suite A  
Emeryville, CA 94608

Project: 6129

BC Work Order: 1108403

Invoice ID: B101991

Enclosed are the results of analyses for samples received by the laboratory on 5/27/2011. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Molly Meyers  
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*  
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 [www.bclabs.com](http://www.bclabs.com)

Page 1 of 12



## Table of Contents

**Sample Information**

Chain of Custody and Cooler Receipt form.....	3
Laboratory / Client Sample Cross Reference.....	5

**Sample Results**

<b>1108403-01 - MW-1-W-110527</b>	
Volatile Organic Analysis (EPA Method 8260).....	6
<b>1108403-02 - MW-3-W-110527</b>	
Volatile Organic Analysis (EPA Method 8260).....	7
<b>1108403-03 - MW-2-W-110527</b>	
Volatile Organic Analysis (EPA Method 8260).....	8

**Quality Control Reports**

<b>Volatile Organic Analysis (EPA Method 8260)</b>	
Method Blank Analysis.....	9
Laboratory Control Sample.....	10
Precision and Accuracy.....	11

**Notes**

Notes and Definitions.....	12
----------------------------	----



# Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Call of Custody and Control Receipt Form 1108403 Page 1 of 2

**Bill of Custody and Control Receipt Form**

Page 102

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



## Chain of Custody and Cooler Receipt Form for 1108403 Page 2 of 2

BC LABORATORIES INC.		SAMPLE RECEIPT FORM			Rev. No. 12	06/24/08	Page 1 Of /			
Submission #: 11-08403										
<b>SHIPPING INFORMATION</b> Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> Box <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____						
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: Custody Seals: Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input type="checkbox"/> Comments: Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>										
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.98 Container: VOA Thermometer ID: 163 Temperature: A 5.2 °C / C 5.2 °C		Date/Time 5-27-11 Analyst Init MIM 1950						
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										
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	A3	A3	A3							
QT EPA 413.1, 413.2, 418.1										
PT ODDR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 515										
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										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
Comments:										
Sample Numbering Completed By: <i>C. H. H.</i>	Date/Time: 5/31/11 0941									
A = Actual / C = Corrected										



Conestoga-Rovers & Associates  
5900 Hollis St. Suite A  
Emeryville, CA 94608

**Reported:** 06/13/2011 16:43  
**Project:** 6129  
**Project Number:** SO-15078003  
**Project Manager:** Kiersten Hoey

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1108403-01	<b>COC Number:</b> --- <b>Project Number:</b> 6129 <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-1-W-110527 <b>Sampled By:</b> TRCI	<b>Receive Date:</b> 05/27/2011 19:50 <b>Sampling Date:</b> 05/27/2011 08:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: T0600101465 Location ID (FieldPoint): MW-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:		
1108403-02	<b>COC Number:</b> --- <b>Project Number:</b> 6129 <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-3-W-110527 <b>Sampled By:</b> TRCI	<b>Receive Date:</b> 05/27/2011 19:50 <b>Sampling Date:</b> 05/27/2011 09:10 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: T0600101465 Location ID (FieldPoint): MW-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:		
1108403-03	<b>COC Number:</b> --- <b>Project Number:</b> 6129 <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-2-W-110527 <b>Sampled By:</b> TRCI	<b>Receive Date:</b> 05/27/2011 19:50 <b>Sampling Date:</b> 05/27/2011 09:45 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: T0600101465 Location ID (FieldPoint): MW-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:		



Conestoga-Rovers & Associates  
5900 Hollis St. Suite A  
Emeryville, CA 94608

**Reported:** 06/13/2011 16:43  
**Project:** 6129  
**Project Number:** SO-15078003  
**Project Manager:** Kiersten Hoey

## Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1108403-01	Client Sample Name:	6129, MW-1-W-110527, 5/27/2011 8:30:00AM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260	ND		1
<b>Methyl t-butyl ether</b>	<b>220</b>	<b>ug/L</b>	<b>1.0</b>	<b>EPA-8260</b>	<b>ND</b>	<b>A01,S01</b>	<b>2</b>
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>110</b>	<b>ug/L</b>	<b>50</b>	<b>Luft-GC/MS</b>	<b>ND</b>	<b>A90</b>	<b>1</b>
1,2-Dichloroethane-d4 (Surrogate)	109	%	76 - 114 (LCL - UCL)	EPA-8260			1
1,2-Dichloroethane-d4 (Surrogate)	101	%	76 - 114 (LCL - UCL)	EPA-8260			2
Toluene-d8 (Surrogate)	93.7	%	88 - 110 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	100	%	88 - 110 (LCL - UCL)	EPA-8260			2
4-Bromofluorobenzene (Surrogate)	96.9	%	86 - 115 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	91.9	%	86 - 115 (LCL - UCL)	EPA-8260			2

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-8260	06/08/11	06/09/11	00:42	KEA	MS-V10	1	BUF0474
2	EPA-8260	06/09/11	06/09/11	19:37	KEA	MS-V12	2	BUF0190



Conestoga-Rovers & Associates  
5900 Hollis St. Suite A  
Emeryville, CA 94608

**Reported:** 06/13/2011 16:43  
**Project:** 6129  
**Project Number:** SO-15078003  
**Project Manager:** Kiersten Hoey

## Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1108403-02	Client Sample Name: 6129, MW-3-W-110527, 5/27/2011 9:10:00AM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260	ND		1
<b>Methyl t-butyl ether</b>	<b>890</b>	<b>ug/L</b>	<b>5.0</b>	<b>EPA-8260</b>	<b>ND</b>	<b>A01</b>	<b>2</b>
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260	ND		1
<b>t-Butyl alcohol</b>	<b>73</b>	<b>ug/L</b>	<b>10</b>	<b>EPA-8260</b>	<b>ND</b>		<b>1</b>
Diisopropyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>340</b>	<b>ug/L</b>	<b>50</b>	<b>Luft-GC/MS</b>	<b>ND</b>	<b>A90</b>	<b>1</b>
1,2-Dichloroethane-d4 (Surrogate)	109	%	76 - 114 (LCL - UCL)	EPA-8260			1
1,2-Dichloroethane-d4 (Surrogate)	100	%	76 - 114 (LCL - UCL)	EPA-8260			2
Toluene-d8 (Surrogate)	92.5	%	88 - 110 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	103	%	88 - 110 (LCL - UCL)	EPA-8260			2
4-Bromofluorobenzene (Surrogate)	97.7	%	86 - 115 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	89.3	%	86 - 115 (LCL - UCL)	EPA-8260			2

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-8260	06/08/11	06/09/11	00:24	KEA	MS-V10	1	BUF0474
2	EPA-8260	06/09/11	06/09/11	19:17	KEA	MS-V12	10	BUF0099



Conestoga-Rovers & Associates  
5900 Hollis St. Suite A  
Emeryville, CA 94608

**Reported:** 06/13/2011 16:43  
**Project:** 6129  
**Project Number:** SO-15078003  
**Project Manager:** Kiersten Hoey

## Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1108403-03	Client Sample Name:	6129, MW-2-W-110527, 5/27/2011 9:45:00AM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260	ND		1
<b>Methyl t-butyl ether</b>	<b>1100</b>	<b>ug/L</b>	<b>12</b>	<b>EPA-8260</b>	<b>ND</b>		<b>2</b>
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260	ND		1
<b>t-Butyl alcohol</b>	<b>210</b>	<b>ug/L</b>	<b>10</b>	<b>EPA-8260</b>	<b>ND</b>		<b>1</b>
Diisopropyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
<b>Total Purgeable Petroleum Hydrocarbons</b>	<b>560</b>	<b>ug/L</b>	<b>50</b>	<b>Luft-GC/MS</b>	<b>ND</b>	<b>A90</b>	<b>1</b>
1,2-Dichloroethane-d4 (Surrogate)	108	%	76 - 114 (LCL - UCL)	EPA-8260			1
1,2-Dichloroethane-d4 (Surrogate)	96.9	%	76 - 114 (LCL - UCL)	EPA-8260			2
Toluene-d8 (Surrogate)	95.4	%	88 - 110 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	97.8	%	88 - 110 (LCL - UCL)	EPA-8260			2
4-Bromofluorobenzene (Surrogate)	104	%	86 - 115 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	103	%	86 - 115 (LCL - UCL)	EPA-8260			2

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-8260	06/08/11	06/09/11	00:06	KEA	MS-V10	1	BUF0474
2	EPA-8260	06/08/11	06/10/11	17:00	JCC	HPCHEM	25	BUF0506



Conestoga-Rovers & Associates  
5900 Hollis St. Suite A  
Emeryville, CA 94608

Reported: 06/13/2011 16:43  
Project: 6129  
Project Number: SO-15078003  
Project Manager: Kiersten Hoey

## Volatile Organic Analysis (EPA Method 8260)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BUF0099</b>						
Methyl t-butyl ether	BUF0099-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane-d4 (Surrogate)	BUF0099-BLK1	101	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BUF0099-BLK1	107	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BUF0099-BLK1	86.3	%	86 - 115 (LCL - UCL)		
<b>QC Batch ID: BUF0190</b>						
Methyl t-butyl ether	BUF0190-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane-d4 (Surrogate)	BUF0190-BLK1	105	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BUF0190-BLK1	106	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BUF0190-BLK1	94.1	%	86 - 115 (LCL - UCL)		
<b>QC Batch ID: BUF0474</b>						
Benzene	BUF0474-BLK1	ND	ug/L	0.50		
1,2-Dibromoethane	BUF0474-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane	BUF0474-BLK1	ND	ug/L	0.50		
Ethylbenzene	BUF0474-BLK1	ND	ug/L	0.50		
Toluene	BUF0474-BLK1	ND	ug/L	0.50		
Total Xylenes	BUF0474-BLK1	ND	ug/L	1.0		
t-Amyl Methyl ether	BUF0474-BLK1	ND	ug/L	0.50		
t-Butyl alcohol	BUF0474-BLK1	ND	ug/L	10		
Diisopropyl ether	BUF0474-BLK1	ND	ug/L	0.50		
Ethanol	BUF0474-BLK1	ND	ug/L	250		
Ethyl t-butyl ether	BUF0474-BLK1	ND	ug/L	0.50		
Total Purgeable Petroleum Hydrocarbons	BUF0474-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	BUF0474-BLK1	110	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BUF0474-BLK1	97.3	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BUF0474-BLK1	101	%	86 - 115 (LCL - UCL)		
<b>QC Batch ID: BUF0506</b>						
Methyl t-butyl ether	BUF0506-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane-d4 (Surrogate)	BUF0506-BLK1	93.9	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BUF0506-BLK1	96.9	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BUF0506-BLK1	97.0	%	86 - 115 (LCL - UCL)		



Conestoga-Rovers & Associates  
5900 Hollis St. Suite A  
Emeryville, CA 94608

**Reported:** 06/13/2011 16:43  
**Project:** 6129  
**Project Number:** SO-15078003  
**Project Manager:** Kiersten Hoey

## Volatile Organic Analysis (EPA Method 8260)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BUF0099</b>									
1,2-Dichloroethane-d4 (Surrogate)	BUF0099-BS1	LCS	10.020	10.000	ug/L	100		76 - 114	
Toluene-d8 (Surrogate)	BUF0099-BS1	LCS	10.100	10.000	ug/L	101		88 - 110	
4-Bromofluorobenzene (Surrogate)	BUF0099-BS1	LCS	10.230	10.000	ug/L	102		86 - 115	
<b>QC Batch ID: BUF0190</b>									
1,2-Dichloroethane-d4 (Surrogate)	BUF0190-BS1	LCS	10.390	10.000	ug/L	104		76 - 114	
Toluene-d8 (Surrogate)	BUF0190-BS1	LCS	10.200	10.000	ug/L	102		88 - 110	
4-Bromofluorobenzene (Surrogate)	BUF0190-BS1	LCS	10.210	10.000	ug/L	102		86 - 115	
<b>QC Batch ID: BUF0474</b>									
Benzene	BUF0474-BS1	LCS	23.410	25.000	ug/L	93.6		70 - 130	
Toluene	BUF0474-BS1	LCS	25.450	25.000	ug/L	102		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BUF0474-BS1	LCS	10.410	10.000	ug/L	104		76 - 114	
Toluene-d8 (Surrogate)	BUF0474-BS1	LCS	9.9600	10.000	ug/L	99.6		88 - 110	
4-Bromofluorobenzene (Surrogate)	BUF0474-BS1	LCS	10.020	10.000	ug/L	100		86 - 115	
<b>QC Batch ID: BUF0506</b>									
1,2-Dichloroethane-d4 (Surrogate)	BUF0506-BS1	LCS	9.5600	10.000	ug/L	95.6		76 - 114	
Toluene-d8 (Surrogate)	BUF0506-BS1	LCS	9.9300	10.000	ug/L	99.3		88 - 110	
4-Bromofluorobenzene (Surrogate)	BUF0506-BS1	LCS	10.370	10.000	ug/L	104		86 - 115	



Conestoga-Rovers & Associates  
5900 Hollis St. Suite A  
Emeryville, CA 94608

Reported: 06/13/2011 16:43  
Project: 6129  
Project Number: SO-15078003  
Project Manager: Kiersten Hoey

## Volatile Organic Analysis (EPA Method 8260)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BUF0099</b>		Used client sample: N								
1,2-Dichloroethane-d4 (Surrogate)	MS	1107512-48	ND	9.9900	10.000	ug/L		99.9	76 - 114	
	MSD	1107512-48	ND	10.490	10.000	ug/L	4.9	105	76 - 114	
Toluene-d8 (Surrogate)	MS	1107512-48	ND	10.230	10.000	ug/L		102	88 - 110	
	MSD	1107512-48	ND	9.8500	10.000	ug/L	3.8	98.5	88 - 110	
4-Bromofluorobenzene (Surrogate)	MS	1107512-48	ND	9.9700	10.000	ug/L		99.7	86 - 115	
	MSD	1107512-48	ND	9.8600	10.000	ug/L	1.1	98.6	86 - 115	
<b>QC Batch ID: BUF0190</b>		Used client sample: N								
1,2-Dichloroethane-d4 (Surrogate)	MS	1107512-50	ND	9.9400	10.000	ug/L		99.4	76 - 114	
	MSD	1107512-50	ND	9.9700	10.000	ug/L	0.3	99.7	76 - 114	
Toluene-d8 (Surrogate)	MS	1107512-50	ND	10.270	10.000	ug/L		103	88 - 110	
	MSD	1107512-50	ND	10.060	10.000	ug/L	2.1	101	88 - 110	
4-Bromofluorobenzene (Surrogate)	MS	1107512-50	ND	10.260	10.000	ug/L		103	86 - 115	
	MSD	1107512-50	ND	10.210	10.000	ug/L	0.5	102	86 - 115	
<b>QC Batch ID: BUF0474</b>		Used client sample: N								
Benzene	MS	1107512-52	ND	23.950	25.000	ug/L		95.8	70 - 130	
	MSD	1107512-52	ND	24.620	25.000	ug/L	2.8	98.5	20	70 - 130
Toluene	MS	1107512-52	ND	26.080	25.000	ug/L		104	70 - 130	
	MSD	1107512-52	ND	26.540	25.000	ug/L	1.7	106	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1107512-52	ND	10.710	10.000	ug/L		107	76 - 114	
	MSD	1107512-52	ND	11.050	10.000	ug/L	3.1	110	76 - 114	
Toluene-d8 (Surrogate)	MS	1107512-52	ND	9.7700	10.000	ug/L		97.7	88 - 110	
	MSD	1107512-52	ND	9.6600	10.000	ug/L	1.1	96.6	88 - 110	
4-Bromofluorobenzene (Surrogate)	MS	1107512-52	ND	10.090	10.000	ug/L		101	86 - 115	
	MSD	1107512-52	ND	10.400	10.000	ug/L	3.0	104	86 - 115	
<b>QC Batch ID: BUF0506</b>		Used client sample: N								
1,2-Dichloroethane-d4 (Surrogate)	MS	1108606-01	ND	9.9400	10.000	ug/L		99.4	76 - 114	
	MSD	1108606-01	ND	9.7100	10.000	ug/L	2.3	97.1	76 - 114	
Toluene-d8 (Surrogate)	MS	1108606-01	ND	10.000	10.000	ug/L		100	88 - 110	
	MSD	1108606-01	ND	9.8100	10.000	ug/L	1.9	98.1	88 - 110	
4-Bromofluorobenzene (Surrogate)	MS	1108606-01	ND	10.390	10.000	ug/L		104	86 - 115	
	MSD	1108606-01	ND	9.7100	10.000	ug/L	6.8	97.1	86 - 115	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Conestoga-Rovers & Associates  
5900 Hollis St. Suite A  
Emeryville, CA 94608

**Reported:** 06/13/2011 16:43  
**Project:** 6129  
**Project Number:** SO-15078003  
**Project Manager:** Kiersten Hoey

## 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.
A90	TPPH does not exhibit a "gasoline" pattern. TPPH is entirely due to MTBE.
S01	Sample result is not within the quantitation range of the method.

ATTACHMENT C

HISTORICAL GROUNDWATER MONITORING AND SAMPLING DATA

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**

**November 1, 2010  
76 Station 6129**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 ()	TPH-G (GC/MS) ( $\mu\text{g/l}$ )		Ethyl-benzene ( $\mu\text{g/l}$ )	Total Xylenes ( $\mu\text{g/l}$ )	MTBE (8021B) ( $\mu\text{g/l}$ )	MTBE (8260B) ( $\mu\text{g/l}$ )	Comments
							Benzene ( $\mu\text{g/l}$ )	Toluene ( $\mu\text{g/l}$ )					
<b>MW-1</b>													
1/5/1990	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	
5/11/1990	--	--	--	--	--	ND	--	ND	7.1	ND	ND	--	
8/9/1990	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	
11/14/1990	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	
2/12/1991	--	--	--	--	--	ND	--	0.32	ND	ND	ND	--	
5/9/1991	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	
11/13/2003	--	--	--	--	--	--	180	ND<1.0	ND<1.0	ND<1.0	ND<2.0	--	240
8/27/2004	102.24	30.65	0	71.59	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
11/23/2004	102.24	29.35	0	72.89	1.30	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
2/9/2005	102.24	26.89	0	75.35	2.46	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	9.3
5/17/2005	102.24	26.56	0	75.68	0.33	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.9
7/27/2005	102.24	27.33	0	74.91	-0.77	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
12/6/2005	102.24	29.59	0	72.65	-2.26	--	ND<50	ND<0.50	0.93	ND<0.50	1.8	--	ND<0.50
2/21/2006	102.24	28.27	0	73.97	1.32	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	2.6
6/8/2006	102.24	26.07	0	76.17	2.20	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	11
9/15/2006	102.24	28.86	0	73.38	-2.79	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	1.4
12/14/2006	102.24	29.49	0	72.75	-0.63	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	3.5
3/28/2007	102.24	27.24	0	75.00	2.25	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	0.64
6/25/2007	102.24	28.30	0	73.94	-1.06	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
9/22/2007	102.24	30.61	0	71.63	-2.31	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	4.1
12/14/2007	102.24	30.30	0	71.94	0.31	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.65
3/17/2008	102.24	27.22	0	75.02	3.08	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	14
6/20/2008	102.24	30.10	0	72.14	-2.88	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	11
9/11/2008	102.24	31.04	0	71.20	-0.94	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.3
11/25/2008	102.24	30.88	0	71.36	0.16	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5.8
3/9/2009	102.24	27.50	0	74.74	3.38	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	25
5/28/2009	102.24	28.25	0	73.99	-0.75	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	17
12/11/2009	190.79	30.60	0	160.19	86.20	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	18
5/7/2010	190.79	26.06	0	164.73	4.54	--	67	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	64
11/1/2010	190.79	30.18	0	160.61	-4.12	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	92
<b>MW-2</b>													
1/5/1990	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	
5/11/1990	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	
8/9/1990	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**

November 1, 2010												
11/14/1990	--	--	--	--	--	ND	--	ND	ND	ND	ND	--
2/12/1991	--	--	--	--	--	ND	--	ND	0.42	ND	0.51	--
5/9/1991	--	--	--	--	--	ND	--	ND	ND	ND	ND	--
11/13/2003	--	--	--	--	--	ND<2000	ND<20	ND<20	ND<20	ND<40	--	2100
8/27/2004	102.16	30.28	0	71.88	--	--	950	ND<5.0	ND<5.0	ND<5.0	ND<10	--
11/23/2004	102.16	28.75	0	73.41	1.53	--	53	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--
2/9/2005	102.16	26.08	0	76.08	2.67	--	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--
5/17/2005	102.16	24.53	0	77.63	1.55	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--
7/27/2005	102.16	27.51	0	74.65	-2.98	--	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<10	--
12/6/2005	102.16	29.13	0	73.03	-1.62	--	340	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--
2/21/2006	102.16	29.23	0	72.93	-0.10	--	190	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--
6/8/2006	102.16	25.76	0	76.40	3.47	--	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<10	--
9/15/2006	102.16	29.17	0	72.99	-3.41	--	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	--
12/14/2006	102.16	29.11	0	73.05	0.06	--	520	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--
3/28/2007	102.16	26.68	0	75.48	2.43	--	290	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--
6/25/2007	102.16	25.91	0	76.25	0.77	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--
9/22/2007	102.16	30.18	0	71.98	-4.27	--	400	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--
12/14/2007	102.16	29.96	0	72.20	0.22	--	400	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--
3/17/2008	102.16	26.74	0	75.42	3.22	--	570	ND<5.0	ND<5.0	ND<5.0	ND<10	--
6/20/2008	102.16	29.78	0	72.38	-3.04	--	580	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--
9/11/2008	102.16	30.62	0	71.54	-0.84	--	220	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--
11/25/2008	102.16	30.48	0	71.68	0.14	--	500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--
3/9/2009	102.16	25.75	0	76.41	4.73	--	910	ND<5.0	ND<5.0	ND<5.0	ND<10	--
5/28/2009	102.16	27.71	0	74.45	-1.96	--	460	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--
12/11/2009	190.80	29.80	0	161.00	86.55	--	640	ND<5.0	ND<5.0	ND<5.0	ND<10	--
5/7/2010	190.80	25.11	0	165.69	4.69	--	600	ND<1.0	ND<1.0	ND<1.0	ND<2.0	--
11/1/2010	190.80	29.90	0	160.90	-4.79	--	140	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--
<b>MW-3</b>												
1/5/1990	--	--	0	--	--	ND	--	ND	ND	ND	ND	--
5/11/1990	--	--	--	--	--	ND	--	ND	ND	ND	ND	--
8/9/1990	--	--	--	--	--	ND	--	ND	ND	ND	ND	--
11/14/1990	--	--	--	--	--	ND	--	ND	ND	ND	ND	--
2/12/1991	--	--	--	--	--	ND	--	ND	ND	ND	ND	--
5/9/1991	--	--	--	--	--	ND	--	ND	ND	ND	ND	--
11/13/2003	--	--	--	--	--	--	2600	ND<20	ND<20	ND<20	ND<40	--
8/27/2004	100.00	29.61	0	70.39	--	--	1700	ND<10	ND<10	ND<10	ND<20	--
11/23/2004	100.00	28.48	0	71.52	1.13	--	1500	ND<10	ND<10	ND<10	ND<20	--
2/9/2005	100.00	26.45	0	73.55	2.03	--	ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--
5/17/2005	100.00	25.61	0	74.39	0.84	--	ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--
7/27/2005	100.00	27.35	0	72.65	-1.74	--	ND<1000	ND<10	ND<10	ND<10	ND<20	--
12/6/2005	100.00	28.78	0	71.22	-1.43	--	430	ND<0.50	1.6	ND<0.50	3.6	--

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**

November 1, 2010													
2/21/2006	100.00	28.91	0	71.09	-0.13	--	420	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1100
6/8/2006	100.00	25.97	0	74.03	2.94	--	ND<1200	ND<12	ND<12	ND<12	ND<25	--	1000
9/15/2006	100.00	28.73	0	71.27	-2.76	--	ND<1200	ND<12	ND<12	ND<12	ND<12	--	1200
12/14/2006	100.00	28.62	0	71.38	0.11	--	ND<1000	ND<10	ND<10	ND<10	ND<10	--	1300
3/28/2007	100.00	26.69	0	73.31	1.93	--	500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--	860
6/25/2007	100.00	26.74	0	73.26	-0.05	--	270	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	570
9/22/2007	100.00	29.57	0	70.43	-2.83	--	500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	980
12/14/2007	100.00	29.30	0	70.70	0.27	--	270	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	570
3/17/2008	100.00	26.82	0	73.18	2.48	--	220	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	520
6/20/2008	100.00	29.10	0	70.90	-2.28	--	490	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1300
9/11/2008	100.00	29.89	0	70.11	-0.79	--	630	ND<5.0	ND<5.0	ND<5.0	ND<10	--	1200
11/25/2008	100.00	29.74	0	70.26	0.15	--	380	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	870
3/9/2009	100.00	25.56	0	74.44	4.18	--	310	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	720
5/28/2009	100.00	27.55	0	72.45	-1.99	--	410	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	750
12/11/2009	188.58	29.10	0	159.48	87.03	--	220	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	620
5/7/2010	188.58	25.72	0	162.86	3.38	--	360	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	660
11/1/2010	188.58	29.29	0	159.29	-3.57	--	120	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	490

**Table 2a**  
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 6129**

Date Sampled	TBA ( $\mu\text{g/l}$ )	Ethanol (8260B) ( $\mu\text{g/l}$ )	Ethylene-dibromide (EDB) ( $\mu\text{g/l}$ )	1,2-DCA (EDC) ( $\mu\text{g/l}$ )	DIPE ( $\mu\text{g/l}$ )	ETBE ( $\mu\text{g/l}$ )	TAME ( $\mu\text{g/l}$ )	Carbon (organic, total) ( $\text{mg/l}$ )	Chromium VI ( $\mu\text{g/l}$ )	Chromium (total) ( $\mu\text{g/l}$ )	Chromium (dissolved) ( $\text{mg/l}$ )	Iron Ferric ( $\mu\text{g/l}$ )	Comments
<b>MW-1</b>													
11/13/2003	ND<200	ND<1000	ND<4.0	ND<4.0	ND<4.0	ND<4.0	ND<4.0	--	--	--	--	--	--
8/27/2004	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	--	--	--	--	--	--
11/23/2004	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	--	--	--	--	--	--
2/9/2005	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
5/17/2005	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
7/27/2005	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
12/6/2005	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
2/21/2006	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
6/8/2006	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
9/15/2006	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
12/14/2006	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
3/28/2007	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
6/25/2007	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
9/22/2007	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
12/14/2007	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
3/17/2008	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
6/20/2008	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
9/11/2008	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
11/25/2008	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
3/9/2009	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.83	--	--	--	--	--
5/28/2009	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.88	ND<2.0	21	ND<10	27000	
12/11/2009	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
5/7/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
11/1/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
<b>MW-2</b>													
11/13/2003	ND<4000	ND<20000	ND<80	ND<80	ND<80	ND<80	ND<80	--	--	--	--	--	--
8/27/2004	ND<50	ND<500	ND<5.0	ND<5.0	24	ND<5.0	ND<5.0	--	--	--	--	--	--
11/23/2004	ND<5.0	ND<50	ND<0.50	ND<0.50	18	ND<0.50	ND<0.50	--	--	--	--	--	--
2/9/2005	ND<50	ND<500	ND<5.0	ND<5.0	19	ND<5.0	ND<5.0	--	--	--	--	--	--
5/17/2005	ND<5.0	ND<50	ND<0.50	ND<0.50	12	ND<0.50	ND<0.50	--	--	--	--	--	--
7/27/2005	140	ND<500	ND<5.0	ND<5.0	16	ND<5.0	ND<5.0	--	--	--	--	--	--
12/6/2005	61	ND<250	ND<0.50	ND<0.50	15	ND<0.50	ND<0.50	--	--	--	--	--	--
2/21/2006	ND<10	ND<250	ND<0.50	ND<0.50	18	ND<0.50	ND<0.50	--	--	--	--	--	--
6/8/2006	ND<100	ND<2500	ND<5.0	ND<5.0	14	ND<5.0	ND<5.0	--	--	--	--	--	--
9/15/2006	ND<100	ND<2500	ND<5.0	ND<5.0	17	ND<5.0	ND<5.0	--	--	--	--	--	--

**Table 2a**  
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

12/14/2006	27	ND<250	ND<0.50	ND<0.50	20	ND<0.50	ND<0.50	--	--	--	--	--
3/28/2007	260	ND<250	ND<0.50	ND<0.50	23	ND<0.50	ND<0.50	--	--	--	--	--
6/25/2007	ND<10	ND<250	ND<0.50	ND<0.50	23	ND<0.50	ND<0.50	--	--	--	--	--
9/22/2007	ND<10	ND<250	ND<0.50	ND<0.50	35	ND<0.50	ND<0.50	--	--	--	--	--
12/14/2007	48	ND<250	ND<0.50	ND<0.50	24	ND<0.50	ND<0.50	--	--	--	--	--
3/17/2008	ND<100	ND<2500	ND<5.0	ND<5.0	18	ND<5.0	ND<5.0	--	--	--	--	--
6/20/2008	ND<10	ND<250	ND<0.50	ND<0.50	16	ND<0.50	ND<0.50	--	--	--	--	--
9/11/2008	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
11/25/2008	ND<10	ND<250	ND<0.50	ND<0.50	19	ND<0.50	ND<0.50	--	--	--	--	--
3/9/2009	ND<100	ND<2500	ND<5.0	ND<5.0	15	ND<5.0	ND<5.0	1.4	--	--	--	--
5/28/2009	ND<10	ND<250	ND<0.50	ND<0.50	20	ND<0.50	ND<0.50	1.6	ND<2.0	49	ND<10	43000
12/11/2009	ND<100	ND<2500	ND<5.0	ND<5.0	19	ND<5.0	ND<5.0	--	--	--	--	--
5/7/2010	ND<20	ND<500	ND<1.0	ND<1.0	14	ND<1.0	ND<1.0	--	--	--	--	--
11/1/2010	ND<10	ND<250	ND<0.50	ND<0.50	28	ND<0.50	ND<0.50	--	--	--	--	--
<b>MW-3</b>												
11/13/2003	ND<4000	ND<20000	ND<80	ND<80	ND<80	ND<80	ND<80	--	--	--	--	--
8/27/2004	ND<100	ND<1000	ND<10	ND<10	ND<20	ND<10	ND<10	--	--	--	--	--
11/23/2004	ND<100	ND<1000	ND<10	ND<10	ND<20	ND<10	ND<10	--	--	--	--	--
2/9/2005	130	ND<1000	ND<10	ND<10	ND<10	ND<10	ND<10	--	--	--	--	--
5/17/2005	ND<100	ND<1000	ND<10	ND<10	ND<10	ND<10	ND<10	--	--	--	--	--
7/27/2005	360	ND<1000	ND<10	ND<10	ND<10	ND<10	ND<10	--	--	--	--	--
12/6/2005	160	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
2/21/2006	88	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.58	--	--	--	--	--
6/8/2006	ND<250	ND<6200	ND<12	ND<12	ND<12	ND<12	ND<12	--	--	--	--	--
9/15/2006	ND<250	ND<6200	ND<12	ND<12	ND<12	ND<12	ND<12	--	--	--	--	--
12/14/2006	ND<200	ND<5000	ND<10	ND<10	ND<10	ND<10	ND<10	--	--	--	--	--
3/28/2007	500	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--	--	--	--	--
6/25/2007	11	ND<250	ND<0.50	0.65	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
9/22/2007	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
12/14/2007	26	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
3/17/2008	ND<10	ND<250	ND<0.50	0.65	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
6/20/2008	49	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
9/11/2008	ND<100	ND<2500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	--	--	--	--	--
11/25/2008	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
3/9/2009	15	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.4	--	--	--	--
5/28/2009	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.5	ND<2.0	23	ND<10	11000
12/11/2009	63	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
5/7/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
11/1/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--

**Table 2b**  
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 6129**

Date Sampled	Iron Ferrous ( $\mu\text{g/l}$ )	Iron (total) ( $\mu\text{g/l}$ )	Manganese (dissolved) ( $\mu\text{g/l}$ )	Manganese (total) ( $\mu\text{g/l}$ )	Nitrogen as Nitrate (mg/l)	Sulfate (mg/l)	Alkalinity (total) (mg/l)	Dissolved Oxygen (Lab) (mg O <sub>2</sub> /)	Redox Potential (ORP-Lab) (mV)	Specific Conductance (umhos)	Post-purge Dissolved Oxygen ()	Pre-purge Dissolved Oxygen ()	Comments
<b>MW-1</b>													
11/13/2003	--	--	--	--	--	--	--	--	--	--	--	--	
8/27/2004	--	--	--	--	--	--	--	--	--	--	--	--	
11/23/2004	--	--	--	--	--	--	--	--	--	--	--	--	
2/9/2005	--	--	--	--	--	--	--	--	--	--	--	--	
5/17/2005	--	--	--	--	--	--	--	--	--	--	--	--	
7/27/2005	--	--	--	--	--	--	--	--	--	--	--	--	
12/6/2005	--	--	--	--	--	--	--	--	--	--	--	--	
2/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	
6/8/2006	--	--	--	--	--	--	--	--	--	--	--	--	
9/15/2006	--	--	--	--	--	--	--	--	--	--	--	--	
12/14/2006	--	--	--	--	--	--	--	--	--	--	--	--	
3/28/2007	--	--	--	--	--	--	--	--	--	--	--	--	
6/25/2007	--	--	--	--	--	--	--	--	--	--	--	--	
9/22/2007	--	--	--	--	--	--	--	--	--	--	--	--	
12/14/2007	--	--	--	--	--	--	--	--	--	--	--	--	
3/17/2008	--	--	--	--	--	--	--	--	--	--	--	--	
6/20/2008	--	--	--	--	--	--	--	--	--	--	--	--	
9/11/2008	--	--	--	--	--	--	--	--	--	--	--	--	
11/25/2008	--	--	--	--	--	--	--	--	--	--	--	--	
3/9/2009	ND<1000	--	--	2.0	46	310	--	--	--	1.95	2.54		
5/28/2009	ND<500	27000	10	680	2.9	43	310	7.7	126	798	--	4.05	
12/11/2009	--	--	--	--	--	--	--	--	--	--	1.42	2.35	
5/7/2010	--	--	--	--	--	--	--	--	--	--	2.60	3.06	
11/1/2010	--	--	--	--	--	--	--	--	--	--	0.54	2.30	
<b>MW-2</b>													
11/13/2003	--	--	--	--	--	--	--	--	--	--	--	--	
8/27/2004	--	--	--	--	--	--	--	--	--	--	--	--	
11/23/2004	--	--	--	--	--	--	--	--	--	--	--	--	
2/9/2005	--	--	--	--	--	--	--	--	--	--	--	--	
5/17/2005	--	--	--	--	--	--	--	--	--	--	--	--	
7/27/2005	--	--	--	--	--	--	--	--	--	--	--	--	
12/6/2005	--	--	--	--	--	--	--	--	--	--	--	--	
2/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	
6/8/2006	--	--	--	--	--	--	--	--	--	--	--	--	
9/15/2006	--	--	--	--	--	--	--	--	--	--	--	--	

**Table 2b**  
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

12/14/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
3/28/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
6/25/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
9/22/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
12/14/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
3/17/2008	--	--	--	--	--	--	--	--	--	--	--	--	--
6/20/2008	--	--	--	--	--	--	--	--	--	--	--	--	--
9/11/2008	--	--	--	--	--	--	--	--	--	--	--	--	--
11/25/2008	--	--	--	--	--	--	--	--	--	--	--	--	--
3/9/2009	940	--	--	--	2.0	41	410	--	--	--	0.85	1.32	
5/28/2009	ND<1000	44000	4.3	500	1.6	40	370	7.1	138	813	--	1.54	
12/11/2009	--	--	--	--	--	--	--	--	--	--	0.47	0.74	
5/7/2010	--	--	--	--	--	--	--	--	--	--	1.89	2.39	
11/1/2010	--	--	--	--	--	--	--	--	--	--	1.12	1.22	
<b>MW-3</b>													
11/13/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
8/27/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
11/23/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
2/9/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
5/17/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
7/27/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
12/6/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
2/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
6/8/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
9/15/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
12/14/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
3/28/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
6/25/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
9/22/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
12/14/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
3/17/2008	--	--	--	--	--	--	--	--	--	--	--	--	--
6/20/2008	--	--	--	--	--	--	--	--	--	--	--	--	--
9/11/2008	--	--	--	--	--	--	--	--	--	--	--	--	--
11/25/2008	--	--	--	--	--	--	--	--	--	--	--	--	--
3/9/2009	ND<500	--	--	--	ND<0.44	38	310	--	--	--	0.94	0.84	
5/28/2009	ND<500	12000	49	300	ND<0.44	39	300	7.5	125	667	--	0.91	
12/11/2009	--	--	--	--	--	--	--	--	--	--	0.75	1.03	
5/7/2010	--	--	--	--	--	--	--	--	--	--	2.35	2.29	
11/1/2010	--	--	--	--	--	--	--	--	--	--	0.98	1.22	

**Table 2c**  
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 6129**

Date Sampled	Pre-purge ORP ()	Post-purge ORP ()	Comments
<b>MW-1</b>			
11/13/2003	--	--	
8/27/2004	--	--	
11/23/2004	--	--	
2/9/2005	--	--	
5/17/2005	--	--	
7/27/2005	--	--	
12/6/2005	--	--	
2/21/2006	--	--	
6/8/2006	--	--	
9/15/2006	--	--	
12/14/2006	--	--	
3/28/2007	--	--	
6/25/2007	--	--	
9/22/2007	--	--	
12/14/2007	--	--	
3/17/2008	--	--	
6/20/2008	--	--	
9/11/2008	--	--	
11/25/2008	--	--	
3/9/2009	8	24	
5/28/2009	70	--	
12/11/2009	32	21	
5/7/2010	211	205	
11/1/2010	150	163	
<b>MW-2</b>			
11/13/2003	--	--	
8/27/2004	--	--	
11/23/2004	--	--	
2/9/2005	--	--	
5/17/2005	--	--	
7/27/2005	--	--	
12/6/2005	--	--	
2/21/2006	--	--	
6/8/2006	--	--	
9/15/2006	--	--	

**Table 2c**  
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

12/14/2006	--	--
3/28/2007	--	--
6/25/2007	--	--
9/22/2007	--	--
12/14/2007	--	--
3/17/2008	--	--
6/20/2008	--	--
9/11/2008	--	--
11/25/2008	--	--
3/9/2009	39	56
5/28/2009	80	--
12/11/2009	29	-10
5/7/2010	208	204
11/1/2010	96	158
<b>MW-3</b>		
11/13/2003	--	--
8/27/2004	--	--
11/23/2004	--	--
2/9/2005	--	--
5/17/2005	--	--
7/27/2005	--	--
12/6/2005	--	--
2/21/2006	--	--
6/8/2006	--	--
9/15/2006	--	--
12/14/2006	--	--
3/28/2007	--	--
6/25/2007	--	--
9/22/2007	--	--
12/14/2007	--	--
3/17/2008	--	--
6/20/2008	--	--
9/11/2008	--	--
11/25/2008	--	--
3/9/2009	14	32
5/28/2009	66	--
12/11/2009	44	35
5/7/2010	209	204
11/1/2010	142	148

ATTACHMENT D

EXXON GROUNDWATER MONITORING AND SAMPLING DATA

**TABLE 1A**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 70234  
3450 35th Avenue  
Oakland, California

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Organic Pb (mg/L)
<b>Monitoring Well Samples</b>														
MW1	07/15/92	---	---		Well installed.									
MW1	07/17/92	---	192.00	33.02	158.98	No	67	---	6.6	6.9	2.0	4.5	17	---
MW1	10/22/92	---	192.00	34.07	157.93	No	<50	---	2.9	<0.5	<0.5	<0.5	16	---
MW1	02/04/93	---	192.00	29.43	162.57	No	<50	---	0.8	<0.5	<0.5	<0.5	4	---
MW1	05/03/93	---	192.00	29.72	162.28	No	71	---	2.8	7.2	2.2	22	40	---
MW1	07/30/93	---	192.00	32.95	159.05	No	<50	---	<0.5	<0.5	<0.5	<0.5	5	---
MW1	10/19/93	---	192.00	34.34	157.66	No	<50	---	<0.5	<0.5	<0.5	<0.5	12	---
MW1	02/23/94	---	192.00	31.72	160.28	No	<50	---	<0.5	<0.5	<0.5	<0.5	4	---
MW1	06/06/94	---	192.00	31.77	160.23	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW1	08/18/94	---	192.00	33.76	158.24	No	<50	---	<0.5	<0.5	<0.5	<0.5	130	---
MW1	11/15/94	---	192.00	34.08	157.92	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3.0	<100
MW1	02/06/95	---	192.00	28.50	163.50	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW1	05/10/95	---	192.00	29.30	162.70	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW1	09/20/99	---	192.00	33.30	158.70	No	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<75	<50
MW1	Well destroyed in June 2000.													
MW2	07/15/92	---	---		Well installed.									
MW2	07/17/92	---	194.85	34.65	160.20	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	10/22/92	---	194.85	35.64	159.21	No	<50	---	<0.5	<0.5	<0.5	<0.5	--	---
MW2	02/04/93	---	194.85	31.13	163.72	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	05/03/93	---	194.85	31.08	163.77	No	<50	---	<0.5	<0.5	<0.5	<0.5	3	---
MW2	07/30/93	---	194.85	34.34	160.51	No	<50	---	<0.5	<0.5	<0.5	<0.5	14	---
MW2	10/19/93	---	194.85	36.00	158.85	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	02/23/94	---	194.85	33.92	160.93	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	06/06/94	---	194.85	33.50	161.35	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---
MW2	08/18/94	---	194.85	35.38	159.47	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3.0	---
MW2	11/15/94	---	194.85	35.93	158.92	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3.0	<100
MW2	02/06/95	---	194.85	30.38	164.47	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW2	05/10/95	---	194.85	30.77	164.08	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MW2	09/20/99	---	194.85	35.15	159.70	No	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<75	<0.5
MW2	Well destroyed in June 2000.													
MW3	07/15/92	---	---		Well installed.									
MW3	07/17/92	---	196.90	37.24	159.66	No	<50	---	<0.5	<0.5	<0.5	<0.5	50	---

**TABLE 1A**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 70234  
3450 35th Avenue  
Oakland, California

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Organic Pb (mg/L)	
MW3	10/22/92	---	196.90	35.95	160.95	No	<50	---	<0.5	<0.5	<0.5	<0.5	9	---	
MW3	02/04/93	---	196.90	29.85	167.05	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---	
MW3	05/03/93	---	196.90	29.87	167.03	No	<50	---	<0.5	<0.5	<0.5	<0.5	3	---	
MW3	07/30/93	---	196.90	33.85	163.05	No	<50	---	<0.5	<0.5	<0.5	<0.5	22	---	
MW3	10/19/93	---	196.90	35.89	161.01	No	<50	---	<0.5	<0.5	<0.5	<0.5	12	---	
MW3	02/23/94	---	196.90	32.88	164.02	No	<50	---	<0.5	<0.5	<0.5	<0.5	25	---	
MW3	06/06/94	---	196.90	32.40	164.50	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3	---	
MW3	08/18/94	---	196.90	35.07	161.83	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3.0	---	
MW3	11/15/94	---	196.90	35.97	160.93	No	<50	---	<0.5	<0.5	<0.5	<0.5	<3.0	<100	
MW3	02/06/95	---	196.90	28.39	168.51	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	
MW3	05/10/95	---	196.90	28.90	168.00	No	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	
MW3	09/20/99	---	196.90	34.68	162.22	No	75.0	1.87	<0.5	11.5	1.8	18.0	<75	<0.5	
MW3	Well destroyed in June 2000.														
MW4	03/02/09	---	---	Well installed.											
MW4	03/30/09	---	197.62	30.94	166.68	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---	
MW4	04/02/09	---	197.62	Well surveyed.											
MW4	05/28/09	---	197.62	32.00	165.62	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---	
MW4	08/31/09	---	197.62	35.43	162.19	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---	
MW4	12/11/09	---	197.62	35.01	162.61	No	<50	<0.50	<0.50	0.83	<0.50	1.1	---	---	
MW4	05/07/10	---	197.62	29.11	168.51	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---	
MW4	11/01/10	---	197.62	34.95	162.67	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---	
<b>MW4</b>	<b>05/27/11 d</b>	---	<b>197.62</b>	<b>30.65</b>	<b>166.97</b>	<b>No</b>	---	---	---	---	---	---	---	---	
MW5	03/06/09	---	---	Well installed.											
MW5	03/30/09	---	196.35	30.05	166.30	No	4,200	1,900	540	140	<12	310	---	---	
MW5	04/02/09	---	196.35	Well surveyed.											
MW5	05/28/09	---	196.35	31.45	164.90	No	5,300	3,600	890	150	<25	140	---	---	
MW5	08/31/09	---	196.35	34.70	161.65	No	5,800	3,500	550	<100	<100	<100	---	---	
MW5	12/11/09	---	196.35	34.52	161.83	No	4,000b	3,800	230	<100	<100	<100	---	---	
MW5	05/07/10	---	196.35	30.84	165.51	No	2,700b	1,700	73	5.3	3.6	6.5	---	---	
MW5	11/01/10	---	196.35	33.93	162.42	No	2,400b	3,400	320	71	21	40	---	---	
<b>MW5</b>	<b>05/27/11 d</b>	---	<b>196.35</b>	<b>31.65</b>	<b>164.70</b>	<b>No</b>	---	---	---	---	---	---	---	---	
MW6	03/09/09	---	---	Well installed.											
MW6	03/30/09	---	192.41	26.94	165.47	No	2,800	4,800	0.91	<0.50	<0.50	<0.50	---	---	
MW6	04/02/09	---	192.41	Well surveyed.											

**TABLE 1A**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 70234  
3450 35th Avenue  
Oakland, California

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Organic Pb (mg/L)
MW6	05/28/09	---	192.41	28.04	164.37	No	2,800	6,000	<100	<100	<100	<100	---	---
MW6	08/31/09	---	192.41	30.57	161.84	No	4,900	6,600	<100	<100	<100	<100	---	---
MW6	12/11/09	---	192.41	30.78	161.63	No	4,900b	6,200	<100	<100	<100	<100	---	---
MW6	05/07/10	---	192.41	25.42	166.99	No	2,900b	3,700	2.7	<0.50	0.74c	<1.0	---	---
MW6	11/01/10	---	192.41	30.68	161.73	No	850b	6,100	2.1	<0.50	<0.50	<1.0	---	---
<b>MW6</b>	<b>05/27/11 d</b>	<b>---</b>	<b>192.41</b>	<b>27.07</b>	<b>165.34</b>	<b>No</b>	---	---	---	---	---	---	---	---
MW7	03/09/09	---	---	Well installed.										
MW7	03/30/09	---	194.34	29.15	165.19	No	55	66	<0.50	<0.50	<0.50	<0.50	---	---
MW7	04/02/09	---	194.34	Well surveyed.										
MW7	05/28/09	---	194.34	30.16	164.18	No	50	67	<1.0	<1.0	<1.0	<1.0	---	---
MW7	08/31/09	---	194.34	33.31	161.03	No	<50	12	<0.50	0.60	<0.50	<0.50	---	---
MW7	12/11/09	---	194.34	32.71	161.63	No	<50	31	0.78	1.7	0.62	2.4	---	---
MW7	05/07/10	---	194.34	27.54	166.80	No	510b	700	<0.50	<0.50	<0.50	<1.0	---	---
MW7	11/01/10	---	194.34	32.82	161.52	No	68b	140	<0.50	<0.50	<0.50	<1.0	---	---
<b>MW7</b>	<b>05/27/11 d</b>	<b>---</b>	<b>194.34</b>	<b>28.85</b>	<b>165.49</b>	<b>No</b>	---	---	---	---	---	---	---	---
MW8	03/04/09	---	---	Well installed.										
MW8	03/30/09	---	192.96	27.35	165.61	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	04/02/09	---	192.96	Well surveyed.										
MW8	05/28/09	---	192.96	28.72	164.24	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	08/31/09	---	192.96	31.93	161.03	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	12/11/09	---	192.96	31.24	161.72	No	<50	<0.50	0.74	1.6	0.59	2.3	---	---
MW8	05/07/10	---	192.96	25.68	167.28	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---
MW8	11/01/10	---	192.96	31.18	161.78	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---
<b>MW8</b>	<b>05/27/11</b>	<b>---</b>	<b>192.96</b>	<b>27.55</b>	<b>165.41</b>	<b>No</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	---	---
MW9	03/05/09	---	---	Well installed.										
MW9	03/30/09	---	195.16	28.31	166.85	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW9	04/02/09	---	195.16	Well surveyed.										
MW9	05/28/09	---	195.16	29.69	165.47	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW9	08/31/09	---	195.16	33.20	161.96	No	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW9	12/11/09	---	195.16	32.62	162.54	No	<50	<0.50	0.73	1.7	0.54	2.2	---	---
MW9	05/07/10	---	195.16	26.59	168.57	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---
MW9	11/01/10	---	195.16	32.45	162.71	No	<50	<0.50	<0.50	<0.50	<0.50	<1.0	---	---
<b>MW9</b>	<b>05/27/11</b>	<b>---</b>	<b>195.16</b>	<b>29.62</b>	<b>165.54</b>	<b>No</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	---	---

**TABLE 1A**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 70234  
3450 35th Avenue  
Oakland, California

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Organic Pb (mg/L)
<b>Grab Groundwater Samples</b>														
Pit Water	06/14/02	11.5a	---	---	---	---	5,600	12,000	140	840	100	530	---	---
UST Pit	06/19/02	13.5a	---	---	---	---	680	640	2.7	36	18	130	---	---
W-38-B11	11/14/07	38	---	---	---	---	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
W-15-B12	11/13/07	15	---	---	---	---	8,400	78	67	<5.0	140	150	---	---
W-40-B13	11/12/07	40	---	---	---	---	<50	0.53	<0.50	<0.50	<0.50	<0.50	---	---
W-15-B14	11/13/07	15	---	---	---	---	2,500	16	1.7	3.0	26	13	---	---
W-38-B15	11/15/07	38	---	---	---	---	18,000	12,000	3,400	2,500	330	2,000	---	---
W-40-B16	11/15/07	40	---	---	---	---	<50	7.7	<0.50	<0.50	<0.50	<0.50	---	---
W-37-B17	11/13/07	37	---	---	---	---	630	2,200	1.8	<0.50	4.1	1.4	---	---
W-38-B18	11/12/07	38	---	---	---	---	4,300	1,400	52	<12	56	96	---	---
W-35-B19	03/03/09	35	---	---	---	---	4,400	7,100	<0.50	<0.50	<0.50	<1.0	---	---
W-35-B20	03/03/09	35	---	---	---	---	640	440	<0.50	<0.50	<0.50	<1.0	---	---
W-35-B21	03/03/09	35	---	---	---	---	<50	1.4	<0.50	<0.50	<0.50	<1.0	---	---

**TABLE 1A**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 70234  
3450 35th Avenue  
Oakland, California

---

Notes:	Data prior to 1999 provided by EA Environmental Science and Engineering in previously submitted reports.
TOC Elev.	= Top of well casing elevation; datum is mean sea level.
DTW	= Depth to water.
GW Elev.	= Groundwater elevation; datum is mean sea level.
NAPL	= Non-aqueous phase liquid.
TPHg	= Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015.
MTBE	= Methyl tertiary butyl ether analyzed using EPA Method 8260.
BTEX	= Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8260B/8020/8021B; during March 2009, analyzed using EPA Method 8020/8021B.
Total Pb	= Total lead analyzed using EPA Method 6010.
Organic Pb	= Organic lead analyzed using CA DHS LUFT method.
EDB	= 1,2-dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	= 1,2-dichloroethane analyzed using EPA Method 8260B.
TAME	= Tertiary amyl methyl ether analyzed using EPA Method 8260B.
TBA	= Tertiary butyl alcohol analyzed using EPA Method 8260B.
ETBE	= Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
DIPE	= Di-isopropyl ether analyzed using EPA Method 8260B.
Ethanol	= Ethanol analyzed using EPA Method 8260B.
µg/L	= Micrograms per liter.
mg/L	= Milligrams per liter.
<	= Less than the stated laboratory reporting limit.
---	= Not sampled/Not analyzed/Not measured/Not applicable.
a	= Approximate depth to groundwater surface at time of sampling.
b	= Hydrocarbon pattern does not match the requested fuel.
c	= Analyte presence was not confirmed by second column or GC/MS analysis.
d	= Well inaccessible for sampling.

---

**TABLE 1B**  
**ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 70234  
3450 35th Avenue  
Oakland, California

Well ID	Sampling Date	Depth (feet)	EDB (µg/L)	1,2-DCA (µg/L)	TAME (µg/L)	TBA (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
<b>Monitoring Well Samples</b>									
MW1	07/17/92 - 09/20/99	---			Not analyzed for these analytes.				
MW1	Well destroyed in June 2000.	---							
MW2	07/17/92 - 09/20/99	---			Not analyzed for these analytes.				
MW2	Well destroyed in June 2000.	---							
MW3	07/17/92 - 09/20/99	---			Not analyzed for these analytes.				
MW3	Well destroyed in June 2000.	---							
MW4	03/30/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	05/28/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	08/31/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	12/11/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	05/07/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW4	11/01/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
<b>MW4</b>	<b>05/27/11 d</b>	---	---	---	---	---	---	---	---
MW5	03/30/09	---	<12	17	<12	450	<12	<12	---
MW5	05/28/09	---	<25	<25	<25	530	<25	<25	---
MW5	08/31/09	---	<100	<100	<100	<1,000	<100	<100	---
MW5	12/11/09	---	<100	<100	<100	2,000	<100	<100	---
MW5	05/07/10	---	<25	<25	<25	400	<25	<25	---
MW5	11/01/10	---	<50	<50	<50	1,500	<50	<50	---
<b>MW5</b>	<b>05/27/11 d</b>	---	---	---	---	---	---	---	---
MW6	03/30/09	---	<0.50	<0.50	1.3	410	<0.50	0.82	---
MW6	05/28/09	---	<100	<100	<100	<1,000	<100	<100	---
MW6	08/31/09	---	<100	<100	<100	1,100	<100	<100	---
MW6	12/11/09	---	<100	<100	<100	2,600	<100	<100	---
MW6	05/07/10	---	<100	<100	<100	<1,000	<100	<100	---
MW6	11/01/10	---	<50	<50	<50	2,400	<50	<50	---
<b>MW6</b>	<b>05/27/11 d</b>	---	---	---	---	---	---	---	---
MW7	03/30/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---

**TABLE 1B**  
**ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 70234  
3450 35th Avenue  
Oakland, California

Well ID	Sampling Date	Depth (feet)	EDB (µg/L)	1,2-DCA (µg/L)	TAME (µg/L)	TBA (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
MW7	05/28/09	---	<1.0	<1.0	<1.0	<10	<1.0	<1.0	---
MW7	08/31/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW7	12/11/09	---	<0.50	<0.50	<0.50	12	<0.50	<0.50	---
MW7	05/07/10	---	<0.50	<0.50	<0.50	130	<0.50	<0.50	---
MW7	11/01/10	---	<2.5	<2.5	<2.5	27	<2.5	<2.5	---
<b>MW7</b>	<b>05/27/11 d</b>	---	---	---	---	---	---	---	---
MW8	03/30/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	05/28/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	08/31/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	12/11/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	05/07/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW8	11/01/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
<b>MW8</b>	<b>05/27/11</b>	---	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;5.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	---
MW9	03/30/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	05/28/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	08/31/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	12/11/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	05/07/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW9	11/01/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
<b>MW9</b>	<b>05/27/11</b>	---	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;5.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	---
<b>Grab Groundwater Samples</b>									
Pit Water	06/14/02	11.5a	---	---	---	---	---	---	---
UST Pit	06/19/02	13.5a	---	---	---	---	---	---	---
W-38-B11	11/14/07	38	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<50
W-15-B12	11/13/07	15	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<500
W-40-B13	11/12/07	40	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<50
W-15-B14	11/13/07	15	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<100
W-38-B15	11/15/07	38	<25	<25	<25	1,900	<25	<25	<2,500
W-40-B16	11/15/07	40	<0.50	<0.50	<0.50	<10	<0.50	<0.50	85
W-37-B17	11/13/07	37	<0.50	<0.50	<0.50	58	<0.50	<0.50	<50
W-38-B18	11/12/07	38	<12	<12	<12	<250	<12	<12	<1,200

**TABLE 1B**  
**ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 70234  
3450 35th Avenue  
Oakland, California

Well ID	Sampling Date	Depth (feet)	EDB ( $\mu\text{g/L}$ )	1,2-DCA ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	ETBE ( $\mu\text{g/L}$ )	DIPE ( $\mu\text{g/L}$ )	Ethanol ( $\mu\text{g/L}$ )
W-35-B19	03/03/09	35	<50	<50	<50	<500	<50	<50	<5,000
W-35-B20	03/03/09	35	<0.50	<0.50	<0.50	12	<0.50	<0.50	<50
W-35-B21	03/03/09	35	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50

**TABLE 1B**  
**ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 70234  
3450 35th Avenue  
Oakland, California

---

Notes:	Data prior to 1999 provided by EA Environmental Science and Engineering in previously submitted reports.
TOC Elev.	= Top of well casing elevation; datum is mean sea level.
DTW	= Depth to water.
GW Elev.	= Groundwater elevation; datum is mean sea level.
NAPL	= Non-aqueous phase liquid.
TPHg	= Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015.
MTBE	= Methyl tertiary butyl ether analyzed using EPA Method 8260.
BTEX	= Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8260B/8020/8021B; during March 2009, analyzed using EPA Method 8020/8021B.
Total Pb	= Total lead analyzed using EPA Method 6010.
Organic Pb	= Organic lead analyzed using CA DHS LUFT method.
EDB	= 1,2-dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	= 1,2-dichloroethane analyzed using EPA Method 8260B.
TAME	= Tertiary amyl methyl ether analyzed using EPA Method 8260B.
TBA	= Tertiary butyl alcohol analyzed using EPA Method 8260B.
ETBE	= Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
DIPE	= Di-isopropyl ether analyzed using EPA Method 8260B.
Ethanol	= Ethanol analyzed using EPA Method 8260B.
µg/L	= Micrograms per liter.
mg/L	= Milligrams per liter.
<	= Less than the stated laboratory reporting limit.
---	= Not sampled/Not analyzed/Not measured/Not applicable.
a	= Approximate depth to groundwater surface at time of sampling.
b	= Hydrocarbon pattern does not match the requested fuel.
c	= Analyte presence was not confirmed by second column or GC/MS analysis.
d	= Well inaccessible for sampling.

---