



July 15, 2012

Roya C. Kambin
Project Manager
Marketing Business Unit

**Chevron Environmental
Management Company**
6101 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 790-6270
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Ms. Barbara Jakub
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502-6577

RECEIVED

9:45 am, Jul 19, 2012

Alameda County
Environmental Health

RE: First Semi-Annual 2012 Groundwater Monitoring Report Submittal
Former Unocal Service Station 0746
3943 Broadway Avenue, Oakland, California
Fuel Leak Case No.: RO0000203

Dear Ms. Jakub,

I declare under penalty of perjury that to the best of my knowledge the information and/or recommendations contained in the attached report is/are true and correct.

If you have any questions or need additional information, please contact me at (925) 790-6270.

Sincerely,

A handwritten signature in black ink, appearing to read "Roya Kambin".

Roya Kambin
Union Oil of California – Project Manager

Attachment:
First Semi-Annual 2012 Groundwater Monitoring Report

Mr. Keith Nowell
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Subject:
First Semi-Annual 2012 Monitoring Report Submittal

ENVIRONMENT

Dear Mr. Nowell:

On behalf of Chevron Environmental Management Company, for itself and as Attorney-in-Fact for Union Oil Company of California (hereinafter "EMC"), ARCADIS is submitting the enclosed Semi-Annual Groundwater Monitoring Report for the following facility:

Date:
July 15, 2012

Contact:
Katherine Brandt

Phone:
510.596.9675

Email:
katherine.brandt@arcadis-us.com

<u>Facility No.</u>	<u>Case No.</u>	<u>Location</u>
0746	RO0000203	3943 Broadway Avenue Oakland, California 94611

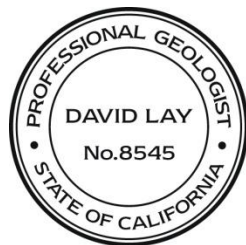
Our ref:
B0047338.2012

If you have any questions, please contact Katherine Brandt at 510.596.9675.
Sincerely,

ARCADIS



Katherine Brandt
Certified Project Manager





David W. Lay, P.G., C.P.G.
Principal Geologist

Copies:
Ms. Roya Kambin, EMC
Ms. Cherie McCaulou, CRWQCB – San Francisco Bay Region, 1515 Clay Street, Suite
1400, Oakland, California 94612 (CD)

**UNION OIL OF CALIFORNIA
SEMI-ANNUALLY MONITORING REPORT
SECOND QUARTER 2012
JULY 15, 2012**

Facility No.: 0746 Address: 3943 Broadway Avenue, Oakland, California 94611

Consulting Company/Contact Person/Phone No.: ARCADIS / Katherine Brandt / 510.596.9675

Primary Agency/Contact Person/Regulatory ID No.: Alameda County Department of Environmental Health / Mr. Keith Nowell / Case No. RO0000203

WORK PERFORMED DURING THIS REPORTING PERIOD (Second Quarter – 2012) :

- TRC Solutions (TRC) conducted groundwater monitoring and sampling on June 1, 2012. Field data sheets and general procedures are included as **Attachment A**. Eleven (11) groundwater monitoring wells were gauged this monitoring event (MW-1 through MW-7, MW-10, MW-11, MW-12, and RW-1). Ten (10) of those wells were sampled during this monitoring event (MW-1 through MW-4, MW-6, MW-7, MW-10, MW-11, MW-12, and RW-1). Well MW-5 was not sampled due to the presence of liquid-phase hydrocarbons (LPH) in the well.

All groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-g; C₆-C₁₂) by United States Environmental Protection Agency (EPA) Method 8015B; and benzene, toluene, ethylbenzene, and total xylenes (BTEX, collectively), methyl tertiary butyl ether (MTBE), 1,2-dibromoethane (EDB), 1,2-dichloroethane (EDC), and ethanol by EPA Method 8260B.

The site location map, the site plan, and the groundwater contour map are presented on **Figures 1** through **3**. Concentration maps for TPH-g, benzene, and MTBE are on **Figures 4** through **6**. Current Groundwater Gauging and Analytical Results are summarized in **Table 1**, Historic Groundwater Gauging and Analytical Results are summarized in **Table 2**, Current Additional Groundwater Analytical Results are summarized in **Table 2a**, LPH Recovery Data are summarized in **Table 3**, and Historical Groundwater Results from TRC are included as **Attachment B**. A copy of the laboratory analytical report and chain-of-custody documentation is included as **Attachment C**.

WORK PROPOSED FOR THE NEXT REPORTING PERIOD (Fourth Quarter – 2012):

- Perform groundwater monitoring and related reporting during fourth quarter 2012.

Current Phase of Project:	<u>Groundwater Monitoring</u>
Site Use:	<u>Active gasoline retail station</u>
Frequency of Sampling:	<u>Groundwater – Semi-Annually</u>
Frequency of Monitoring:	<u>Groundwater – Semi-Annually</u>
LPH Present On-Site:	<u>0.02feet (MW-5)</u>
Cumulative LPH Recovered to Date:	<u>3.919 gallons</u>
LPH Recovered This Quarter:	<u>0.210 gallons</u>
Bulk Soil Removed to Date:	<u>350 cubic yards during UST removal activities (1989)</u>
Bulk Soil Removed this Quarter:	<u>None</u>
Water Wells or Surface Waters within a 2,000' Radius and Their Respective Directions:	<u>Two irrigation wells located 1,330 feet east and 1,450 feet north of the site; the only surface water body (Glen Echo Creek) was located 1,630 feet southeast of the site</u>
Groundwater Use Designation:	<u>Irrigation</u>
Current Remediation Techniques:	<u>None</u>
Permits for Discharge (No.):	<u>None</u>
Approximate Depth to Groundwater:	<u>7.32 (MW-6) – 14.50 (MW-11) feet below top of casing</u> Measured <input checked="" type="checkbox"/> Estimated
Approximate Groundwater Elevation:	<u>63.68 (MW-11) – 73.16 (MW-5) feet relative to mean sea level</u>

**UNION OIL OF CALIFORNIA
SEMI-ANNUALLY MONITORING REPORT
SECOND QUARTER 2012
JULY 15, 2012**

Facility No.: 0746 Address: 3943 Broadway Avenue, Oakland, California 94611

Groundwater Gradient: 0.043 ft/ft (Magnitude) Measured Estimated
Southwest (Direction)

DISCUSSION:

Groundwater conditions during the second quarter 2012 remained generally consistent with previous quarters. The maximum dissolved concentrations of TPH-g (4,300 micrograms per liter [$\mu\text{g/L}$]), total xylenes (3.4 $\mu\text{g/L}$), and MTBE (19 $\mu\text{g/L}$) were detected in the samples collected from MW-3. The maximum dissolved concentrations of benzene (140 $\mu\text{g/L}$) and ethylbenzene (56 $\mu\text{g/L}$) were detected in the samples collected from RW-1. Toluene, EDB, EDC, and ethanol were not detected above the laboratory reporting limits for all wells sampled.

Groundwater elevations at the site vary by approximately nine-and-a-half feet, creating a hydraulic gradient of 0.043 foot per foot in the southwest direction.

CONCLUSIONS AND RECOMMENDATIONS:

Dissolved hydrocarbon constituent concentrations have remained relatively consistent with previous quarters. ARCADIS recommends continued groundwater monitoring and monthly product gauging and bail down.

ATTACHMENTS:

- Figure 1: Site Location Map
- Figure 2: Site Plan
- Figure 3: Groundwater Contour Map
- Figure 4: TPH-g Concentration Map
- Figure 5: Benzene Concentration Map
- Figure 6: MTBE Concentration Map

- Table 1: Current Groundwater Gauging and Analytical Results
- Table 2: Historic Groundwater Gauging and Analytical Results
- Table 2a: Historic Additional Groundwater Analytical Results
- Table 3: Liquid Phase Hydrocarbon Recovery Data

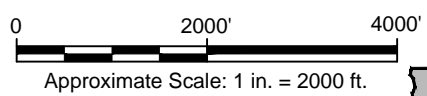
- Attachment A: Field Data Sheets and General Procedures
- Attachment B: Historical Groundwater Results from TRC
- Attachment C: Laboratory Report and Chain-of-Custody Documentation

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Figures



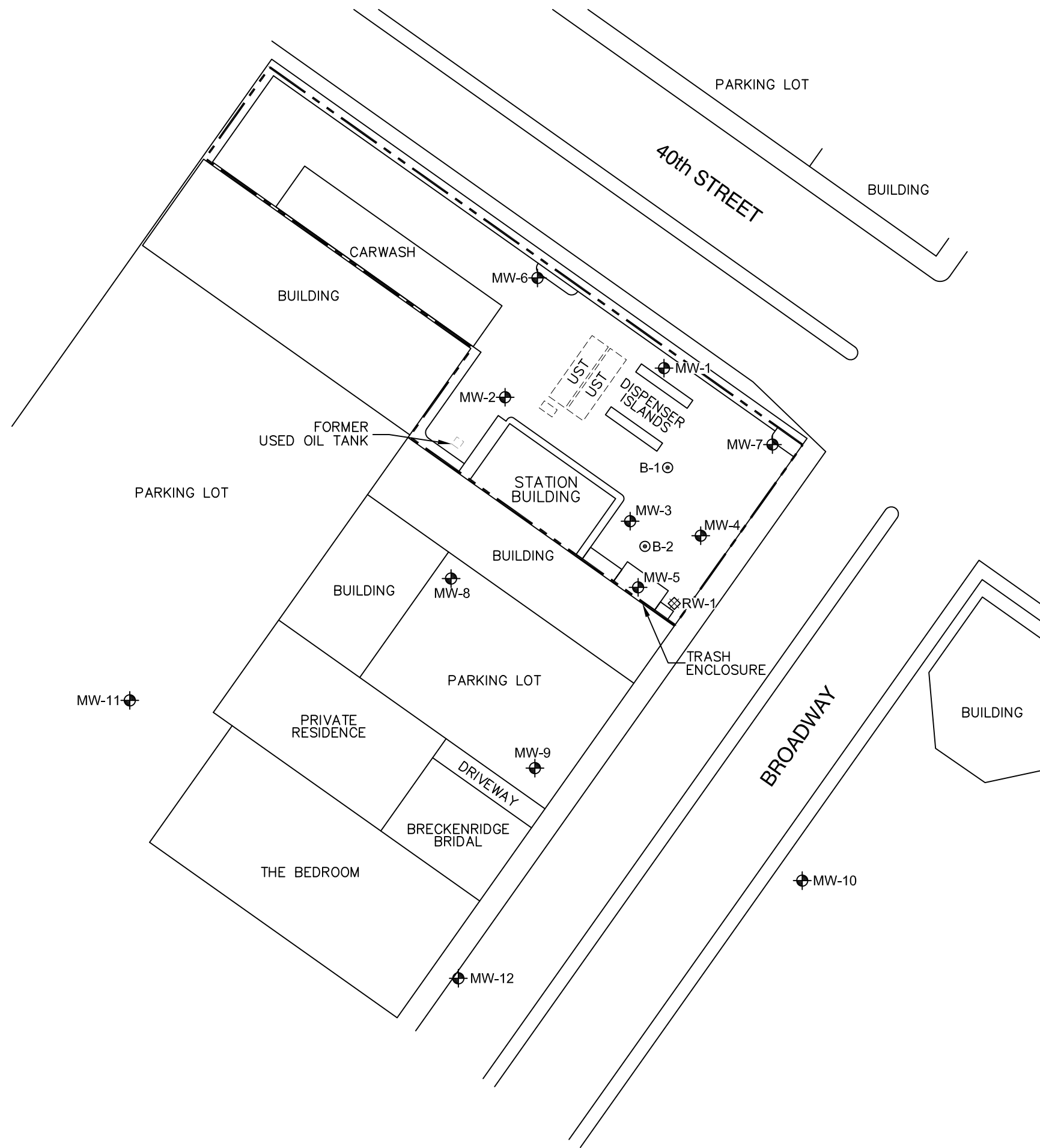
REFERENCE: BASE MAP USGS 7.5 MIN. TOPO. QUAD., OAKLAND WEST, CALIFORNIA, 1993, AND OAKLAND EAST, CALIFORNIA, 1997.



UNION OIL
 STATION NO. 0746
 3943 BROADWAY
 OAKLAND, CALIFORNIA

SITE LOCATION MAP





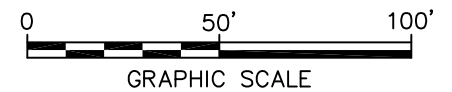
LEGEND

- PROPERTY BOUNDARY
- MW-1 MONITORING WELL
- RW-1 RECOVERY WELL
- B-1 CPT BORING



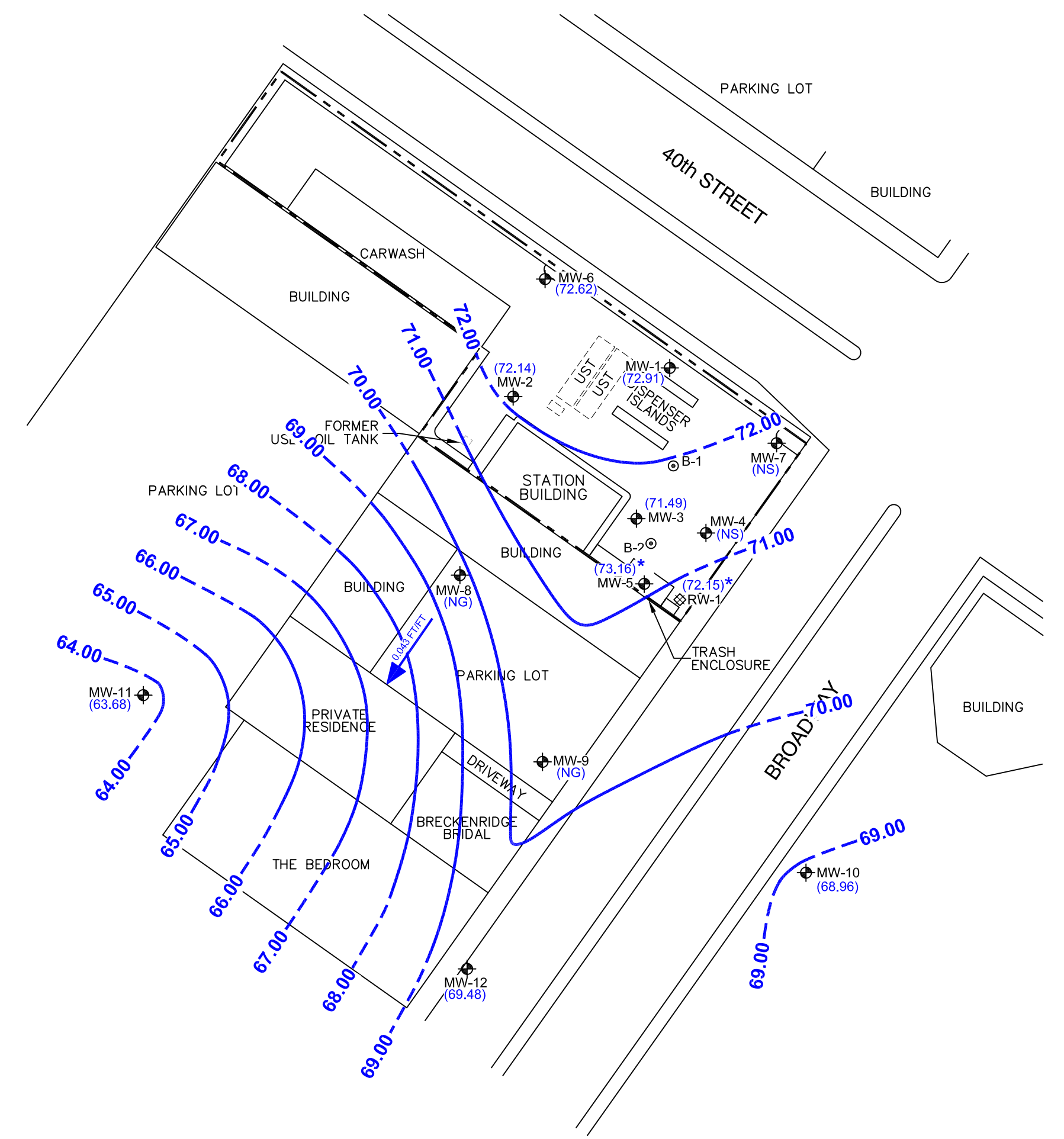
NOTES:

1. BASE MAP DIGITIZED FROM A FIGURE PDF PROVIDED BY DELTA, DATED 09/14/09, AT A SCALE OF 1"=50'.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.



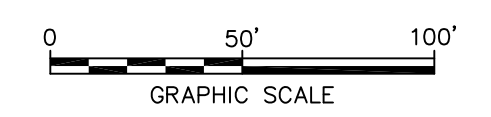
UNION OIL STATION NO. 0746 3943 BROADWAY OAKLAND, CALIFORNIA	
SITE MAP	
	FIGURE 2

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS
 C:\Users\jharris\Desktop\ENVCAD\B04733812012000021\SA 2012\DWG\47338W01.dwg LAYOUT: 3 SAVED: 6/28/2012 12:50 PM ACADVER: 16.15 (LMS TECH) PAGESETUP: SETUP1 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 6/28/2012 12:50 PM BY: HARRIS, JESSICA
 XREFS: IMAGES: PROJECTNAME: --



- LEGEND**
- PROPERTY BOUNDARY
 - MW-1 ◉ MONITORING WELL
 - RW-1 ◈ RECOVERY WELL
 - B-1 ⊙ CPT BORING
 - (71.49) GROUNDWATER ELEVATION IN FEET RELATIVE TO MEAN SEA LEVEL (FT MSL)
 - GROUNDWATER ELEVATION CONTOUR (FT MSL; DASHED WHERE INFERRED)
 - ← 0.043 FT/FT GROUNDWATER FLOW DIRECTION AND GRADIENT (FOOT PER FOOT)
 - (NG) NOT GAUGED
 - (NS) NOT SAMPLED
 - * NOT USED IN CONTOURING; Due to Different Well Construction Details

- NOTES:**
- BASE MAP DIGITIZED FROM A FIGURE PDF PROVIDED BY DELTA, DATED 09/14/09, AT A SCALE OF 1"=50'.
 - ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.
 - GROUNDWATER MONITORING WELLS WERE GAUGED AND SAMPLED ON JUNE 1, 2012.

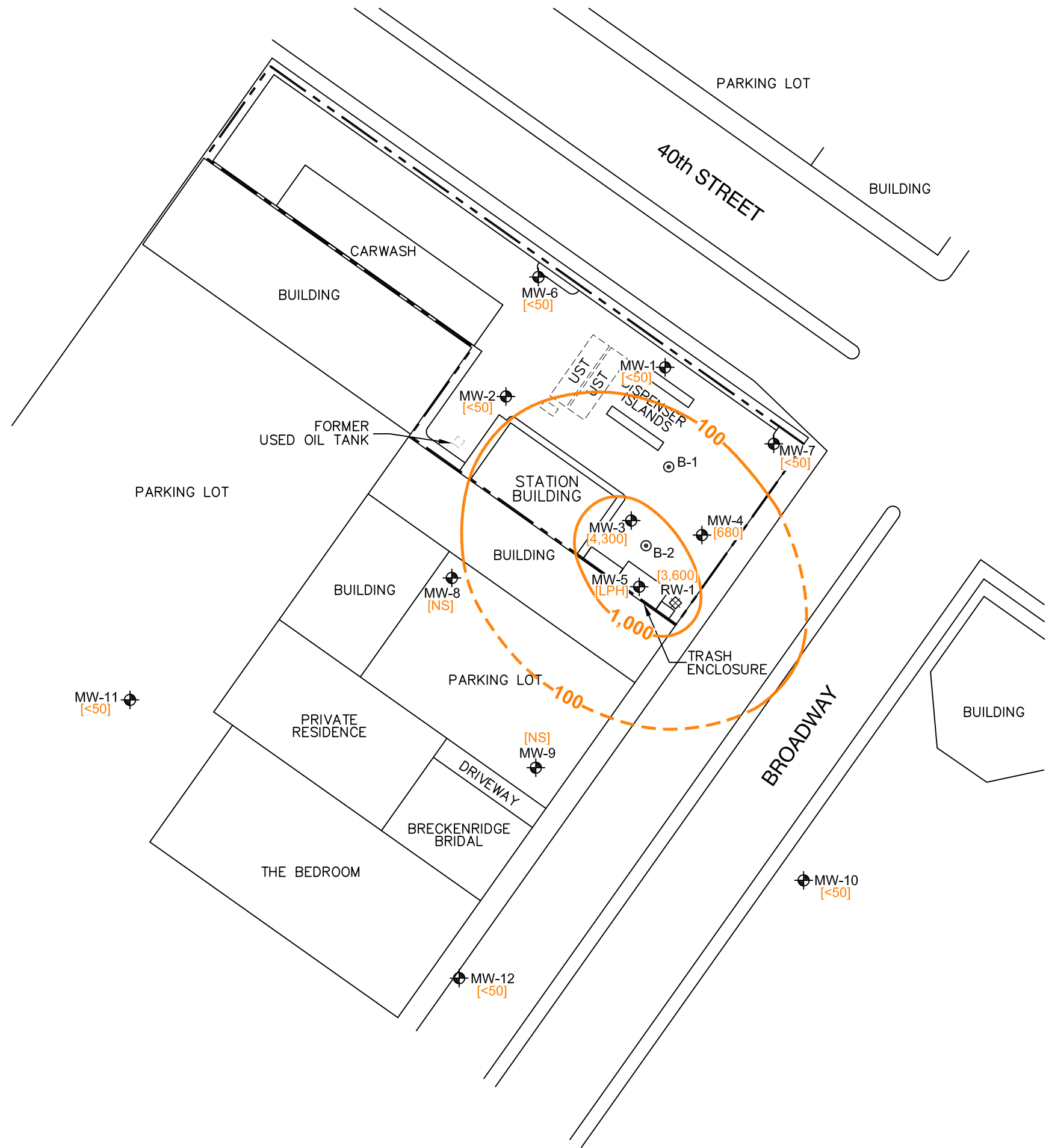


UNION OIL
 STATION NO. 0746
 3943 BROADWAY
 OAKLAND, CALIFORNIA

**GROUNDWATER ELEVATION
 CONTOUR MAP**

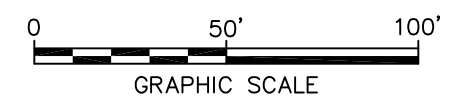
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FIGURE
3



- LEGEND**
- PROPERTY BOUNDARY
 - MW-1 MONITORING WELL
 - RW-1 RECOVERY WELL
 - B-1 CPT BORING
 - [TPH-g] TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (C6-C12) CONCENTRATION IN MICROGRAMS PER LITER ($\mu\text{g/L}$)
 - 100 TPH-g ISOCONCENTRATION CONTOUR ($\mu\text{g/L}$; DASHED WHERE INFERRED)
 - < DENOTES LESS THAN LABORATORY REPORTING LIMIT
 - [LPH] LIQUID PHASE HYDROCARBON
 - [NS] NOT SAMPLED

- NOTES:**
- BASE MAP DIGITIZED FROM A FIGURE PDF PROVIDED BY DELTA, DATED 09/14/09, AT A SCALE OF 1"=50'.
 - ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.
 - GROUNDWATER MONITORING WELLS WERE GAUGED AND SAMPLED ON JUNE 1, 2012.



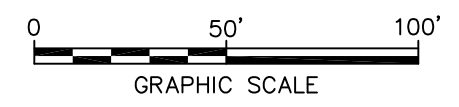
UNION OIL STATION NO. 0746 3943 BROADWAY OAKLAND, CALIFORNIA	
TPH-g CONCENTRATION MAP	
	FIGURE 4

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS
 C:\Users\jharris\Desktop\ENVCAD\B0047338\2012\000021\SA 2012\DWG\47338C02.dwg LAYOUT: 5 SAVED: 6/28/2012 1:24 PM ACADVER: 18.1S (LMS TECH) PAGES: 1 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 6/28/2012 1:24 PM BY: HARRIS, JESSICA
 XREFS: IMAGES: PROJECTNAME: 47338X01



- LEGEND
- PROPERTY BOUNDARY
 - MW-1 MONITORING WELL
 - RW-1 RECOVERY WELL
 - B-1 CPT BORING
 - [BENZ] BENZENE CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
 - 100 BENZENE ISOCONCENTRATION CONTOUR (µg/L; DASHED WHERE INFERRED)
 - < DENOTES LESS THAN LABORATORY REPORTING LIMIT
 - [LPH] LIQUID PHASE HYDROCARBON
 - [NS] NOT SAMPLED

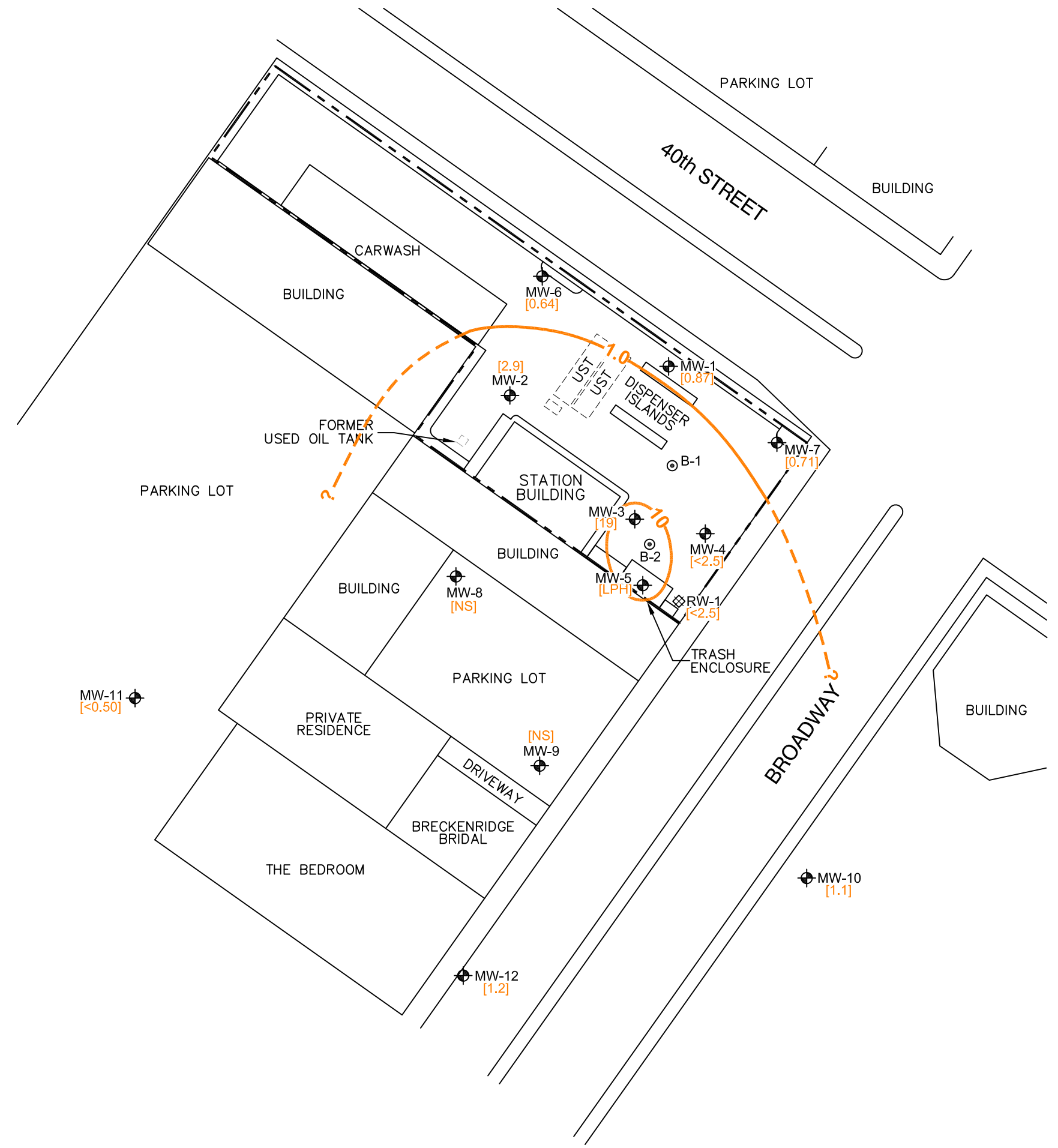
- NOTES:
1. BASE MAP DIGITIZED FROM A FIGURE PDF PROVIDED BY DELTA, DATED 09/14/09, AT A SCALE OF 1"=50'.
 2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.
 3. GROUNDWATER MONITORING WELLS WERE GAUGED AND SAMPLED ON JUNE 1, 2012.



UNION OIL
 STATION NO. 0746
 3943 BROADWAY
 OAKLAND, CALIFORNIA

BENZENE CONCENTRATION MAP

FIGURE
5

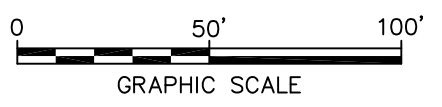


LEGEND

- - - - - PROPERTY BOUNDARY
- MW-1 ◉ MONITORING WELL
- RW-1 ⊠ RECOVERY WELL
- B-1 ⊙ CPT BORING
- [MTBE] METHYL TERTIARY BUTYL ETHER CONCENTRATION IN MICROGRAMS PER LITER (μg/L)
- 1.0 — — — MTBE ISOCONCENTRATION CONTOUR (μg/L; DASHED WHERE INFERRED)
- < DENOTES LESS THAN LABORATORY REPORTING LIMIT
- [LPH] LIQUID PHASE HYDROCARBON
- [NS] NOT SAMPLED

NOTES:

1. BASE MAP DIGITIZED FROM A FIGURE PDF PROVIDED BY DELTA, DATED 09/14/09, AT A SCALE OF 1"=50'.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.
3. GROUNDWATER MONITORING WELLS WERE GAUGED AND SAMPLED ON JUNE 1, 2012.



UNION OIL
STATION NO. 0746
3943 BROADWAY
OAKLAND, CALIFORNIA

MTBE CONCENTRATION MAP

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Tables

Table 1
Current Groundwater Gauging and Analytical Results
76 Station 0746
3943 Broadway Avenue, Oakland California

Well ID	Date Sampled	TOC (feet MSL)	DTW (feet BTOC)	LPH Thickness (feet)	GW Elevation (feet MSL)	Previous Quarter GWE (feet MSL)	Change in Elevation (feet)	TPH-g	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments
MW-1	6/1/2012	80.54	7.63	0.00	72.91	72.57	0.34	<50	<0.50	<0.50	<0.50	<1.0	0.87	<0.50	<0.50	<250	
MW-2	6/1/2012	81.32	9.18	0.00	72.14	72.37	-0.23	<50	<0.50	<0.50	<0.50	<1.0	2.9	<0.50	<0.50	<250	
MW-3	6/1/2012	81.41	9.92	0.00	71.49	71.33	0.16	4,300	4.6	<0.50	17	3.4	19	<0.50	<0.50	<250	A01
MW-4	6/1/2012	--	9.92	0.00	--	--	--	680	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<1,200	A01
MW-5	1/12/2012	81.38	10.12	0.02	71.26	71.36	-0.10	--	--	--	--	--	--	--	--	--	
MW-5	6/1/2012	81.38	8.22	0.02	73.16	71.26	1.90	--	--	--	--	--	--	--	--	--	
MW-6	6/1/2012	79.94	7.32	0.00	72.62	73.19	-0.57	<50	<0.50	<0.50	<0.50	<1.0	0.64	<0.50	<0.50	<250	
MW-7	6/1/2012	--	8.22	0.00	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	0.71	<0.50	<0.50	<250	
MW-8	6/1/2012	81.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	6/1/2012	80.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	6/1/2012	81.61	12.65	0.00	68.96	67.20	1.76	<50	<0.50	<0.50	<0.50	<1.0	1.1	<0.50	<0.50	<250	
MW-11	6/1/2012	78.18	14.50	0.00	63.68	64.91	-1.23	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-12	6/1/2012	79.61	10.13	0.00	69.48	70.19	-0.71	<50	<0.50	<0.50	<0.50	<1.0	1.2	<0.50	<0.50	<250	
RW-1	1/12/2012	80.63	9.53	0.00	71.10	71.35	-0.25	--	--	--	--	--	--	--	--	--	
RW-1	6/1/2012	80.63	8.48	0.00	72.15	71.10	1.05	3,600	140	<2.5	56	<5.0	<2.5	<2.5	<2.5	<1,200	A01

Note

Analytical results given in micrograms per liter (µg/l) unless otherwise stated

Standard Abbreviations

- not analyzed, measured, or collected
- < not detected at or above laboratory detection limit
- TOC top of casing (surveyed reference elevation)
- feet MSL feet relative to mean sea level
- DTW depth to water
- BTOC below top of casing
- LPH liquid-phase hydrocarbons
- GW groundwater

Table 1
Current Groundwater Gauging and Analytical Results
76 Station 0746
3943 Broadway Avenue, Oakland California

Well ID	Date Sampled	TOC (feet MSL)	DTW (feet BTOC)	LPH Thickness (feet)	GW Elevation (feet MSL)	Previous Quarter GWE (feet MSL)	Change in Elevation (feet)	TPH-g	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments
	GWE	groundwater elevation															

Analytes

TPH-g	total petroleum hydrocarbons with gasoline (C6-C12)
MTBE	methyl tertiary butyl ether
EDB	1,2-dibromoethane (same as ethylene dibromide)
EDC	1,2-dichloroethane (same as ethylene dichloride)
8015B	EPA Method 8015B for TPH-g
8260B	EPA Method 8260B for Volatile Organic Compounds

Laboratory Qualifiers

A01	PQL's and MDL's are raised due to sample dilution.
PQL	practical quantitation limit
MDL	method detection limit

Table 2
Historic Groundwater Gauging and Analytical Results
76 Station 0746
3943 Broadway Avenue, Oakland California

Well ID	Date Sampled	TOC (feet MSL)	DTW (feet BTOC)	LPH Thickness (feet)	GW Elevation (feet MSL)	Previous Quarter GWE (feet MSL)	Change in Elevation (feet)	TPH-g	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments
MW-1	12/9/2011	80.54	7.97	0.00	72.57	74.29	-1.72	<50	<0.50	<0.50	<0.50	<1.0	4.2	<0.50	<0.50	<250	
MW-1	6/1/2012	80.54	7.63	0.00	72.91	72.57	0.34	<50	<0.50	<0.50	<0.50	<1.0	0.87	<0.50	<0.50	<250	
MW-2	12/9/2011	81.32	8.95	0.00	72.37	73.57	-1.20	<50	<0.50	<0.50	<0.50	<1.0	7.9	<0.50	<0.50	<250	
MW-2	6/1/2012	81.32	9.18	0.00	72.14	72.37	-0.23	<50	<0.50	<0.50	<0.50	<1.0	2.9	<0.50	<0.50	<250	
MW-3	12/9/2011	81.41	10.08	0.00	71.33	75.31	-3.98	9,900	11	<2.5	98	47	9.3	<2.5	<2.5	<1,200	A01
MW-3	6/1/2012	81.41	9.92	0.00	71.49	71.33	0.16	4,300	4.6	<0.50	17	3.4	19	<0.50	<0.50	<250	A01
MW-4	12/9/2011	--	9.04	0.00	--	--	--	1,900	<0.50	<0.50	1.4	<1.0	<0.50	<0.50	<0.50	<250	
MW-4	6/1/2012	--	9.92	0.00	--	--	--	680	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<1,200	A01
MW-5	9/13/2011	81.38	6.70	0.00	74.68	75.95	-1.27	--	--	--	--	--	--	--	--	--	
MW-5	10/21/2011	81.38	6.72	0.00	74.66	75.95	-1.29	--	--	--	--	--	--	--	--	--	
MW-5	11/4/2011	81.38	6.64	0.00	74.74	75.95	-1.21	--	--	--	--	--	--	--	--	--	
MW-5	12/9/2011	81.38	10.02	0.21	71.36	74.66	-3.30	--	--	--	--	--	--	--	--	--	
MW-5	1/12/2012	81.38	10.12	0.02	71.26	71.36	-0.10	--	--	--	--	--	--	--	--	--	
MW-5	6/1/2012	81.38	8.22	0.02	73.16	71.26	1.90	--	--	--	--	--	--	--	--	--	
MW-6	12/9/2011	79.94	6.75	0.00	73.19	73.70	-0.51	<50	<0.50	<0.50	<0.50	<1.0	2.0	<0.50	<0.50	<250	
MW-6	6/1/2012	79.94	7.32	0.00	72.62	73.19	-0.57	<50	<0.50	<0.50	<0.50	<1.0	0.64	<0.50	<0.50	<250	
MW-7	12/9/2011	--	8.54	0.00	--	--	--	120	<0.50	<0.50	<0.50	<1.0	4.5	<0.50	<0.50	<250	
MW-7	6/1/2012	--	8.22	0.00	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	0.71	<0.50	<0.50	<250	
MW-8	12/9/2011	81.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	6/1/2012	81.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	12/9/2011	80.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	6/1/2012	80.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	12/9/2011	81.61	14.41	0.00	67.20	69.25	-2.05	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-10	6/1/2012	81.61	12.65	0.00	68.96	67.20	1.76	<50	<0.50	<0.50	<0.50	<1.0	1.1	<0.50	<0.50	<250	
MW-11	12/9/2011	78.18	13.27	0.00	64.91	62.39	2.52	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-11	6/1/2012	78.18	14.50	0.00	63.68	64.91	-1.23	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-12	12/9/2011	79.61	9.42	0.00	70.19	72.28	-2.09	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-12	6/1/2012	79.61	10.13	0.00	69.48	70.19	-0.71	<50	<0.50	<0.50	<0.50	<1.0	1.2	<0.50	<0.50	<250	

Table 2
Historic Groundwater Gauging and Analytical Results
76 Station 0746
3943 Broadway Avenue, Oakland California

Well ID	Date Sampled	TOC (feet MSL)	DTW (feet BTOC)	LPH Thickness (feet)	GW Elevation (feet MSL)	Previous Quarter GWE (feet MSL)	Change in Elevation (feet)	TPH-g	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments
RW-1	10/21/2011	80.63	5.45	0.00	75.18	77.02	-1.84	--	--	--	--	--	--	--	--	--	
RW-1	12/9/2011	80.63	9.28	0.00	71.35	75.18	-3.83	2,900	240	1.2	180	30	<0.50	<0.50	<0.50	<250	A01
RW-1	1/12/2012	80.63	9.53	0.00	71.10	71.35	-0.25	--	--	--	--	--	--	--	--	--	
RW-1	6/1/2012	80.63	8.48	0.00	72.15	71.10	1.05	3,600	140	<2.5	56	<5.0	<2.5	<2.5	<2.5	<1,200	A01

Note

Analytical results given in micrograms per liter (µg/l) unless otherwise stated

Standard Abbreviations

- not analyzed, measured, or collected
- < not detected at or above laboratory detection limit
- TOC top of casing (surveyed reference elevation)
- feet MSL feet relative to mean sea level
- DTW depth to water
- BTOC below top of casing
- LPH liquid-phase hydrocarbons
- GW groundwater
- GWE groundwater elevation

Analytes

- TPH-g total petroleum hydrocarbons with gasoline (C6-C12)
- MTBE methyl tertiary butyl ether
- EDB 1,2-dibromoethane (same as ethylene dibromide)
- EDC 1,2-dichloroethane (same as ethylene dichloride)
- 8015B EPA Method 8015B for TPH-g
- 8260B EPA Method 8260B for Volatile Organic Compounds

Laboratory Qualifiers

- A01 PQL's and MDL's are raised due to sample dilution.
- PQL practical quantitation limit
- MDL method detection limit

Table 2a
Historic Additional Groundwater Analytical Results
76 Station 0746
3943 Broadway Avenue, Oakland California

Well ID	Date Sampled	Total Alkalinity as CaCO ₃ (mg/L)	Nitrate as NO ₃ (mg/L)	Sulfate (mg/L)	Total Sulfide (mg/L)	Total Iron	Comments
MW-1	12/9/2011	230	2.4	21	<0.050	6,200	
MW-2	12/9/2011	--	--	--	--	--	
MW-3	12/9/2011	--	--	--	--	--	
MW-4	12/9/2011	130	<0.090	<0.12	<0.20	12,000	A10
MW-5	12/9/2011	--	--	--	--	--	
MW-6	12/9/2011	--	--	--	--	--	
MW-7	12/9/2011	--	--	--	--	--	
MW-8	12/9/2011	--	--	--	--	--	
MW-9	12/9/2011	--	--	--	--	--	
MW-10	12/9/2011	--	--	--	--	--	
MW-11	12/9/2011	270	9.8	69	<0.050	600	
MW-12	12/9/2011	390	0.77	9.9	<0.050	1,000	
RW-1	12/9/2011	--	--	--	--	--	

Note

Analytical results given in micrograms per liter (µg/l) unless otherwise stated

Standard Abbreviations

-- not analyzed, measured, or collected
 < not detected at or above laboratory detection limit
 mg/L milligram per liter

Analytes

CaCO₃ calcium carbonate
 NO₃ nitrate
 310.1 EPA Method 310.1 for total alkalinity as CaCO₃
 300.0 EPA Method 300.0 for nitrate as NO₃ and sulfate
 376.2 EPA Method 376.2 for total sulfide
 6010B EPA Method 6010B for total iron

Laboratory Qualifiers

A10 PQL's and MDL's were raised due to matrix interference.
 PQL practical quantitation limit
 MDL method detection limit

Table 3
Liquid Phase Hydrocarbon Recovery Data
76 Station 0746
3943 Broadway Avenue, Oakland California

Date	MW-5	RW-1
11/11/1998	0.00	0.00
2/22/1999	0.040	0.00
4/2/1999	0.070	0.00
5/4/1999	0.00	0.00
5/20/1999	0.00	0.00
6/29/1999	0.00	0.00
0729/99	0.00	0.00
8/24/1999	0.00	0.00
9/27/1999	0.00	0.00
10/28/1999	0.00	0.00
11/15/1999	0.00	0.00
12/20/1999	0.00	0.00
1/20/2000	0.00	0.00
2/26/2000	0.00	0.00
3/31/2000	0.00	0.00
4/13/2000	0.000	0.00
5/22/2000	0.00	0.00
11/22/2000	0.020	0.00
2/14/2001	0.060	0.00
3/28/2001	0.00	0.00
4/28/2001	0.00	0.00
5/15/2001	0.00	0.00
6/29/2001	0.00	0.00
7/17/2001	0.00	0.00
8/30/2001	0.000	0.00
9/24/2001	0.00	0.00
10/15/2001	0.030	0.00
11/23/2001	0.00	0.00
12/10/2001	0.000	0.00
1/14/2002	0.00	0.00
2/22/2002	0.00	0.00
3/11/2002	0.000	0.00
4/15/2002	0.00	0.00
5/24/2002	0.040	0.00
6/17/2002	0.040	0.00
7/15/2002	0.020	0.00
8/19/2002	0.050	0.00
9/5/2002	0.030	0.00
10/7/2002	0.020	0.00
11/29/2002	0.020	0.00
12/12/2002	0.010	0.00
1/6/2003	0.010	0.00
2/12/2003	0.020	0.00
3/13/2003	0.020	0.00
4/7/2003	0.010	0.00
5/15/2003	0.030	0.00
6/12/2003	0.020	0.00
7/7/2003	0.010	0.00
8/14/2003	0.020	0.00
9/12/2003	0.020	0.00
10/15/2003	0.087	0.000
11/4/2003	0.043	0.000
11/21/2003	0.032	0.000

Table 3
Liquid Phase Hydrocarbon Recovery Data
76 Station 0746
3943 Broadway Avenue, Oakland California

Date	MW-5	RW-1
12/18/2003	0.024	0.000
1/7/2004	0.009	0.000
2/9/2004	0.010	0.010
3/24/2004	0.031	0.000
4/16/2004	0.000	0.000
5/24/2004	0.050	0.000
6/8/2004	0.049	0.000
7/2/2004	0.046	0.000
8/20/2004	0.080	0.000
9/17/2004	0.048	0.000
10/22/2004	0.024	0.000
11/29/2004	0.036	0.000
12/21/2004	0.010	0.000
1/24/2005	0.027	0.000
2/18/2005	0.020	0.000
3/18/2005	0.024	0.000
4/14/2005	0.010	0.000
5/17/2005	0.010	0.000
6/24/2005	0.000	0.000
7/14/2005	0.020	0.000
8/5/2005	0.050	0.000
9/16/2005	0.009	0.000
10/21/2005	0.000	0.000
11/22/2005	0.000	0.000
12/15/2005	0.000	0.000
1/19/2006	0.000	0.000
2/15/2006	0.000	0.000
3/25/2006	0.000	0.000
4/27/2006	0.000	0.000
5/25/2006	0.000	0.000
6/14/2006	0.000	0.000
7/3/2006	0.000	0.000
8/10/2006	0.000	0.000
9/15/2006	0.027	0.000
10/27/2006	0.009	0.000
11/22/2006	0.017	0.000
12/21/2006	0.000	0.000
2/5/2007	0.010	0.000
2/20/2007	0.000	0.000
3/28/2007	0.000	0.000
4/30/2007	0.000	0.000
5/23/2007	0.073	0.000
6/28/2007	0.049	0.000
8/1/2007	0.000	0.000
8/27/2007	0.000	0.000
9/12/2007	0.040	0.000
10/16/2007	0.000	0.000
12/13/2007	0.029	0.000
1/29/2008	0.010	0.000
2/28/2008	0.020	0.000
3/21/2008	0.000	0.000
4/11/2008	0.058	0.000
5/21/2008	0.044	0.000
6/9/2008	0.029	0.000

Table 3
Liquid Phase Hydrocarbon Recovery Data
76 Station 0746
3943 Broadway Avenue, Oakland California

Date	MW-5	RW-1
7/18/2008	0.032	0.000
8/15/2008	0.024	0.000
9/24/2008	0.051	0.000
10/22/2008	0.044	0.000
11/26/2008	0.034	0.000
12/30/2008	0.022	0.000
1/23/2009	NA	0.000
3/27/2009	0.000	0.000
4/28/2009	0.102	0.000
5/28/2009	NA	NA
7/31/2009	0.034	0.000
8/21/2009	0.102	0.000
9/28/2009	0.017	0.000
10/26/2009	0.063	0.000
11/30/2009	0.075	0.000
12/15/2009	0.010	0.000
1/25/2010	0.003	0.000
2/26/2010	0.000	0.000
3/23/2010	0.010	0.000
4/22/2010	0.009	0.000
5/21/2010	0.117	0.000
6/28/2010	0.085	0.000
7/21/2010	0.040	0.000
8/18/2010	0.070	0.000
9/29/2010	0.030	0.000
10/18/2010	0.046	0.000
11/30/2010	0.058	0.000
12/29/2010	0.250	0.000
1/6/2011	0.138	0.000
1/20/2011	0.231	0.000
2/1/2011	0.230	0.000
2/14/2011	0.000	0.000
3/3/2011	0.000	0.000
3/22/2011	0.000	0.000
4/25/2011	0.000	0.000
5/27/2011	0.000	0.000
9/13/2011	0.000	0.000
10/20/2011	0.000	0.000
11/4/2011	0.000	0.000
12/23/2011	0.210	0.000
Total LPH Removed (gallons):	3.909	0.010

LPH removed for 2" casing well = (feet of product)(0.17 gallon/foot)
4" casing well = (feet of product)(0.67 gallon/foot)
6" casing well = (feet of product)(1.5 gallon/foot)

ARCADIS

Attachment A

Field Data Sheets and General Procedures

FIELD MONITORING DATA SHEET

Technician: Basilio

Job #/Task #: 183487.0035.1647

Date: 1-12-12

Site # 0746

Project Manager A.F

Page 1 of 1

Well #	TOC	Time Gauged	Total Depth	Depth to Water	Depth to Product	Product Thickness (feet)	Time Sampled	Misc. Well Notes
RW-1	✓	0900	16.05	9.53	-	-	N/S	8"
MW-5	✓	0910	19.73	10.12	10.10	0.02	N/S	2"

FIELD DATA COMPLETE QA/QC COC WELL BOX CONDITION SHEETS

MANIFEST DRUM INVENTORY TRAFFIC CONTROL



MANUAL PUMP/BAIL OUT SHEET

Site #: 0746 Project #: 183487.0035.1047 Date: 1-12-12

Technician: Baerlin Page #: 1 of 1

Monitoring Data Before Pump/Bail Out

Well Number MW-5
 Depth to Product 10.10
 Depth to Water 10.12
 Total Depth of Well 19.73
 Feet of Total Fluid in Well 9.63
 Thickness of Product (ft.) .02
 Well Diameter (in.) 2
 One Well Volume (gal.) 2

Pump/Bail One Well Volume

Water Recovered (gal.) 1.98
 Product Recovered (gal.) 0.02
THICKNESS OF PRODUCT x (0.67 FOR 4" CASING) OR
 (0.17 FOR 2" CASING) OR (1.5 FOR 6" CASING)
 Time Required for Purge 5 Min
 Comments: _____

Monitoring Data Before Pump/Bail Out

Well Number _____
 Depth to Product _____
 Depth to Water _____
 Total Depth of Well _____
 Feet of Total Fluid in Well _____
 Thickness of Product (ft.) _____
 Well Diameter (in.) _____
 One Well Volume (gal.) _____

Pump/Bail One Well Volume

Water Recovered (gal.) _____
 Product Recovered (gal.) _____
THICKNESS OF PRODUCT x (0.67 FOR 4" CASING) OR
 (0.17 FOR 2" CASING) OR (1.5 FOR 6" CASING)
 Time Required for Purge _____
 Comments: _____

Monitoring Data Before Pump/Bail Out

Well Number _____
 Depth to Product _____
 Depth to Water _____
 Total Depth of Well _____
 Feet of Total Fluid in Well _____
 Thickness of Product (ft.) _____
 Well Diameter (in.) _____
 One Well Volume (gal.) _____

Pump/Bail One Well Volume

Water Recovered (gal.) _____
 Product Recovered (gal.) _____
THICKNESS OF PRODUCT x (0.67 FOR 4" CASING) OR
 (0.17 FOR 2" CASING) OR (1.5 FOR 6" CASING)
 Time Required for Purge _____
 Comments: _____

Monitoring Data Before Pump/Bail Out

Well Number _____
 Depth to Product _____
 Depth to Water _____
 Total Depth of Well _____
 Feet of Total Fluid in Well _____
 Thickness of Product (ft.) _____
 Well Diameter (in.) _____
 One Well Volume (gal.) _____

Pump/Bail One Well Volume

Water Recovered (gal.) _____
 Product Recovered (gal.) _____
THICKNESS OF PRODUCT x (0.67 FOR 4" CASING) OR
 (0.17 FOR 2" CASING) OR (1.5 FOR 6" CASING)
 Time Required for Purge _____
 Comments: _____

Fluids from all of today's Manual Pump/Bail Outs were pumped into:

1) Vac Truck 2) Properly Labeled Drums 3) Other _____

TECHNICAL SERVICES REQUEST FORM
0746 Monthly LPH Recovery Events

Site ID: 0746
Address: 3943 Broadway
City: Oakland
Cross Street: 40th Street

Project #: 183487.0035.1647 / 00TA01
Client: Roya Kambin
Client Contact #: 925-790-6270
PM: Kathy Brandt, ARCADIS
PM Contact #: 510-596-9675

Number of Wells: 2 **Well Diameters (in.):** 2 - 8 **# of Techs, # of Hrs:** 1 , 2
Depth to Water (ft.): 9 **Max. Well Depth (ft.):** 19

ACTIVITIES		FREQUENCY	NOTES
Gauging:	✓	Monthly	
Purge/Sampling:			
Drums:	✓		

NOTIFICATIONS:

Broadway 76: 510-655-7662

Station Owner: Clement Leung, 510-409-0768

SITE INFORMATION:

Check skimmer in MW-5 and RW-1.

Empty and record volume of product in each skimmer.

Bail product for wells (if any).



123 Technology Drive West
Irvine, CA 92618

949.727.9336 PHONE
949.727.7399 FAX

www.TRCSolutions.com

DATE: June 8, 2012

TO: Katherine Brandt
ARCADIS U.S., Inc.
1900 Powell Street, 12th Floor
Emeryville, California 94608

SITE: Unocal Site 0746
Facility 351647
3943 Broadway, Oakland, CA

RE: Transmittal of Groundwater Monitoring Data

Dear Ms. Brandt,

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 June 1, 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 949-727-7345 if you have questions.

Sincerely,

A handwritten signature in black ink, appearing to read "CC", is written over a circular stamp that contains the letters "TRC".

Christina Carrillo
Groundwater Program Coordinator

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. Videns

Job #/Task #: 189791.0035.1647

Date: 6/1/12

Site # 0746

Project Manager AF

Page 1 of 2

Well #	TOC	Time Gauged	Total Depth	Depth to Water	Depth to Product	Product Thickness (feet)	Time Sampled	Misc. Well Notes
Mw-4	✓	0538	19.73	9.92	—	—	0909	2"
Mw-6	✓	0543	19.52	7.32	—	—	0721	2"
Mw-1	✓	0548	19.56	7.63	—	—	0742	2"
Mw-7	✓	0554	19.61	8.22	—	—	0934	2"
Mw-2	✓	0609	19.76	9.18	—	—	0810	2"
Mw-3	✓	0614	22.45	9.92	—	—	0900	2"
Mw-8	—	—	—	—	—	—	N/S	No access
Mw-9	—	—	—	—	—	—	N/S	↓

FIELD DATA COMPLETE	QA/QC	COC	WELL BOX CONDITION SHEETS
MANIFEST	DRUM INVENTORY	TRAFFIC CONTROL	



FIELD MONITORING DATA SHEET

Technician: Basilio

Job #/Task #: 189791.2035.1647

Date: ~~5-31-12~~ 6-1-12 BK

Site # 0746

Project Manager AF

Page 2 of 2

Well #	TOC	Time Gauged	Total Depth	Depth to Water	Depth to Product	Product Thickness (feet)	Time Sampled	Misc. Well Notes
MW-10	✓	0851	21.68	12.65	-	-	0912	2 CAR Top of well
MW-12	✓	0542	17.56	10.13	-	-	0925	2
MW-11	✓	0958	19.10	14.50	-	-	1212	2 TRUCK Top of well.
MW-5	✓	0610	19.75	8.22	8.20	1.02	N/S	2
RW-1	✓	0556	16.10	8.48	-	-	0940	6"
FIELD DATA COMPLETE		QA/QC		COC		WELL BOX CONDITION SHEETS		
MANIFEST		DRUM INVENTORY			TRAFFIC CONTROL			



GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Vidners

Site: 0746

Project No.: 184791.0035.1647

Date: 6/1/12

Well No. MW-1

Purge Method: Sub

Depth to Water (feet): 7.63

Depth to Product (feet):

Total Depth (feet) 19.56

LPH & Water Recovered (gallons):

Water Column (feet): 11.93

Casing Diameter (Inches): 2

80% Recharge Depth(feet): 10.02

1 Well Volume (gallons): 3

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0730			3	658.3	19.4	6.74			
			6	659.5	19.5	6.74			
	0736		9	660.4	19.6	6.74			
Static at Time Sampled			Total Gallons Purged			Sample Time			
7.63			9			0742			
Comments: <u>Pump depth - 13ft.</u>									

Well No. MW-7

Purge Method: HB

Depth to Water (feet): 8.22

Depth to Product (feet):

Total Depth (feet) 19.61

LPH & Water Recovered (gallons):

Water Column (feet): 11.39

Casing Diameter (Inches): 2

80% Recharge Depth(feet): 10.50

1 Well Volume (gallons): 2

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0919			2	668.5	20.3	6.89			
			4	667.5	19.9	6.90			
	0928		6	665.4	19.8	6.89			
Static at Time Sampled			Total Gallons Purged			Sample Time			
8.62			6			0934			
Comments:									

GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Videns

Site: 0746

Project No.: 189791.0035.1647

Date: 6/1/12

Well No. MW-4

Purge Method: HB

Depth to Water (feet): 9.92

Depth to Product (feet):

Total Depth (feet) 19.73

LPH & Water Recovered (gallons):

Water Column (feet): 9.81

Casing Diameter (Inches): 2

80% Recharge Depth(feet): 11.88

1 Well Volume (gallons): 2

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity	
Pre-Purge										
<u>0647</u>			<u>2</u>	<u>444.6</u>	<u>17.9</u>	<u>6.89</u>				
			<u>4</u>	<u>454.1</u>	<u>17.9</u>	<u>6.87</u>				
	<u>0658</u>		<u>6</u>	<u>463.2</u>	<u>17.9</u>	<u>6.87</u>				
		Static at Time Sampled		Total Gallons Purged			Sample Time			
		<u>15.71</u>		<u>6</u>			<u>0909</u>			
Comments: <u>Did not recover in 2 hours,</u>										

Well No. MW-6

Purge Method: Sub

Depth to Water (feet): 7.32

Depth to Product (feet):

Total Depth (feet) 19.52

LPH & Water Recovered (gallons):

Water Column (feet): 12.20

Casing Diameter (Inches): 2

80% Recharge Depth(feet): 9.76

1 Well Volume (gallons): 3

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity	
Pre-Purge										
<u>0709</u>			<u>3</u>	<u>1095</u>	<u>19.5</u>	<u>6.65</u>				
			<u>6</u>	<u>1020</u>	<u>19.8</u>	<u>6.66</u>				
	<u>0715</u>		<u>9</u>	<u>980.1</u>	<u>19.8</u>	<u>6.65</u>				
		Static at Time Sampled		Total Gallons Purged			Sample Time			
		<u>10.51</u>		<u>9</u>			<u>0721</u>			
Comments: <u>Pump depth - 12 ft</u>										

GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Videns

Site: 0746

Project No.: 189791.0035.1647

Date: 6/1/12

Well No. MW-2

Purge Method: Sub

Depth to Water (feet): 9.18

Depth to Product (feet):

Total Depth (feet): 19.76

LPH & Water Recovered (gallons):

Water Column (feet): 10.58

Casing Diameter (Inches): 2

80% Recharge Depth(feet): 11.30

1 Well Volume (gallons): 2

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0759			2	593.2	18.1	6.77			
			4	596.6	17.9	6.77			
	0804		6	594.2	17.8	6.77			
Static at Time Sampled		Total Gallons Purged			Sample Time				
11.30		6			0810				
Comments: Pump depth - 5ft. below DTW									

Well No. MW-3

Purge Method: Sub

Depth to Water (feet): 9.92

Depth to Product (feet):

Total Depth (feet): 22.45

LPH & Water Recovered (gallons):

Water Column (feet): 12.53

Casing Diameter (Inches): 2

80% Recharge Depth(feet): 12.43

1 Well Volume (gallons): 3

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0844			3	669.5	18.9	6.65			
			6	635.9	18.9	6.71			
	0850		9	655.7	19.1	6.71			
Static at Time Sampled		Total Gallons Purged			Sample Time				
11.34		9			0900				
Comments: Pump depth - 5ft. below DTW									

GROUNDWATER SAMPLING FIELD NOTES

Technician: Francis

Site: 0746

Project No.: 189791, 0035, 1647

Date: 5-31-12

Well No. MW-10

Purge Method: HB

Depth to Water (feet): 12.65

Depth to Product (feet): —

Total Depth (feet) 21.68

LPH & Water Recovered (gallons): —

Water Column (feet): 9.03

Casing Diameter (Inches): 2

80% Recharge Depth(feet): 14.45

1 Well Volume (gallons): 2

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, °C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
<u>0857</u>			<u>2</u>	<u>538.2</u>	<u>19.8</u>	<u>6.99</u>			
			<u>4</u>	<u>563.7</u>	<u>19.1</u>	<u>6.51</u>			
	<u>0907</u>		<u>6</u>	<u>571.4</u>	<u>18.9</u>	<u>6.36</u>			
Static at Time Sampled			Total Gallons Purged			Sample Time			
<u>14.10</u>			<u>6</u>			<u>0912</u>			
Comments:									

Well No. MW-11

Purge Method: HB

Depth to Water (feet): 14.50

Depth to Product (feet): —

Total Depth (feet) 19.10

LPH & Water Recovered (gallons): —

Water Column (feet): 5.40

Casing Diameter (Inches): 2

80% Recharge Depth(feet): 14.78

1 Well Volume (gallons): 1

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, °C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
<u>1005</u>			<u>1</u>	<u>948.5</u>	<u>20.3</u>	<u>6.76</u>			
			<u>2</u>	<u>971.5</u>	<u>19.2</u>	<u>6.26</u>			
	<u>1012</u>		<u>3</u>	<u>980.6</u>	<u>19.2</u>	<u>6.16</u>			
Static at Time Sampled			Total Gallons Purged			Sample Time			
<u>16.67</u>			<u>3</u>			<u>1212</u>			
Comments: <u>did not recover 2hrs.</u>									

GROUNDWATER SAMPLING FIELD NOTES

Technician: Baird

Site: 0746

Project No.: 189791.0035.1647

Date: 6-1-12

Well No. NW-12

Purge Method: HB

Depth to Water (feet): 10.13

Depth to Product (feet): —

Total Depth (feet) 17.56

LPH & Water Recovered (gallons): —

Water Column (feet): 7.43

Casing Diameter (Inches): 2

80% Recharge Depth(feet): 11.61

1 Well Volume (gallons): 2

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0649			2	724.7	18.4	6.74			
	0658		4	749.0	18.4	6.50			
			6	781.5	18.3	6.40			
Static at Time Sampled			Total Gallons Purged			Sample Time			
12-20			6			0925			
Comments: <u>did not recover chrs.</u>									

Well No. RW-1

Purge Method: Sub

Depth to Water (feet): 8.48

Depth to Product (feet): —

Total Depth (feet) 16.10

LPH & Water Recovered (gallons): —

Water Column (feet): 7.62

Casing Diameter (Inches): 6

80% Recharge Depth(feet): 10.00

1 Well Volume (gallons): 12

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0712	0724		12	315.3	17.4	6.81			
0740	0754		24	322.4	19.2	6.30			
0810	0817		36	328.1	19.1	6.27			
Static at Time Sampled			Total Gallons Purged			Sample Time			
9:30			36			0940			
Comments: <u>Dry at 18 gls. Dry at 29 gls. ; Recovers</u>									

STATEMENT OF NON-COMPLETION OF JOB

DATE OF EVENT: 6/1/12 SITE ID: 0746
TECH: A. Vidners CALLED SUPERVISOR: YES / NO
CALLED PM: YES / NO NAME OF PM: _____

WELL ID: MW-8, MW-9
No access agreement

WELL ID: _____

WELL ID: _____

MANUAL PUMP/BAIL OUT SHEET

Site #: 0746 Project #: 1877910035-1647 Date: 6-1-12

Technician: Baskin Page #: 1 of 1

Monitoring Data Before Pump/Bail Out

Well Number MW-5
 Depth to Product 8.20
 Depth to Water 8.22
 Total Depth of Well 19.10
 Feet of Total Fluid in Well 11.30
 Thickness of Product (ft.) 102
 Well Diameter (in.) 2
 One Well Volume (gal.) 2

Pump/Bail One Well Volume

Water Recovered (gal.) 1.98
 Product Recovered (gal.) .02
THICKNESS OF PRODUCT x (0.67 FOR 4" CASING) OR
 (0.17 FOR 2" CASING) OR (1.5 FOR 6" CASING)
 Time Required for Purge 5 min
 Comments: _____

Monitoring Data Before Pump/Bail Out

Well Number _____
 Depth to Product _____
 Depth to Water _____
 Total Depth of Well _____
 Feet of Total Fluid in Well _____
 Thickness of Product (ft.) _____
 Well Diameter (in.) _____
 One Well Volume (gal.) _____

Pump/Bail One Well Volume

Water Recovered (gal.) _____
 Product Recovered (gal.) _____
THICKNESS OF PRODUCT x (0.67 FOR 4" CASING) OR
 (0.17 FOR 2" CASING) OR (1.5 FOR 6" CASING)
 Time Required for Purge _____
 Comments: _____

Monitoring Data Before Pump/Bail Out

Well Number _____
 Depth to Product _____
 Depth to Water _____
 Total Depth of Well _____
 Feet of Total Fluid in Well _____
 Thickness of Product (ft.) _____
 Well Diameter (in.) _____
 One Well Volume (gal.) _____

Pump/Bail One Well Volume

Water Recovered (gal.) _____
 Product Recovered (gal.) _____
THICKNESS OF PRODUCT x (0.67 FOR 4" CASING) OR
 (0.17 FOR 2" CASING) OR (1.5 FOR 6" CASING)
 Time Required for Purge _____
 Comments: _____

Monitoring Data Before Pump/Bail Out

Well Number _____
 Depth to Product _____
 Depth to Water _____
 Total Depth of Well _____
 Feet of Total Fluid in Well _____
 Thickness of Product (ft.) _____
 Well Diameter (in.) _____
 One Well Volume (gal.) _____

Pump/Bail One Well Volume

Water Recovered (gal.) _____
 Product Recovered (gal.) _____
THICKNESS OF PRODUCT x (0.67 FOR 4" CASING) OR
 (0.17 FOR 2" CASING) OR (1.5 FOR 6" CASING)
 Time Required for Purge _____
 Comments: _____

Fluids from all of today's Manual Pump/Bail Outs were pumped into:

- 1) Vac Truck 2) Properly Labeled Drums 3) Other _____

WELL BOX CONDITION REPORT

SITE NO. 0746
 ADDRESS 3943 Broadway Oakland, CA
 DATE 6/1/12

PERFORMED BY: A. Vidales
 PAGE 1 OF 2

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
MW-6	12"	2																		OK
MW-8												X								
MW-9												X								
MW-1	12"	2																		OK
MW-7	12"	2																		OK
MW-2	12"	2																		OK
MW-3	12"	2			1															OK Av
MW-4	12"	2																		OK



WELL BOX CONDITION REPORT

SITE NO. 0746
 ADDRESS 3943 Broadway
 DATE 6-1-12

PERFORMED BY: Baulis
 PAGE 2 OF 2

Well Name	Current Well Box Size	# of Ears	# of Slipped 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	
NW-10	8"	2	1																		
NW-12	8"	3		2																	
NW-11	8"	2	1																		
NW-5	12"	2																			
NW-1	18"	3																			



CHAIN OF CUSTODY FORM

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

COC _____ of _____

Union Oil Site ID: <u>1746</u>				Union Oil Consultant: <u>Arcadis</u>				ANALYSES REQUIRED												
Site Global ID: <u>T06011471</u>				Consultant Contact: <u>Kathy Brandt</u>				TPH - Diesel by EPA 8015	TPH - G by <u>GCMS GC15B (C6-C12)</u>	BTEx/MTBE/OXYS by EPA 8260B	Ethanol by EPA 8260B	EPA 8260B Full List with OXYS	EPA 8260B	Turnaround Time (TAT):						
Site Address: <u>2923 Broadway Oakland, CA</u>				Consultant Phone No.: <u>510 516 7675</u>										Standard <input type="checkbox"/> 24 Hours <input type="checkbox"/>		48 Hours <input type="checkbox"/> 72 Hours <input type="checkbox"/>				
Union Oil PM: <u>Roya Karlin</u>				Sampling Company: <u>TRC</u>										Special Instructions: <u>Run 8 OXYS by 8260 in all 8260 MTBE kits.</u>						
Union Oil PM Phone No.: <u>925 796 2270</u>				Sampled By (PRINT): <u>Andrew Vidner</u>																
Charge Code: <u>NWRTB-0 331047 -0- LAB</u>				Sampler Signature:																
<p><small>This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.</small></p>				BC Laboratories, Inc. Project Manager: Molly Meyers 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911																
SAMPLE ID				Sample Time		# of Containers														
Field Point Name	Matrix	DTW	Date (yymmdd)																	
Mw-1	W-S-A		120601	0742	6			X	X	X		X								
Mw-2	W-S-A			0916																
Mw-3	W-S-A			0900																
Mw-4	W-S-A			0709																
Mw-6	W-S-A			0721																
Mw-7	W-S-A			0932																
Mw-10	W-S-A			0912																
Mw-11	W-S-A			1212																
Mw-12	W-S-A			0705																
RW-1	W-S-A			0705																
	W-S-A																			
	W-S-A																			
Relinquished By <u>[Signature]</u> Company <u>TRC</u> Date / Time: <u>6/11/15</u>				Relinquished By _____ Company _____ Date / Time: _____				Relinquished By _____ Company _____ Date / Time: _____												
Received By <u>[Signature]</u> Company <u>[Signature]</u> Date / Time: <u>6/11/15</u>				Received By _____ Company _____ Date / Time: _____				Received By _____ Company _____ Date / Time: _____												

TRC SOLUTIONS
TECHNICAL SERVICES REQUEST FORM

21-May-12

Site ID: 0746
Address 3943 Broadway
City: Oakland
Cross Street: 40th Street

Project No.: 189791.0035.1647 / 00TA01
Client: Roya Kambin
Contact #: 925-790-6270
PM: Kathy Brandt Arcadis
PM Contact #: 510-596-9675

Total number of wells: 13 **Min. Well Diameter (in.):** 2 **# of Techs, # of Hrs:** 2, 5
Depth to Water (ft.): 7 **Max. Well Diameter (in.):** 6 **Travel Time (hrs):**
Max. Well Depth (ft): 22 **Hotel PO#:**

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

RELATED ACTIVITIES Note

Drums:
Other Activities: No parking signs
Traffic Control:

PERMIT INFORMATION:

Post no parking signs at least 48 hours before event:

NOTIFICATIONS:

Broadway 76: 510-655-7662

MW-11: Oakland Masonic Temple, 510-653-3353

Red Cross on Broadway. Need to call to make sure the blood mobiles are not parked over the wells: 510-595-4400

Ohgane Korean BBQ: (510) 594-8300. MW-8 & MW-9 are on restaurant property. Restaurant does not open until 10:00am.
***** 4Q11 Check w/ PM if we have access to these wells *****

SITE INFORMATION:

Do not gauge/sample MW-8, MW-9. No access agreement.

Check skimmer in MW-5 and bail product (if any)

MW-11 is located in the Red Cross parking lot. They open at 8:30am.

TRC SOLUTIONS
TECHNICAL SERVICES REQUEST FORM

21-May-12

Site ID:	0746	Project No.:	189791.0035.1647 / 00TA01
Address	3943 Broadway	Client:	Roya Kambin
City:	Oakland	Contact #:	925-790-6270
Cross Street:	40th Street	PM:	Kathy Brandt Arcadis
		PM Contact #:	510-596-9675

LAB INFORMATION:

Global ID: T0600101471

Lab WO: 351647

Lab Used: BC

Lab Notes: Lab Analyses:
TPH-G by 8015B (C6 - C12), BTEX/MTBE by 8260B, Ethanol by 8260B, EDB/EDC by 8260B [Containers: 6 voas w/HCl]

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

TRC SOLUTIONS
TECHNICAL SERVICES REQUEST FORM

21-May-12

Site ID.: 0746
 Address 3943 Broadway
 City: Oakland
 Cross Street 40th Street

Well IDs	Benz.	MTBE	Gauging				Sampling				Field Measurements			Comments	
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Pre-Purge	Post-Purge	Type		
MW-9	0	0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2" casing
MW-5	0	0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2" casing/ Inside trash enclosure
MW-4	0	0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2" casing
MW-12	0	0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2" casing
MW-11	0	0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2" casing
MW-10	0	0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2" casing
MW-6	0	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2" casing
MW-8	0	2.7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2" casing
MW-1	0	4.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2" casing
MW-7	0	4.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2" casing
MW-2	0	7.9	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2" casing
MW-3	11	9.3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			2" casing
RW-1	240	0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			6" casing

ARCADIS

Attachment B

Historical Groundwater Results from TRC

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

76 Station 0746

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														
11/1/1989	--	--	--	--	--	ND	--	ND	ND	ND	0.3	--	--	
2/15/1990	--	--	--	--	--	170	--	7.9	ND	2.2	2.8	--	--	
8/16/1990	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
11/7/1990	--	--	--	--	--	45	--	ND	ND	ND	ND	--	--	
2/25/1991	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
5/28/1991	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
8/28/1991	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
11/19/1991	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
2/6/1992	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
5/23/1992	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
8/26/1992	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
11/20/1992	--	--	--	--	--	ND	--	0.75	ND	ND	ND	--	--	
12/21/1992	81.07	8.12	0	72.95	--	--	--	--	--	--	--	--	--	
1/30/1993	81.07	7.63	0	73.44	0.49	--	--	--	--	--	--	--	--	
2/24/1993	81.07	7.16	0	73.91	0.47	1100	--	280	4.9	120	140	--	--	
3/22/1993	81.07	6.26	0	74.81	0.90	--	--	--	--	--	--	--	--	
4/28/1993	81.07	7.91	0	73.16	-1.65	--	--	--	--	--	--	--	--	
5/25/1993	81.07	7.87	0	73.20	0.04	260	--	27	4.9	2.6	54	--	--	
6/23/1993	80.54	7.66	0	72.88	-0.32	--	--	--	--	--	--	--	--	
7/22/1993	80.54	7.87	0	72.67	-0.21	--	--	--	--	--	--	--	--	
8/25/1993	80.54	8.00	0	72.54	-0.13	ND	--	ND	ND	ND	ND	--	--	
9/22/1993	80.54	8.10	0	72.44	-0.10	--	--	--	--	--	--	--	--	
10/28/1993	80.54	8.15	0	72.39	-0.05	--	--	--	--	--	--	--	--	
11/30/1993	80.54	7.65	0	72.89	0.50	--	--	--	--	--	--	--	--	Sampled semi-annually
2/16/1994	80.54	7.46	0	73.08	0.19	ND	--	0.84	ND	ND	0.59	--	--	
5/31/1994	80.54	7.80	0	72.74	-0.34	--	--	--	--	--	--	--	--	
8/31/1994	80.54	8.27	0	72.27	-0.47	ND	--	ND	0.98	ND	0.84	--	--	
9/27/1994	80.54	8.37	0	72.17	-0.10	--	--	--	--	--	--	--	--	
10/11/1994	80.54	8.36	0	72.18	0.01	--	--	--	--	--	--	--	--	
11/10/1994	80.54	6.43	0	74.11	1.93	--	--	--	--	--	--	--	--	
2/7/1995	80.54	7.06	0	73.48	-0.63	6100	--	670	ND	120	60	--	--	
5/3/1995	80.54	6.85	0	73.69	0.21	260	--	21	39	17	24	--	--	
8/3/1995	80.54	7.69	0	72.85	-0.84	--	--	--	--	--	--	--	--	
11/7/1995	80.54	8.15	0	72.39	-0.46	ND	--	ND	ND	ND	ND	--	--	
5/6/1996	80.54	7.40	0	73.14	0.75	170	--	1.0	20	2.3	17	55	--	
11/5/1996	80.54	7.90	0	72.64	-0.50	ND	--	ND	ND	ND	ND	5.2	--	
5/15/1997	80.54	7.77	0	72.77	0.13	ND	--	ND	ND	ND	ND	16	--	

Table 2
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

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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
11/12/1997	80.54	7.48	0	73.06	0.29	ND	--	ND	ND	ND	ND	11	--	
5/4/1998	80.54	7.39	0	73.15	0.09	ND	--	ND	ND	ND	ND	320	--	
11/11/1998	80.54	7.37	0	73.17	0.02	ND	--	ND	ND	ND	ND	200	--	
5/20/1999	80.54	7.41	0	73.13	-0.04	ND	--	ND	ND	ND	ND	89	47	
11/15/1999	80.54	7.84	0	72.70	-0.43	ND	--	ND	ND	ND	ND	8.12	7.19	
5/22/2000	80.54	7.53	0	73.01	0.31	ND	--	0.89	ND	ND	ND	220	290	
11/22/2000	80.54	7.35	0	73.19	0.18	ND	--	ND	ND	ND	ND	105	142	
5/15/2001	80.54	7.48	0	73.06	-0.13	345	--	ND	3.41	2.77	25.2	178	374	
11/23/2001	80.54	7.57	0	72.97	-0.09	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	350	350	
5/24/2002	80.54	7.10	0	73.44	0.47	70	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	200	240	
11/29/2002	80.54	7.96	0	72.58	-0.86	ND<250	--	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	330	
5/15/2003	80.54	7.22	0	73.32	0.74	ND<250	--	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	210	
11/4/2003	80.54	7.94	0	72.60	-0.72	--	120	ND<1.0	ND<1.0	ND<1.0	ND<2.0	--	140	
5/24/2004	80.54	7.54	0	73.00	0.40	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	26	
11/29/2004	80.54	7.27	0	73.27	0.27	--	58	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	44	
6/24/2005	80.54	7.06	0	73.48	0.21	--	87	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	80	
12/15/2005	80.54	7.35	0	73.19	-0.29	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	32	
6/14/2006	80.54	7.06	0	73.48	0.29	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	44	
12/21/2006	80.54	7.12	0	73.42	-0.06	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	16	
6/28/2007	80.54	7.79	0	72.75	-0.67	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	5.6	
12/13/2007	80.54	7.94	0	72.60	-0.15	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	10	
6/9/2008	80.54	8.00	0	72.54	-0.06	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	29	
12/30/2008	80.54	7.51	0	73.03	0.49	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	3.2	
9/28/2009	80.54	8.10	0	72.44	-0.59	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.98	
12/15/2009	80.54	7.32	0	73.22	0.78	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/28/2010	80.54	7.80	0	72.74	-0.48	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	8.1	
12/29/2010	80.54	6.22	0	74.32	1.58	--	99	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.6	
MW-2														
11/1/1989	--	--	--	--	--	200	--	ND	ND	3.0	1.2	--	--	
2/15/1990	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
8/16/1990	--	--	--	--	--	ND	--	ND	6.7	ND	ND	--	--	
11/7/1990	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
2/25/1991	--	--	--	--	--	ND	--	0.68	0.42	ND	0.86	--	--	
5/28/1991	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
8/28/1991	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
11/19/1991	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
2/6/1992	--	--	--	--	--	ND	--	0.36	0.66	ND	0.62	--	--	
5/23/1992	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	

Table 2
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

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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
4/8/1993	82.01	9.14	0.02	72.89	-0.33	--	--	--	--	--	--	--	--	LPH in well
4/28/1993	82.01	9.44	0.03	72.59	-0.29	--	--	--	--	--	--	--	--	LPH in well
5/12/1993	82.01	9.57	0.03	72.46	-0.13	--	--	--	--	--	--	--	--	LPH in well
5/25/1993	82.01	9.45	0.03	72.58	0.12	--	--	--	--	--	--	--	--	LPH in well
6/7/1993	81.41	8.94	0	72.47	-0.11	--	--	--	--	--	--	--	--	
6/23/1993	81.41	9.20	0.02	72.23	-0.24	--	--	--	--	--	--	--	--	LPH in well
7/8/1993	81.41	9.31	0.03	72.12	-0.10	--	--	--	--	--	--	--	--	LPH in well
7/22/1993	81.41	9.47	0	71.94	-0.18	--	--	--	--	--	--	--	--	
8/11/1993	81.41	9.59	0	71.82	-0.12	--	--	--	--	--	--	--	--	
8/25/1993	81.41	9.67	0.03	71.76	-0.06	--	--	--	--	--	--	--	--	LPH in well
9/8/1993	81.41	10.34	0	71.07	-0.69	--	--	--	--	--	--	--	--	
9/22/1993	81.41	9.84	0.02	71.59	0.51	--	--	--	--	--	--	--	--	LPH in well
10/7/1993	81.41	9.87	0	71.54	-0.05	--	--	--	--	--	--	--	--	
10/28/1993	81.41	10.03	0	71.38	-0.16	--	--	--	--	--	--	--	--	
11/12/1993	81.41	9.76	0	71.65	0.27	--	--	--	--	--	--	--	--	
11/30/1993	81.41	9.66	0.02	71.76	0.11	--	--	--	--	--	--	--	--	LPH in well
2/16/1994	81.41	8.87	0	72.54	0.78	57000	--	910	2500	2100	9000	--	--	Sheen
5/31/1994	81.41	9.48	0	71.93	-0.61	39000	--	670	630	1500	6200	--	--	
8/31/1994	81.41	10.08	0	71.33	-0.60	44000	--	500	240	1400	5700	--	--	
9/24/1994	81.41	10.22	0	71.19	-0.14	--	--	--	--	--	--	--	--	
10/11/1994	81.41	10.41	0.01	71.01	-0.18	--	--	--	--	--	--	--	--	LPH in well
11/10/1994	81.41	7.47	0	73.94	2.93	86000	--	3300	3800	1800	8300	--	--	Sheen
2/7/1995	81.41	8.05	0	73.36	-0.58	45000	--	1400	1300	1500	5600	--	--	
3/14/1995	81.41	7.05	0	74.36	1.00	--	--	--	--	--	--	--	--	
5/3/1995	81.41	7.91	0	73.50	-0.86	26000	--	740	990	1100	4400	--	--	
8/3/1995	81.41	9.28	0	72.13	-1.37	18000	--	59	ND	530	1900	--	--	
8/19/1995	81.41	--	0	--	--	--	--	--	--	--	--	--	--	
11/7/1995	81.41	10.79	0	70.62	--	17000	--	110	26	400	1500	880	--	
5/6/1996	81.41	9.44	0	71.97	1.35	5100	--	48	ND	87	210	370	--	Sheen
11/5/1996	81.41	10.64	0	70.77	-1.20	35000	--	2200	ND	1200	2800	460	--	
5/15/1997	81.41	9.61	0	71.80	1.03	2400	--	110	ND	ND	140	100	--	
11/12/1997	81.41	9.18	0	72.23	0.43	29000	--	2000	ND	1800	3000	ND	--	
5/4/1998	81.41	9.50	0	71.91	-0.32	8200	--	430	ND	310	320	ND	--	
11/11/1998	81.41	9.25	0	72.16	0.25	8700	--	500	ND	330	310	ND	--	
5/20/1999	81.41	8.95	0	72.46	0.30	4300	--	250	ND	ND	86	ND	--	
11/15/1999	81.41	10.35	0	71.06	-1.40	6720	--	326	ND	398	226	120	45.1	
5/22/2000	81.41	9.14	0	72.27	1.21	4000	--	99	4.5	190	75	100	94	
11/22/2000	81.41	9.33	0	72.08	-0.19	6130	--	93.7	6.71	174	47.8	212	131	

Table 2
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

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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
7/22/1993	81.29	9.26	0	72.03	-0.36	--	--	--	--	--	--	--	--	
8/25/1993	81.29	9.45	0	71.84	-0.19	640	--	100	1.1	100	22	--	--	
9/22/1993	81.29	9.63	0	71.66	-0.18	--	--	--	--	--	--	--	--	
10/28/1993	81.29	9.62	0	71.67	0.01	--	--	--	--	--	--	--	--	
11/30/1993	81.29	9.40	0	71.89	0.22	200	--	28	ND	17	8.1	--	--	
12/21/1993	81.48	9.10	0	72.38	0.49	--	--	--	--	--	--	--	--	
2/16/1994	81.29	9.21	0	72.08	-0.30	190	--	11	0.98	21	6.6	--	--	
5/31/1994	81.29	9.11	0	72.18	0.10	1100	--	190	ND	100	58	--	--	
8/31/1994	81.29	10.01	0	71.28	-0.90	400	--	17	0.94	14	5.2	--	--	
9/27/1994	81.29	10.09	0	71.20	-0.08	--	--	--	--	--	--	--	--	
10/11/1994	81.29	11.50	0	69.79	-1.41	--	--	--	--	--	--	--	--	
11/10/1994	81.29	9.21	0	72.08	2.29	7700	--	1800	280	460	1300	--	--	
2/7/1995	81.29	7.66	0	73.63	1.55	540	--	47	ND	17	2.5	--	--	
5/3/1995	81.29	8.29	0	73.00	-0.63	160	--	8.3	0.52	1.5	3.7	--	--	
8/3/1995	81.29	8.60	0	72.69	-0.31	57	--	2.0	ND	ND	ND	--	--	
8/19/1995	81.29	--	0	--	--	--	--	--	--	--	--	--	--	
11/7/1995	81.29	10.28	0	71.01	--	ND	--	0.71	ND	ND	ND	0.86	--	
5/6/1996	81.29	8.70	0	72.59	1.58	1200	--	12	11	15	36	ND	--	
11/5/1996	81.29	10.00	0	71.29	-1.30	700	--	32	0.71	1.8	1.3	6.5	--	
5/15/1997	81.29	9.37	0	71.92	0.63	51	--	ND	ND	ND	ND	ND	ND	
11/12/1997	81.29	8.92	0	72.37	0.45	74	--	1.7	ND	ND	ND	ND	ND	
5/4/1998	81.29	9.48	0	71.81	-0.56	ND	--	ND	ND	ND	ND	ND	ND	
11/11/1998	81.29	9.13	0	72.16	0.35	ND	--	0.63	ND	ND	ND	ND	ND	
5/20/1999	81.29	8.41	0	72.88	0.72	ND	--	ND	ND	ND	ND	ND	ND	
11/15/1999	81.29	9.68	0	71.61	-1.27	ND	--	ND	ND	ND	ND	ND	ND	
5/22/2000	81.29	8.60	0	72.69	1.08	ND	--	ND	ND	ND	ND	ND	ND	
11/22/2000	81.29	8.91	0	72.38	-0.31	ND	--	ND	ND	ND	ND	ND	ND	
5/15/2001	81.29	8.66	0	72.63	0.25	ND	--	ND	1.10	ND	1.16	ND	ND	
11/23/2001	81.29	8.84	0	72.45	-0.18	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
5/24/2002	81.29	7.93	0	73.36	0.91	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	9.6	3.5	
11/29/2002	81.29	9.34	0	71.95	-1.41	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	2.6	
5/15/2003	81.29	7.87	0	73.42	1.47	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
11/4/2003	81.48	9.45	0	72.03	-1.39	--	61	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
5/24/2004	81.48	8.49	0	72.99	0.96	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
11/29/2004	81.48	9.01	0	72.47	-0.52	--	120	ND<0.50	ND<0.50	0.52	ND<1.0	--	0.55	
6/24/2005	81.48	7.81	0	73.67	1.20	--	90	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/15/2005	81.48	8.73	0	72.75	-0.92	--	170	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.65	
6/14/2006	81.48	7.43	0	74.05	1.30	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	

Table 2
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	Ground- LPH Thickness (feet)	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
11/29/2004	81.38	9.16	0.21	72.38	0.14	--	--	--	--	--	--	--	--	LPH in well
6/24/2005	81.38	8.41	0	72.97	0.59	--	53000	560	230	1600	5100	--	82	
12/15/2005	81.38	8.96	0	72.42	-0.55	--	27000	130	ND<25	560	1800	--	120	
6/14/2006	81.38	8.41	0	72.97	0.55	--	11000	110	ND<12	360	640	--	48	
12/21/2006	81.38	9.65	0	71.73	-1.24	--	78000	490	43	1400	4300	--	96	
6/28/2007	81.38	9.99	0.29	71.61	-0.12	--	--	--	--	--	--	--	--	LPH in well
12/13/2007	81.38	10.12	0.17	71.39	-0.22	--	--	--	--	--	--	--	--	LPH in well
6/9/2008	81.38	10.12	0.17	71.39	0.00	--	--	--	--	--	--	--	--	LPH in well
12/30/2008	81.38	9.33	0.13	72.15	0.76	--	--	--	--	--	--	--	--	LPH in well
9/28/2009	81.38	9.77	0.01	71.62	-0.53	--	--	--	--	--	--	--	--	LPH in well
12/15/2009	81.38	8.87	0.01	72.52	0.90	--	--	--	--	--	--	--	--	LPH in well
6/28/2010	81.38	9.82	0.5	71.93	-0.58	--	--	--	--	--	--	--	--	LPH in well
12/29/2010	81.38	8.69	1.49	73.81	1.87	--	--	--	--	--	--	--	--	LPH in well
MW-6														
11/7/1990	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
2/25/1991	--	--	--	--	--	ND	--	0.37	0.4	0.35	1.5	--	--	
5/28/1991	--	--	--	--	--	ND	--	ND	ND	ND	0.42	--	--	
8/28/1991	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
11/19/1991	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
2/6/1992	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
5/23/1992	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
8/26/1992	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
11/20/1992	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
12/21/1992	80.47	7.71	0	72.76	--	--	--	--	--	--	--	--	--	
1/30/1993	80.47	7.25	0	73.22	0.46	--	--	--	--	--	--	--	--	
2/24/1993	80.47	6.74	0	73.73	0.51	ND	--	ND	ND	ND	ND	--	--	
3/22/1993	80.47	5.85	0	74.62	0.89	--	--	--	--	--	--	--	--	
4/28/1993	80.47	7.58	0	72.89	-1.73	--	--	--	--	--	--	--	--	
5/25/1993	80.47	7.48	0	72.99	0.10	ND	--	ND	ND	ND	ND	--	--	
6/23/1993	79.94	7.34	0	72.60	-0.39	--	--	--	--	--	--	--	--	
7/22/1993	79.94	7.53	0	72.41	-0.19	--	--	--	--	--	--	--	--	
8/25/1993	79.94	7.66	0	72.28	-0.13	ND	--	ND	ND	ND	ND	--	--	
9/22/1993	79.94	7.76	0	72.18	-0.10	--	--	--	--	--	--	--	--	
10/28/1993	79.94	8.30	0	71.64	-0.54	--	--	--	--	--	--	--	--	
11/30/1993	79.94	7.40	0	72.54	0.90	--	--	--	--	--	--	--	--	
2/16/1994	79.94	7.13	0	72.81	0.27	ND	--	ND	ND	ND	ND	--	--	
5/31/1994	79.94	7.49	0	72.45	-0.36	--	--	--	--	--	--	--	--	
8/31/1994	79.94	7.93	0	72.01	-0.44	ND	--	ND	1.5	ND	1.6	--	--	

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

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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
9/27/1994	79.94	8.03	0	71.91	-0.10	--	--	--	--	--	--	--	--	
10/11/1994	79.94	8.05	0	71.89	-0.02	--	--	--	--	--	--	--	--	
11/10/1994	79.94	6.12	0	73.82	1.93	--	--	--	--	--	--	--	--	
2/7/1995	79.94	6.65	0	73.29	-0.53	ND	--	ND	ND	ND	ND	--	--	
5/3/1995	79.94	6.47	0	73.47	0.18	ND	--	ND	ND	ND	1.0	--	--	
8/3/1995	79.94	7.28	0	72.66	-0.81	--	--	--	--	--	--	--	--	
11/7/1995	79.94	7.98	0	71.96	-0.70	ND	--	ND	ND	ND	ND	--	--	
5/6/1996	79.94	7.80	0	72.14	0.18	--	--	--	--	--	--	--	--	
11/5/1996	79.94	7.63	0	72.31	0.17	--	--	--	--	--	--	--	--	
5/15/1997	79.94	7.41	0	72.53	0.22	--	--	--	--	--	--	--	--	
11/12/1997	79.94	7.51	0	72.43	-0.10	--	--	--	--	--	--	--	--	
5/4/1998	79.94	7.15	0	72.79	0.36	--	--	--	--	--	--	--	--	
11/11/1998	79.94	7.04	0	72.90	0.11	--	--	--	--	--	--	--	--	
5/20/1999	79.94	7.00	0	72.94	0.04	--	--	--	--	--	--	--	--	
11/15/1999	79.94	7.42	0	72.52	-0.42	--	--	--	--	--	--	--	--	
5/22/2000	79.94	7.24	0	72.70	0.18	--	--	--	--	--	--	--	--	
11/22/2000	79.94	7.40	0	72.54	-0.16	--	--	--	--	--	--	--	--	
5/15/2001	79.94	7.12	0	72.82	0.28	--	--	--	--	--	--	--	--	
11/23/2001	79.94	7.19	0	72.75	-0.07	--	--	--	--	--	--	--	--	
5/24/2002	79.94	6.54	0	73.40	0.65	--	--	--	--	--	--	--	--	
11/29/2002	79.94	7.26	0	72.68	-0.72	--	--	--	--	--	--	--	--	
5/15/2003	79.94	6.26	0	73.68	1.00	--	--	--	--	--	--	--	--	
11/4/2003	79.94	7.80	0	72.14	-1.54	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	2.4	
5/24/2004	79.94	7.54	0	72.40	0.26	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	2.8	
11/29/2004	79.94	7.01	0	72.93	0.53	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.8	
6/24/2005	79.94	7.68	0	72.26	-0.67	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.47	
12/15/2005	79.94	7.49	0	72.45	0.19	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.88	
6/14/2006	79.94	6.45	0	73.49	1.04	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	3.0	
12/21/2006	79.94	6.91	0	73.03	-0.46	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	1.0	
6/28/2007	79.94	7.46	0	72.48	-0.55	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	1.2	
12/13/2007	79.94	7.41	0	72.53	0.05	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.64	
6/9/2008	79.94	8.20	0	71.74	-0.79	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.65	
12/30/2008	79.94	7.47	0	72.47	0.73	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
9/28/2009	79.94	7.96	0	71.98	-0.49	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.67	
12/15/2009	79.94	7.22	0	72.72	0.74	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/28/2010	79.94	7.68	0	72.26	-0.46	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/29/2010	79.94	5.93	0	74.01	1.75	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	

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

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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
3/9/1993	81.71	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
3/22/1993	81.71	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
4/8/1993	81.71	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
4/28/1993	81.71	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
5/12/1993	81.71	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
5/25/1993	81.71	10.12	0	71.59	--	1200	--	5.4	ND	9.0	21	--	--	
6/7/1993	81.41	9.98	0	71.43	-0.16	--	--	--	--	--	--	--	--	
6/23/1993	81.41	10.36	0	71.05	-0.38	--	--	--	--	--	--	--	--	
7/8/1993	81.41	10.52	0	70.89	-0.16	--	--	--	--	--	--	--	--	
7/22/1993	81.41	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
8/11/1993	81.41	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
8/25/1993	81.41	10.95	0	70.46	--	1800	--	11	17	8.9	29	--	--	
9/8/1993	81.41	11.34	0	70.07	-0.39	--	--	--	--	--	--	--	--	
9/22/1993	81.41	11.13	0	70.28	0.21	--	--	--	--	--	--	--	--	
10/7/1993	81.41	10.96	0	70.45	0.17	--	--	--	--	--	--	--	--	
10/28/1993	81.41	11.19	0	70.22	-0.23	--	--	--	--	--	--	--	--	
11/12/1993	81.41	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
11/30/1993	81.41	10.42	0	70.99	--	3500	--	18	ND	ND	ND	--	--	
2/16/1994	81.41	9.86	0	71.55	0.56	990	--	4.9	1.8	2.4	4.5	--	--	
5/31/1994	81.41	10.61	0	70.80	-0.75	350	--	3.0	1.0	0.73	1.7	--	--	
8/31/1994	81.41	11.37	0	70.04	-0.76	1800	--	ND	ND	ND	ND	--	--	
9/27/1994	81.41	--	--	--	--	--	--	--	--	--	--	--	--	Car parked over well
10/11/1994	81.41	11.50	0	69.91	--	--	--	--	--	--	--	--	--	
11/10/1994	81.41	7.81	0	73.60	3.69	940	--	6.7	6.3	ND	16	--	--	
2/7/1995	81.41	8.69	0	72.72	-0.88	230	--	1.4	0.95	0.9	1.1	--	--	
5/3/1995	81.41	8.60	0	72.81	0.09	75	--	ND	ND	ND	1.0	--	--	
8/3/1995	81.41	--	--	--	--	--	--	--	--	--	--	--	--	Car parked over well
11/7/1995	81.41	11.05	0	70.36	--	210	--	1.3	1.2	ND	ND	--	--	
5/6/1996	81.41	--	--	--	--	--	--	--	--	--	--	--	--	Car parked over well
11/5/1996	81.41	--	--	--	--	--	--	--	--	--	--	--	--	Car parked over well
5/15/1997	81.41	10.46	0	70.95	--	ND	--	ND	ND	ND	ND	43	--	
11/12/1997	81.41	--	--	--	--	--	--	--	--	--	--	--	--	Car parked over well
5/4/1998	81.41	--	--	--	--	--	--	--	--	--	--	--	--	Car parked over well
11/11/1998	81.41	--	--	--	--	--	--	--	--	--	--	--	--	Car parked over well
5/20/1999	81.41	9.75	0	71.66	--	ND	--	ND	ND	ND	ND	23	10	
11/15/1999	81.41	--	--	--	--	--	--	--	--	--	--	--	--	Car parked over well
5/22/2000	81.41	9.80	0	71.61	--	ND	--	ND	1.9	ND	3.3	ND	--	
11/22/2000	81.41	9.76	0	71.65	0.04	ND	--	ND	1.16	ND	1.22	ND	--	

Table 2
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

76 Station 0746

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
8/25/1993	80.53	10.44	0	70.09	-0.34	220	--	10	ND	6.8	1.4	--	--	
9/22/1993	80.53	10.64	0	69.89	-0.20	--	--	--	--	--	--	--	--	
10/28/1993	80.53	10.68	0	69.85	-0.04	--	--	--	--	--	--	--	--	
11/30/1993	80.53	9.87	0	70.66	0.81	200	--	5.6	ND	2.9	2.7	--	--	
2/16/1994	80.53	9.21	0	71.32	0.66	250	--	5.1	1.3	4.4	1.5	--	--	
5/31/1994	80.53	10.15	0	70.38	-0.94	360	--	7.8	0.97	4.6	2.2	--	--	
8/31/1994	80.53	10.97	0	69.56	-0.82	650	--	7.7	2.8	4.4	5.0	59	--	
9/27/1994	80.53	11.10	0	69.43	-0.13	--	--	--	--	--	--	--	--	
10/11/1994	80.53	11.20	0	69.33	-0.10	--	--	--	--	--	--	--	--	
11/10/1994	80.53	7.25	0	73.28	3.95	ND	--	ND	ND	ND	ND	--	--	
2/7/1995	80.53	7.76	0	72.77	-0.51	57	--	0.7	ND	0.86	ND	--	--	
5/3/1995	80.53	7.82	0	72.71	-0.06	ND	--	0.85	0.67	1.3	1.0	--	--	
8/3/1995	80.53	9.70	0	70.83	-1.88	91	--	1.1	ND	ND	ND	--	--	
11/7/1995	80.53	10.64	0	69.89	-0.94	130	--	1.5	0.62	0.71	ND	60	--	
5/6/1996	80.53	9.01	0	71.52	1.63	860	--	6.1	13	6.0	25	ND	--	
11/5/1996	80.53	11.42	0	69.11	-2.41	84	--	0.74	ND	1.2	4.5	ND	--	
5/15/1997	80.53	9.89	0	70.64	1.53	ND	--	ND	ND	ND	ND	ND	--	
11/12/1997	80.53	10.22	0	70.31	-0.33	ND	--	0.55	ND	ND	ND	74	--	
5/4/1998	80.53	10.05	0	70.48	0.17	ND	--	ND	ND	ND	ND	45	--	
11/11/1998	80.53	9.23	0	71.30	0.82	ND	--	ND	ND	ND	ND	ND	--	
5/20/1999	80.53	8.78	0	71.75	0.45	ND	--	ND	ND	ND	ND	ND	--	
11/15/1999	80.53	9.12	0	71.41	-0.34	ND	--	ND	ND	ND	ND	ND	--	
5/22/2000	80.53	9.17	0	71.36	-0.05	ND	--	ND	1.9	ND	3.5	ND	--	
11/22/2000	80.53	9.08	0	71.45	0.09	ND	--	ND	1.18	ND	1.16	ND	--	
5/15/2001	80.53	8.85	0	71.68	0.23	ND	--	ND	ND	ND	ND	ND	--	
11/23/2001	80.53	9.10	0	71.43	-0.25	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
5/24/2002	80.53	8.79	0	71.74	0.31	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
11/29/2002	80.53	9.24	0	71.29	-0.45	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
5/15/2003	80.53	8.56	0	71.97	0.68	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
11/4/2003	80.53	--	--	--	--	--	--	--	--	--	--	--	--	Car parked over well
5/24/2004	80.53	9.38	0	71.15	--	--	330	1.8	ND<0.50	ND<0.50	ND<1.0	--	160	
11/29/2004	80.53	9.55	0	70.98	-0.17	--	690	0.72	ND<0.50	1.3	ND<1.0	--	160	
6/24/2005	80.53	8.65	0	71.88	0.90	--	240	0.80	ND<0.50	0.55	ND<1.0	--	67	
12/15/2005	80.53	9.43	0	71.10	-0.78	--	400	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	82	
6/14/2006	80.53	9.43	0	71.10	0.00	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5.2	
12/21/2006	80.53	9.01	0	71.52	0.42	--	580	ND<0.50	ND<0.50	0.71	ND<0.50	--	36	
6/28/2007	80.53	11.64	0	68.89	-2.63	--	1200	0.81	ND<0.50	ND<0.50	0.54	--	52	
12/13/2007	80.53	11.18	0	69.35	0.46	--	1100	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	31	

Table 2
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

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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
8/25/1993	78.18	14.10	0	64.08	1.36	ND	--	ND	ND	ND	ND	--	--	
9/22/1993	78.18	15.03	0	63.15	-0.93	--	--	--	--	--	--	--	--	
10/28/1993	78.18	13.84	0	64.34	1.19	--	--	--	--	--	--	--	--	
11/30/1993	78.18	13.04	0	65.14	0.80	ND	--	ND	ND	ND	ND	--	--	
2/16/1994	78.18	12.76	0	65.42	0.28	ND	--	ND	ND	ND	ND	--	--	
5/31/1994	78.18	12.79	0	65.39	-0.03	ND	--	ND	ND	ND	ND	--	--	
8/31/1994	78.18	12.97	0	65.21	-0.18	ND	--	ND	1.5	ND	1.8	--	--	
9/27/1994	78.18	14.88	0	63.30	-1.91	--	--	--	--	--	--	--	--	
10/11/1994	78.18	13.40	0	64.78	1.48	--	--	--	--	--	--	--	--	
11/10/1994	78.18	13.57	0	64.61	-0.17	ND	--	ND	ND	ND	ND	--	--	
2/7/1995	78.18	12.28	0	65.90	1.29	--	--	--	--	--	--	--	--	Sampled semi-annually
5/3/1995	78.18	9.28	0	68.90	3.00	ND	--	ND	ND	ND	ND	--	--	
8/3/1995	78.18	12.67	0	65.51	-3.39	--	--	--	--	--	--	--	--	
11/7/1995	78.18	12.28	0	65.90	0.39	ND	--	ND	ND	ND	ND	--	--	
5/6/1996	78.18	13.30	0	64.88	-1.02	--	--	--	--	--	--	--	--	Sampling discontinued
11/5/1996	78.18	10.90	0	67.28	2.40	--	--	--	--	--	--	--	--	
5/15/1997	78.18	11.65	0	66.53	-0.75	--	--	--	--	--	--	--	--	
11/12/1997	78.18	9.66	0	68.52	1.99	--	--	--	--	--	--	--	--	
5/4/1998	78.18	10.87	0	67.31	-1.21	--	--	--	--	--	--	--	--	
11/11/1998	78.18	11.40	0	66.78	-0.53	--	--	--	--	--	--	--	--	
5/20/1999	78.18	10.71	0	67.47	0.69	ND	--	ND	ND	ND	ND	ND	--	
11/15/1999	78.18	11.32	0	66.86	-0.61	ND	--	ND	1.04	ND	ND	ND	--	
5/22/2000	78.18	10.98	0	67.20	0.34	ND	--	ND	ND	ND	ND	ND	--	
11/22/2000	78.18	11.17	0	67.01	-0.19	ND	--	ND	ND	ND	ND	ND	--	
5/15/2001	78.18	10.93	0	67.25	0.24	ND	--	ND	ND	ND	ND	ND	--	
11/23/2001	78.18	11.08	0	67.10	-0.15	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
5/24/2002	78.18	10.58	0	67.60	0.50	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
11/29/2002	78.18	11.27	0	66.91	-0.69	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
5/15/2003	78.18	10.25	0	67.93	1.02	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
11/4/2003	78.18	11.23	0	66.95	-0.98	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
5/24/2004	78.18	10.10	0	68.08	1.13	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
11/29/2004	78.18	10.96	0	67.22	-0.86	--	63	ND<0.50	ND<0.50	1.0	2.5	--	ND<0.50	
6/24/2005	78.18	14.07	0	64.11	-3.11	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/15/2005	78.18	13.28	0	64.90	0.79	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/14/2006	78.18	12.53	0	65.65	0.75	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/21/2006	78.18	12.78	0	65.40	-0.25	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
6/28/2007	78.18	--	--	--	--	--	--	--	--	--	--	--	--	Bus parked over well
12/13/2007	78.18	15.37	0	62.81	--	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	

Table 2
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

76 Station 0746

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	Ground-LPH Thickness (feet)	Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
11/10/1994	80.63	6.34	0	74.29	3.27	--	--	--	--	--	--	--	--	
2/7/1995	80.63	7.18	0	73.45	-0.84	--	--	--	--	--	--	--	--	
3/14/1995	80.63	6.01	0	74.62	1.17	--	--	--	--	--	--	--	--	
11/7/1995	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/15/2001	80.63	8.43	0	72.20	--	--	--	--	--	--	--	--	--	
11/23/2001	80.63	8.57	0	72.06	-0.14	--	--	--	--	--	--	--	--	
12/10/2001	80.63	8.51	0	72.12	0.06	--	--	--	--	--	--	--	--	
1/14/2002	80.63	8.13	0	72.50	0.38	--	--	--	--	--	--	--	--	
2/22/2002	80.63	6.18	0	74.45	1.95	--	--	--	--	--	--	--	--	
3/11/2002	80.63	6.31	0	74.32	-0.13	--	--	--	--	--	--	--	--	
4/15/2002	80.63	6.39	0	74.24	-0.08	--	--	--	--	--	--	--	--	
5/24/2002	80.63	8.14	0	72.49	-1.75	--	--	--	--	--	--	--	--	
6/17/2002	80.63	8.18	0	72.45	-0.04	--	--	--	--	--	--	--	--	
7/15/2002	80.63	8.29	0	72.34	-0.11	--	--	--	--	--	--	--	--	
8/19/2002	80.63	8.44	0	72.19	-0.15	--	--	--	--	--	--	--	--	
9/5/2002	80.63	8.47	0	72.16	-0.03	--	--	--	--	--	--	--	--	
10/7/2002	80.63	8.43	0	72.20	0.04	--	--	--	--	--	--	--	--	
11/29/2002	80.63	8.92	0	71.71	-0.49	--	--	--	--	--	--	--	--	
12/12/2002	80.63	8.87	0	71.76	0.05	--	--	--	--	--	--	--	--	
1/6/2003	80.63	8.66	0	71.97	0.21	--	--	--	--	--	--	--	--	
2/12/2003	80.63	8.39	0	72.24	0.27	--	--	--	--	--	--	--	--	
3/13/2003	80.63	8.06	0	72.57	0.33	--	--	--	--	--	--	--	--	
4/7/2003	80.63	8.09	0	72.54	-0.03	--	--	--	--	--	--	--	--	
5/15/2003	80.63	8.07	0	72.56	0.02	--	--	--	--	--	--	--	--	
6/12/2003	80.63	8.11	0	72.52	-0.04	--	--	--	--	--	--	--	--	
7/7/2003	80.63	8.13	0	72.50	-0.02	--	--	--	--	--	--	--	--	
8/14/2003	80.63	8.23	0	72.40	-0.10	--	--	--	--	--	--	--	--	
9/12/2003	80.63	8.29	0	72.34	-0.06	--	--	--	--	--	--	--	--	
11/4/2003	80.63	9.97	0	70.66	-1.68	--	2600	11	ND<10	ND<10	ND<20	--	210	
5/24/2004	80.63	8.31	0	72.32	1.66	--	3100	20	ND<5.0	16	ND<10	--	200	
11/29/2004	80.63	8.23	0	72.40	0.08	--	4500	46	ND<1.0	34	3.6	--	140	
6/24/2005	80.63	7.53	0	73.10	0.70	--	2000	20	0.87	50	3.0	--	56	
12/15/2005	80.63	8.11	0	72.52	-0.58	--	3300	37	0.70	35	4.7	--	44	
6/14/2006	80.63	7.41	0	73.22	0.70	--	1500	2.0	0.95	6.9	ND<1.0	--	21	
12/21/2006	80.63	7.78	0	72.85	-0.37	--	3100	21	0.65	56	5.4	--	27	
6/28/2007	80.63	9.09	0	71.54	-1.31	--	2800	46	0.96	44	2.6	--	65	
12/13/2007	80.63	9.21	0	71.42	-0.12	--	9100	190	2.1	400	81	--	30	
6/9/2008	80.63	9.30	0	71.33	-0.09	--	5400	23	ND<2.5	330	13	--	39	

Table 2
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

76 Station 0746

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
12/30/2008	80.63	8.23	0	72.40	1.07	--	5800	130	ND<2.5	270	58	--	22	
9/28/2009	80.63	9.10	0	71.53	-0.87	--	3400	3.8	ND<2.5	23	5.0	--	21	
12/15/2009	80.63	7.96	0	72.67	1.14	--	9100	18	ND<2.5	450	160	--	ND<2.5	
6/28/2010	80.63	8.68	0	71.95	-0.72	--	2300	20	1.0	56	ND<1.0	--	5.6	
12/29/2010	80.63	6.04	0	74.59	2.64	--	4100	9.3	1.3	6.8	ND<1.0	--	1.6	

Table 2a
ADDITIONAL CURRENT ANALYTICAL RESULTS

76 Station 0746

Date Sampled	TBA (µg/l)	Ethanol (8260B) (µg/l)	Ethylene- dibromide (EDB) (µg/l)	EDB (504) (µg/l)	1,2-DCA (EDC) (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (µg/l)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Comments
5/4/1998	--	--	--	--	--	--	--	--	--	2.94	
5/20/1999	--	--	--	--	--	--	--	--	--	3.22	
11/4/2003	--	ND<500	--	--	--	--	--	--	--	--	
5/24/2004	--	ND<50	--	--	--	--	--	--	--	--	
11/29/2004	--	ND<50	--	--	--	--	--	--	--	--	
6/24/2005	--	ND<1000	--	--	--	--	--	--	--	--	
12/15/2005	--	ND<250	--	--	--	--	--	--	--	--	
6/14/2006	--	ND<250	--	--	--	--	--	--	--	--	
12/21/2006	--	ND<250	--	--	--	--	--	--	--	--	
12/13/2007	--	ND<250	--	--	--	--	--	--	--	--	
6/9/2008	--	ND<250	--	--	--	--	--	--	--	--	
12/30/2008	--	ND<250	--	--	--	--	--	--	--	--	
9/28/2009	--	ND<250	--	--	--	--	--	--	--	--	
6/28/2010	--	ND<250	ND<0.50	--	ND<0.50	--	--	--	--	--	
12/29/2010	ND<10	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	
MW-12											
5/15/1997	--	--	--	--	--	--	--	--	--	2.10	
5/4/1998	--	--	--	--	--	--	--	--	--	3.41	
11/4/2003	ND<100	ND<500	--	--	--	ND<2.0	ND<2.0	ND<2.0	--	--	
5/24/2004	ND<5.0	ND<50	ND<0.50	--	ND<0.50	ND<1.0	ND<0.50	ND<0.50	--	--	
11/29/2004	ND<5.0	ND<50	ND<0.50	--	ND<0.50	ND<1.0	ND<0.50	ND<0.50	--	--	
6/24/2005	--	ND<1000	--	--	--	--	--	--	--	--	
12/15/2005	--	ND<250	--	--	--	--	--	--	--	--	
6/14/2006	--	ND<250	--	--	--	--	--	--	--	--	
12/21/2006	--	ND<250	--	--	--	--	--	--	--	--	
6/28/2007	--	ND<250	--	--	--	--	--	--	--	--	
12/13/2007	--	ND<250	--	--	--	--	--	--	--	--	
6/9/2008	--	ND<250	--	--	--	--	--	--	--	--	
12/30/2008	--	ND<250	--	--	--	--	--	--	--	--	
9/28/2009	--	ND<250	--	--	--	--	--	--	--	--	
12/15/2009	--	ND<250	--	--	--	--	--	--	--	--	
6/28/2010	--	ND<250	ND<0.50	ND<0.010	ND<0.50	--	--	--	--	--	
12/29/2010	ND<10	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	
RW-1											
11/7/1995	--	--	--	--	--	--	--	--	2.13	--	

Table 2a
ADDITIONAL CURRENT ANALYTICAL RESULTS

76 Station 0746

Date Sampled	TBA (µg/l)	Ethanol (8260B) (µg/l)	Ethylene- dibromide (EDB) (µg/l)	EDB (504) (µg/l)	1,2-DCA (EDC) (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (µg/l)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Comments
11/4/2003	ND<2000	ND<10000	--	--	--	ND<40	ND<40	ND<40	--	--	
5/24/2004	ND<50	ND<500	ND<5.0	--	ND<5.0	ND<10	ND<5.0	ND<5.0	--	--	
11/29/2004	38	ND<100	ND<1.0	--	ND<1.0	ND<2.0	ND<1.0	1.3	--	--	
6/24/2005	--	ND<1000	--	--	--	--	--	--	--	--	
12/15/2005	ND<10	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	
6/14/2006	--	ND<250	--	--	--	--	--	--	--	--	
12/21/2006	34	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	
6/28/2007	--	ND<250	--	--	--	--	--	--	--	--	
12/13/2007	--	ND<500	--	--	--	--	--	--	--	--	
6/9/2008	--	ND<1200	--	--	--	--	--	--	--	--	
12/30/2008	--	ND<1200	--	--	--	--	--	--	--	--	
9/28/2009	--	ND<1200	--	--	--	--	--	--	--	--	
12/15/2009	--	ND<1200	--	--	--	--	--	--	--	--	
6/28/2010	--	ND<250	ND<0.50	--	ND<0.50	--	--	--	--	--	
12/29/2010	ND<10	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	

ARCADIS

Attachment C

Laboratory Report and Chain-of-Custody Documentation



Date of Report: 06/15/2012

Kathy Brandt

Arcadis

1900 Powell Street 12th Floor
Emeryville, CA 94608

Project: 0746
BC Work Order: 1209946
Invoice ID: B124117

Enclosed are the results of analyses for samples received by the laboratory on 6/1/2012. 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



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Environmental Testing Laboratory Since 1949

MM

12-09946

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>0746</u>				Union Oil Consultant: <u>Arcadis</u>				ANALYSES REQUIRED												
Site Global ID: <u>T0600101471</u>				Consultant Contact: <u>Kathy Brandt</u>				TPH - Diesel by EPA 8015 TPH - G by <u>8015B (C6-C12)</u> BTX/MTBE by EPA 8260B Ethanol by EPA 8260B EPA 8260B Full List with OXYS <u>EDC by 8260B</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Turnaround Time (TAT): Standard <input checked="" type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 72 Hours <input type="checkbox"/> Special Instructions <u>Run 8 OXYS by 8260 on all 8260 MTBE hits.</u>
Site Address: <u>3943 Broadway Oakland, CA</u>				Consultant Phone No.: <u>510 596 9675</u>																
Union Oil PM: <u>Roya Kambin</u>				Sampling Company: <u>TRC</u>																
Union Oil PM Phone No.: <u>925 790 6270</u>				Sampled By (PRINT): <u>Andrew Vidners</u>																
Charge Code: <u>NWRB-0 351647-0-LAB</u>				Sampler Signature: <u>[Signature]</u>																
This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.				BC Laboratories, Inc. Project Manager: <u>Molly Meyers</u> 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911																
SAMPLE ID				Field Point Name	Matrix	DTW	Date (yyymmdd)	Sample Time	# of Containers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes / Comments	
				MW-1	W-S-A	-1	120601	0742	6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
				MW-2	W-S-A	-2		0810												
				MW-3	W-S-A	-3		0900												
				MW-4	W-S-A	-4		0909												
				MW-6	W-S-A	-5		0721												
				MW-7	W-S-A	-6		0934												
				MW-10	W-S-A	-7		0912												
				MW-11	W-S-A	-8		1212												
				MW-12	W-S-A	-9		0925												
				RW-1	W-S-A	-10	↓	0940	↓											
				W-S-A																
				W-S-A																
Relinquished By <u>[Signature]</u> Company <u>TRC</u> Date / Time: <u>6/1/12 1415</u>				Relinquished By <u>[Signature]</u> Company <u>BClab</u> Date / Time: <u>6-1-12 1630</u>				Relinquished By <u>[Signature]</u> Company <u>BCUS</u> Date / Time: <u>6-1-12 1945</u>												
Received By <u>[Signature]</u> Company <u>BClab</u> Date / Time: <u>6-1-12 1415</u>				Received By <u>[Signature]</u> Company <u>TRC/US</u> Date / Time: <u>6-1-12 1630</u>				Received By <u>[Signature]</u> Company <u>BClab</u> Date / Time: <u>6-1-12 1945</u>												

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



Chain of Custody and Cooler Receipt Form for 1209946 Page 2 of 2

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 1 of 1

Submission #: 1209946

SHIPPING INFORMATION: Federal Express, UPS, Hand Delivery, BC Lab Field Service, Other. SHIPPING CONTAINER: Ice Chest, Box, None, Other.

Refrigerant: Ice, Blue Ice, None, Other. Comments:

Custody Seals: Ice Chest, Containers, None. Intact? Yes/No.

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

COC Received: YES/NO. Emissivity: 0.95. Container: VOA. Thermometer ID: 177. Date/Time: 6-1-12 1950. Temperature: A 2.0 C / C 2.2 C. Analyst Init: JKW

Table with columns: SAMPLE CONTAINERS, SAMPLE NUMBERS (1-10). Rows include: GENERAL MINERAL/ GENERAL PHYSICAL, PE UNPRESERVED, INORGANIC CHEMICAL METALS, CYANIDE, NITROGEN FORMS, TOTAL SULFIDE, NITRATE / NITRITE, TOTAL ORGANIC CARBON, TOX, CHEMICAL OXYGEN DEMAND, PHENOLICS, VOA VIAL TRAVEL BLANK, VOA VIAL, EPA 413.1, 413.2, 418.1, ODOR, RADIOLOGICAL, BACTERIOLOGICAL, VOA VIAL, EPA 508/608/8080, EPA 515.1/8150, EPA 525, EPA 525 TRAVEL BLANK, EPA 547, EPA 531.1, EPA 548, EPA 549, EPA 632, EPA 8015M, AMBER, 3 OZ. JAR, 32 OZ. JAR, SOIL SLEEVE, PCB VIAL, PLASTIC BAG, FERROUS IRON, ENCORE.

Comments: 1 VOA from -2. broken in lab. Sample Numbering Completed By: KID. Date/Time: 6-1-12 2200. = Actual / C = Corrected

[H:\DOCS\WPB\LAB_DOCS\FORMS\SAMREC2.WPD]



Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 06/15/2012 14:36
Project: 0746
Project Number: 351647
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

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

1209946-01	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: MW-1-W-120601 Sampled By: TRCI	Receive Date: 06/01/2012 19:45 Sampling Date: 06/01/2012 07:42 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): MW-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

1209946-02	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: MW-2-W-120601 Sampled By: TRCI	Receive Date: 06/01/2012 19:45 Sampling Date: 06/01/2012 08:10 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): MW-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

1209946-03	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: MW-3-W-120601 Sampled By: TRCI	Receive Date: 06/01/2012 19:45 Sampling Date: 06/01/2012 09:00 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): MW-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:
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Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 06/15/2012 14:36
Project: 0746
Project Number: 351647
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

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

1209946-04	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: MW-4-W-120601 Sampled By: TRCI	Receive Date: 06/01/2012 19:45 Sampling Date: 06/01/2012 09:09 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): MW-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

1209946-05	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: MW-6-W-120601 Sampled By: TRCI	Receive Date: 06/01/2012 19:45 Sampling Date: 06/01/2012 07:21 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): MW-6 Matrix: W Sample QC Type (SACode): CS Cooler ID:
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1209946-06	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: MW-7-W-120601 Sampled By: TRCI	Receive Date: 06/01/2012 19:45 Sampling Date: 06/01/2012 09:34 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): MW-7 Matrix: W Sample QC Type (SACode): CS Cooler ID:
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Project: 0746
Project Number: 351647
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
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1209946-07	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: MW-10-W-120601 Sampled By: TRCI	Receive Date: 06/01/2012 19:45 Sampling Date: 06/01/2012 09:12 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): MW-10 Matrix: W Sample QC Type (SACode): CS Cooler ID:
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1209946-08	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: MW-11-W-120601 Sampled By: TRCI	Receive Date: 06/01/2012 19:45 Sampling Date: 06/01/2012 12:12 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): MW-11 Matrix: W Sample QC Type (SACode): CS Cooler ID:
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1209946-09	COC Number: --- Project Number: 0746 Sampling Location: --- Sampling Point: MW-12-W-120601 Sampled By: TRCI	Receive Date: 06/01/2012 19:45 Sampling Date: 06/01/2012 09:25 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600101471 Location ID (FieldPoint): MW-12 Matrix: W Sample QC Type (SACode): CS Cooler ID:
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Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
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1209946-10

COC Number: ---
Project Number: 0746
Sampling Location: ---
Sampling Point: RW-1-W-120601
Sampled By: TRCI

Receive Date: 06/01/2012 19:45
Sampling Date: 06/01/2012 09:40
Sample Depth: ---
Lab Matrix: Water
Sample Type: Groundwater
Delivery Work Order:
Global ID: T0600101471
Location ID (FieldPoint): RW-1
Matrix: W
Sample QC Type (SACode): CS
Cooler ID:



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Project Number: 351647
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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1209946-01	Client Sample Name: 0746, MW-1-W-120601, 6/1/2012 7:42:00AM
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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
Methyl t-butyl ether	0.87	ug/L	0.50	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	76 - 114 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	101	%	88 - 110 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	107	%	86 - 115 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	06/05/12	06/05/12 14:02	JMC	MS-V12	1	BVF0293



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Project: 0746
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Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1209946-01	Client Sample Name: 0746, MW-1-W-120601, 6/1/2012 7:42:00AM
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Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	ND	ug/L	50	EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	78.4	%	70 - 130 (LCL - UCL)	EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	06/05/12	06/07/12 12:05	jjh	GC-V4	1	BVF0366

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Project: 0746
Project Number: 351647
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1209946-02	Client Sample Name: 0746, MW-2-W-120601, 6/1/2012 8:10:00AM
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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
Methyl t-butyl ether	2.9	ug/L	0.50	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	76 - 114 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	100	%	88 - 110 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	105	%	86 - 115 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	06/05/12	06/05/12 13:44	JMC	MS-V12	1	BVF0293



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Project: 0746
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Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1209946-02	Client Sample Name: 0746, MW-2-W-120601, 6/1/2012 8:10:00AM
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Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	ND	ug/L	50	EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	75.0	%	70 - 130 (LCL - UCL)	EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	06/05/12	06/07/12 12:27	jjh	GC-V4	1	BVF0366

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Project: 0746
Project Number: 351647
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1209946-03	Client Sample Name: 0746, MW-3-W-120601, 6/1/2012 9:00:00AM
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Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	4.6	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	17	ug/L	0.50	EPA-8260	ND		1
Methyl t-butyl ether	19	ug/L	0.50	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	3.4	ug/L	1.0	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	101	%	76 - 114 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	106	%	88 - 110 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	132	%	86 - 115 (LCL - UCL)	EPA-8260		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	06/05/12	06/05/12 13:26	JMC	MS-V12	1	BVF0293



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Project: 0746
Project Number: 351647
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1209946-03	Client Sample Name: 0746, MW-3-W-120601, 6/1/2012 9:00:00AM
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Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	4300	ug/L	500	EPA-8015B	ND	A01	1
a,a,a-Trifluorotoluene (FID Surrogate)	94.1	%	70 - 130 (LCL - UCL)	EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	06/12/12	06/14/12 08:49	jjh	GC-V4	10	BVF0524

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Reported: 06/15/2012 14:36
Project: 0746
Project Number: 351647
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1209946-04	Client Sample Name: 0746, MW-4-W-120601, 6/1/2012 9:09:00AM
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Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	2.5	EPA-8260	ND	A01	1
1,2-Dibromoethane	ND	ug/L	2.5	EPA-8260	ND	A01	1
1,2-Dichloroethane	ND	ug/L	2.5	EPA-8260	ND	A01	1
Ethylbenzene	ND	ug/L	2.5	EPA-8260	ND	A01	1
Methyl t-butyl ether	ND	ug/L	2.5	EPA-8260	ND	A01	1
Toluene	ND	ug/L	2.5	EPA-8260	ND	A01	1
Total Xylenes	ND	ug/L	5.0	EPA-8260	ND	A01	1
Ethanol	ND	ug/L	1200	EPA-8260	ND	A01	1
1,2-Dichloroethane-d4 (Surrogate)	103	%	76 - 114 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	90.6	%	88 - 110 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	102	%	86 - 115 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-8260	06/05/12	06/05/12	13:09	JMC	MS-V12	5	BVF0293

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Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1209946-04	Client Sample Name: 0746, MW-4-W-120601, 6/1/2012 9:09:00AM
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Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	680	ug/L	50	EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	94.6	%	70 - 130 (LCL - UCL)	EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	06/07/12	06/08/12 11:29	jjh	GC-V4	1	BVF0524



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Project: 0746
Project Number: 351647
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1209946-05	Client Sample Name: 0746, MW-6-W-120601, 6/1/2012 7:21:00AM
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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
Methyl t-butyl ether	0.64	ug/L	0.50	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	76 - 114 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	102	%	88 - 110 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	103	%	86 - 115 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	06/05/12	06/05/12 12:51	JMC	MS-V12	1	BVF0293



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Project: 0746
Project Number: 351647
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1209946-05	Client Sample Name: 0746, MW-6-W-120601, 6/1/2012 7:21:00AM
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Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	ND	ug/L	50	EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	88.1	%	70 - 130 (LCL - UCL)	EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	06/07/12	06/08/12 11:51	jjh	GC-V4	1	BVF0729

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Project: 0746
Project Number: 351647
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1209946-06	Client Sample Name: 0746, MW-7-W-120601, 6/1/2012 9:34:00AM
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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
Methyl t-butyl ether	0.71	ug/L	0.50	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	103	%	76 - 114 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	102	%	88 - 110 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	102	%	86 - 115 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-8260	06/05/12	06/05/12	12:34	JMC	MS-V12	1	BVF0293



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Project Number: 351647
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Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1209946-06	Client Sample Name: 0746, MW-7-W-120601, 6/1/2012 9:34:00AM
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Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	ND	ug/L	50	EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	86.0	%	70 - 130 (LCL - UCL)	EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	06/07/12	06/08/12 12:14	jjh	GC-V4	1	BVF0729

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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1209946-07	Client Sample Name: 0746, MW-10-W-120601, 6/1/2012 9:12:00AM
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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
Methyl t-butyl ether	1.1	ug/L	0.50	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	76 - 114 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	102	%	88 - 110 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	102	%	86 - 115 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	06/05/12	06/05/12 10:30	JMC	MS-V12	1	BVF0294



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Reported: 06/15/2012 14:36
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Project Number: 351647
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1209946-07	Client Sample Name: 0746, MW-10-W-120601, 6/1/2012 9:12:00AM
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Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	ND	ug/L	50	EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	86.7	%	70 - 130 (LCL - UCL)	EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	06/07/12	06/08/12 12:36	jjh	GC-V4	1	BVF0449

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Project Number: 351647
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1209946-08	Client Sample Name: 0746, MW-11-W-120601, 6/1/2012 12:12:00PM
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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
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	76 - 114 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	101	%	88 - 110 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	102	%	86 - 115 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	06/05/12	06/05/12 10:13	JMC	MS-V12	1	BVF0293



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Reported: 06/15/2012 14:36
Project: 0746
Project Number: 351647
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1209946-08	Client Sample Name: 0746, MW-11-W-120601, 6/1/2012 12:12:00PM
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Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	ND	ug/L	50	EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	92.9	%	70 - 130 (LCL - UCL)	EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	06/07/12	06/07/12 17:04	jjh	GC-V4	1	BVF0449

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1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 06/15/2012 14:36
Project: 0746
Project Number: 351647
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1209946-09	Client Sample Name: 0746, MW-12-W-120601, 6/1/2012 9:25:00AM
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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
Methyl t-butyl ether	1.2	ug/L	0.50	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	76 - 114 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	101	%	88 - 110 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	101	%	86 - 115 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-8260	06/05/12	06/05/12	09:55	JMC	MS-V12	1	BVF0293



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Project: 0746
Project Number: 351647
Project Manager: Kathy Brandt

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1209946-09	Client Sample Name: 0746, MW-12-W-120601, 6/1/2012 9:25:00AM
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Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	ND	ug/L	50	EPA-8015B	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	92.5	%	70 - 130 (LCL - UCL)	EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	06/07/12	06/07/12 17:27	jjh	GC-V4	1	BVF0449

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Reported: 06/15/2012 14:36
Project: 0746
Project Number: 351647
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1209946-10	Client Sample Name: 0746, RW-1-W-120601, 6/1/2012 9:40:00AM
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Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	140	ug/L	2.5	EPA-8260	ND	A01	1
1,2-Dibromoethane	ND	ug/L	2.5	EPA-8260	ND	A01	1
1,2-Dichloroethane	ND	ug/L	2.5	EPA-8260	ND	A01	1
Ethylbenzene	56	ug/L	2.5	EPA-8260	ND	A01	1
Methyl t-butyl ether	ND	ug/L	2.5	EPA-8260	ND	A01	1
Toluene	ND	ug/L	2.5	EPA-8260	ND	A01	1
Total Xylenes	ND	ug/L	5.0	EPA-8260	ND	A01	1
Ethanol	ND	ug/L	1200	EPA-8260	ND	A01	1
1,2-Dichloroethane-d4 (Surrogate)	99.0	%	76 - 114 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	90.4	%	88 - 110 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	105	%	86 - 115 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC
			Date/Time					Batch ID
1	EPA-8260	06/05/12	06/05/12	09:37	JMC	MS-V12	5	BVF0293



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Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1209946-10	Client Sample Name: 0746, RW-1-W-120601, 6/1/2012 9:40:00AM
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Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C6 - C12)	3600	ug/L	500	EPA-8015B	ND	A01	1
a,a,a-Trifluorotoluene (FID Surrogate)	98.6	%	70 - 130 (LCL - UCL)	EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	06/07/12	06/13/12 00:14	jjh	GC-V4	10	BVF0449

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Project: 0746
Project Number: 351647
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
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QC Batch ID: BVF0293

Benzene	BVF0293-BLK1	ND	ug/L	0.50		
1,2-Dibromoethane	BVF0293-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane	BVF0293-BLK1	ND	ug/L	0.50		
Ethylbenzene	BVF0293-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BVF0293-BLK1	ND	ug/L	0.50		
Toluene	BVF0293-BLK1	ND	ug/L	0.50		
Total Xylenes	BVF0293-BLK1	ND	ug/L	1.0		
Ethanol	BVF0293-BLK1	ND	ug/L	250		
1,2-Dichloroethane-d4 (Surrogate)	BVF0293-BLK1	106	%		76 - 114 (LCL - UCL)	
Toluene-d8 (Surrogate)	BVF0293-BLK1	103	%		88 - 110 (LCL - UCL)	
4-Bromofluorobenzene (Surrogate)	BVF0293-BLK1	97.3	%		86 - 115 (LCL - UCL)	

QC Batch ID: BVF0294

Benzene	BVF0294-BLK1	ND	ug/L	0.50		
1,2-Dibromoethane	BVF0294-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane	BVF0294-BLK1	ND	ug/L	0.50		
Ethylbenzene	BVF0294-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BVF0294-BLK1	ND	ug/L	0.50		
Toluene	BVF0294-BLK1	ND	ug/L	0.50		
Total Xylenes	BVF0294-BLK1	ND	ug/L	1.0		
Ethanol	BVF0294-BLK1	ND	ug/L	250		
1,2-Dichloroethane-d4 (Surrogate)	BVF0294-BLK1	108	%		76 - 114 (LCL - UCL)	
Toluene-d8 (Surrogate)	BVF0294-BLK1	105	%		88 - 110 (LCL - UCL)	
4-Bromofluorobenzene (Surrogate)	BVF0294-BLK1	102	%		86 - 115 (LCL - UCL)	



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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		Lab
								Percent Recovery	RPD	
QC Batch ID: BVF0293										
Benzene	BVF0293-BS1	LCS	26.140	25.000	ug/L	105		70 - 130		
Toluene	BVF0293-BS1	LCS	25.580	25.000	ug/L	102		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BVF0293-BS1	LCS	10.420	10.000	ug/L	104		76 - 114		
Toluene-d8 (Surrogate)	BVF0293-BS1	LCS	9.9500	10.000	ug/L	99.5		88 - 110		
4-Bromofluorobenzene (Surrogate)	BVF0293-BS1	LCS	10.900	10.000	ug/L	109		86 - 115		
QC Batch ID: BVF0294										
Benzene	BVF0294-BS1	LCS	24.990	25.000	ug/L	100		70 - 130		
Toluene	BVF0294-BS1	LCS	24.890	25.000	ug/L	99.6		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BVF0294-BS1	LCS	9.9200	10.000	ug/L	99.2		76 - 114		
Toluene-d8 (Surrogate)	BVF0294-BS1	LCS	10.050	10.000	ug/L	100		88 - 110		
4-Bromofluorobenzene (Surrogate)	BVF0294-BS1	LCS	10.860	10.000	ug/L	109		86 - 115		



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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		Lab Quals	
								RPD	Percent Recovery		
QC Batch ID: BVF0293		Used client sample: Y - Description: MW-11-W-120601, 06/01/2012 12:12									
Benzene	MS	1209946-08	ND	25.640	25.000	ug/L			103		70 - 130
	MSD	1209946-08	ND	25.680	25.000	ug/L	0.2	103	20		70 - 130
Toluene	MS	1209946-08	ND	25.540	25.000	ug/L			102		70 - 130
	MSD	1209946-08	ND	25.430	25.000	ug/L	0.4	102	20		70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1209946-08	ND	10.280	10.000	ug/L			103		76 - 114
	MSD	1209946-08	ND	10.120	10.000	ug/L	1.6	101			76 - 114
Toluene-d8 (Surrogate)	MS	1209946-08	ND	10.150	10.000	ug/L			102		88 - 110
	MSD	1209946-08	ND	10.230	10.000	ug/L	0.8	102			88 - 110
4-Bromofluorobenzene (Surrogate)	MS	1209946-08	ND	10.840	10.000	ug/L			108		86 - 115
	MSD	1209946-08	ND	10.680	10.000	ug/L	1.5	107			86 - 115
QC Batch ID: BVF0294		Used client sample: Y - Description: MW-10-W-120601, 06/01/2012 09:12									
Benzene	MS	1209946-07	ND	25.310	25.000	ug/L			101		70 - 130
	MSD	1209946-07	ND	26.680	25.000	ug/L	5.3	107	20		70 - 130
Toluene	MS	1209946-07	ND	25.320	25.000	ug/L			101		70 - 130
	MSD	1209946-07	ND	25.970	25.000	ug/L	2.5	104	20		70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1209946-07	ND	10.050	10.000	ug/L			100		76 - 114
	MSD	1209946-07	ND	9.8400	10.000	ug/L	2.1	98.4			76 - 114
Toluene-d8 (Surrogate)	MS	1209946-07	ND	9.9500	10.000	ug/L			99.5		88 - 110
	MSD	1209946-07	ND	9.9100	10.000	ug/L	0.4	99.1			88 - 110
4-Bromofluorobenzene (Surrogate)	MS	1209946-07	ND	10.920	10.000	ug/L			109		86 - 115
	MSD	1209946-07	ND	10.930	10.000	ug/L	0.1	109			86 - 115

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Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVF0366						
Gasoline Range Organics (C6 - C12)	BVF0366-BLK1	ND	ug/L	50		
a,a,a-Trifluorotoluene (FID Surrogate)	BVF0366-BLK1	77.1	%	70 - 130 (LCL - UCL)		
QC Batch ID: BVF0449						
Gasoline Range Organics (C6 - C12)	BVF0449-BLK1	ND	ug/L	50		
a,a,a-Trifluorotoluene (FID Surrogate)	BVF0449-BLK1	87.4	%	70 - 130 (LCL - UCL)		
QC Batch ID: BVF0524						
Gasoline Range Organics (C6 - C12)	BVF0524-BLK1	ND	ug/L	50		
a,a,a-Trifluorotoluene (FID Surrogate)	BVF0524-BLK1	85.2	%	70 - 130 (LCL - UCL)		
QC Batch ID: BVF0729						
Gasoline Range Organics (C6 - C12)	BVF0729-BLK1	ND	ug/L	50		
a,a,a-Trifluorotoluene (FID Surrogate)	BVF0729-BLK1	85.4	%	70 - 130 (LCL - UCL)		



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Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Quals
								Percent Recovery	RPD		
QC Batch ID: BVF0366											
Gasoline Range Organics (C6 - C12)	BVF0366-BS1	LCS	1069.3		ug/L			85 - 115			
a,a,a-Trifluorotoluene (FID Surrogate)	BVF0366-BS1	LCS	37.387	40.000	ug/L	93.5		70 - 130			
QC Batch ID: BVF0449											
Gasoline Range Organics (C6 - C12)	BVF0449-BS1	LCS	1002.8		ug/L			85 - 115			
a,a,a-Trifluorotoluene (FID Surrogate)	BVF0449-BS1	LCS	39.489	40.000	ug/L	98.7		70 - 130			
QC Batch ID: BVF0524											
Gasoline Range Organics (C6 - C12)	BVF0524-BS1	LCS	1060.5		ug/L			85 - 115			
a,a,a-Trifluorotoluene (FID Surrogate)	BVF0524-BS1	LCS	38.630	40.000	ug/L	96.6		70 - 130			
QC Batch ID: BVF0729											
Gasoline Range Organics (C6 - C12)	BVF0729-BS1	LCS	990.43		ug/L			85 - 115			
a,a,a-Trifluorotoluene (FID Surrogate)	BVF0729-BS1	LCS	38.942	40.000	ug/L	97.4		70 - 130			



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Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Table with columns: Constituent, Type, Source Sample ID, Source Result, Result, Spike Added, Units, RPD, Percent Recovery, Control Limits RPD, Control Limits Percent Recovery, Lab Quals. Includes QC Batch IDs: BVF0366, BVF0449, BVF0524, BVF0729.



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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.
- S09 The surrogate recovery on the sample for this compound was not within the control limits.