



January 24, 2013

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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Mr. Jerry Wickham
Alameda County Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

RECEIVED

By Alameda County Environmental Health at 4:13 pm, Jan 28, 2013

RE: Second Semi-annual 2012 Groundwater Monitoring Report
1771 First Street, Livermore, California
Fuel Leak Case No.: RO0000436

Dear Mr. Wickham,

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,

Roya Kambin
Union Oil of California – Project Manager

Attachment
Second Semi-annual 2012 Groundwater Monitoring Report Submittal

Mr. Jerry Wickham
 Alameda County Heath Care Services
 1131 Harbor Bay Parkway, Suite 250
 Alameda, California 94502

ARCADIS U.S., Inc.
 2000 Powell Street
 7th Floor
 Emeryville
 California 94608
 Tel 510.652.4500
 Fax 510.652.4906
www.arcadis-us.com

Subject:
 Second Semi-annual 2012 Groundwater Monitoring Report Submittal

ENVIRONMENT

Dear Mr. Wickham:

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

<u>Facility No.</u>	<u>Case No.</u>	<u>Location</u>	
4186	RO0000436	1771 First Street Livermore, California	Date: January 24, 2013
			Contact: Katherine Brandt
			Phone: 510.596.9675
			Email: Katherine.Brandt@arcadis-us.com

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

Our ref:
B0047942.2012

Sincerely,

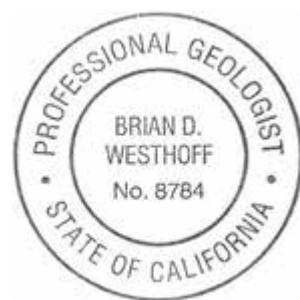
ARCADIS



Katherine Brandt
 Certified Project Manager



Brian Westhoff, P.G., C.P.M.
 Senior Geologist



Copies:

Ms. Roya Kambin, EMC (electronic copy only)
 Mr. and Mrs. Thomas Vadakkekunnel, Property Owners

**UNION OIL OF CALIFORNIA
SEMIANNUAL MONITORING REPORT
SECOND HALF 2012
January 24, 2013**

Facility No.: 4186 Address: 1771 First Street, Livermore, California

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. Jerry Wickham
Case No. RO0000436

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

1. TRC Solutions (TRC) conducted groundwater monitoring and sampling on November 20, 2012. Field data sheets and general procedures are included as **Attachment A**. Fifteen (15) groundwater monitoring wells were gauged during this monitoring event (U-1 through U-15). Twelve (12) groundwater monitoring wells were sampling during this monitoring event (U-4 through U-15). Three lithologic units (shallow, intermediate, and deep) are present at the site. The shallow zone is monitored by wells U-1 through U-3, the intermediate zone is monitored by wells U-4 through U-11, and the deep zone is monitored by wells U-12 through U-15.

All groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethylbenzene, and total xylenes (BTEX, collectively), oxygenates (methyl tertiary butyl ether [MTBE], ethyl tertiary butyl ether [ETBE], di-isopropyl ether [DIPE], tertiary amyl methyl ether [TAME], tertiary butyl alcohol [TBA]), 1,2-dibromoethane (EDB), 1,2-dichloroethane (1,2-DCE or EDC), and ethanol by United States Environmental Protection Agency (USEPA) Method 8260B; as well as field parameters electrical conductivity (EC), dissolved oxygen (DO), and oxidation reduction potential (ORP). In addition, all groundwater samples were analyzed for nitrate as NO₃, sulfate, dissolved ferrous iron, and methane.

Additionally, the samples collected from groundwater monitoring wells U-4, U-8, U-9, U-10, U-11, U-13, and U-15 were analyzed for hexavalent chromium, total dissolved solids, dissolved metals (calcium, sodium, magnesium, potassium, and manganese), and total and dissolved CAM 17 metals.

The site location map and the site plan are presented on **Figures 1 and 2**. The shallow zone groundwater contour map is presented on **Figure 3**. Samples were not collected from the shallow zone wells U-1, U-2 and U-3 due to insufficient water quantity. Thus shallow zone concentration maps for TPH-G, benzene, and MTBE, **Figures 4 through 6**, have been omitted during this reporting period. The intermediate zone concentration maps for TPH-G, benzene, and MTBE are presented on **Figures 7 through 10**, and in the deep zone are presented on Figures **11 through 14**. Current Groundwater Gauging and Analytical Results are summarized in **Table 1**, Current Additional Groundwater Analytical Results are summarized in **Table 1a**, 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 (First Half – 2013):

1. Perform groundwater monitoring and related reporting during first half 2013.

Current Phase of Project:

Groundwater Monitoring

Site Use:

Active Chevron-branded service station.

Frequency of Sampling:

Groundwater – Semiannually

Frequency of Monitoring:

Groundwater – Semiannually

Are Separate-Phase Hydrocarbons (SPH) Present
On-Site:

No

Cumulative SPH Recovered to Date:

None

SPH Recovered This Period:

None

Bulk Soil Removed to Date:

25 cubic yards (1996), 2.5 tons (1998), eight 55-gallon drums (2001), 9.87 tons (2001-2002)

Bulk Soil Removed this Period:

None

**UNION OIL OF CALIFORNIA
SEMIANNUAL MONITORING REPORT
SECOND HALF 2012
January 24, 2013**

Facility No.:	<u>4186</u>	Address:	<u>1771 First Street, Livermore, California</u>		
Water Wells or Surface Waters within a 2,000' Radius and Their Respective Directions:			<u>Two municipal supply wells located approximately 1,500 and 1,800 feet northwest of the site and one domestic well located approximately 1,900 feet southwest of the site.</u>		
Groundwater Use Designation:			<u>Storage (drinking water supply in emergency situations), Irrigation</u>		
Current Remediation Techniques:			<u>None</u>		
Permits for Discharge (No.):			<u>None</u>		
Approximate Depth to Groundwater:			<u>32.47 (U-2) – 40.60 (U-5) feet below top of casing</u>		
			Measured <input checked="" type="checkbox"/>	Estimated	
Approximate Groundwater Elevation:			<u>437.92 (U-5) – 447.13(U-1) feet relative to mean sea level</u>		
			Measured <input checked="" type="checkbox"/>	Estimated	
Groundwater Gradient:	Shallow Zone:	<u>0.004 ft/ft</u>	(Magnitude)	<u>South-southwest</u>	(Direction)
	Intermediate Zone:	<u>0.036 ft/ft</u>	(Magnitude)	<u>Northwest</u>	(Direction)
	Deep Zone:	<u>0.014 ft/ft</u>	(Magnitude)	<u>Northwest</u>	(Direction)

DISCUSSION:

Groundwater conditions during the second half 2012 remained generally consistent with previous periods, with the exception of the flow direction in the shallow zone, which may have shifted to the south-southwest from northeast. Impacted groundwater appears to be isolated to the intermediate zone.

Shallow Zone

Due to insufficient water in wells U-1, U-2 and U-3, no groundwater samples were collected from the shallow zone, thus none of the analytes in the shallow zone were analyzed during the fourth quarter 2012.

Intermediate Zone

The maximum dissolved concentration of TPH-G (4,000 µg/L) was detected in the sample collected from U-10. The maximum dissolved concentrations of BTEX (330 µg/L, 7.5 µg/L, 370 µg/L, and 92 µg/L, respectively), and MTBE (170 µg/L) were detected in the sample collected from U-10. The maximum concentration of TBA (4,500 µg/L) was detected in the sample collected from U-11. TAME, ETBE, DIPE, EDB, EDC, and ethanol were not detected above the laboratory reporting limits in any samples collected from this zone.

The maximum concentration of nitrate as NO₃ (2.0 mg/L) was detected in the sample collected from U-4. The maximum concentration of dissolved ferrous iron (270 mg/L) was detected in the sample collected from U-6. The maximum concentrations of methane (6.3 mg/L) and dissolved potassium (3.0 mg/L) were detected in the sample collected from U-10. The maximum concentrations of sulfate (350 mg/L), dissolved calcium (74 mg/L), dissolved magnesium (180 mg/L), dissolved sodium (57 mg/L), chloride (110 mg/L), fluoride (0.22 mg/L) and total dissolved solids (1,200 mg/L) were detected in the sample collected from U-11.

In addition, the maximum concentrations of total arsenic (180 µg/L), total barium (7,600 µg/L), total beryllium (12 µg/L), total chromium (3,100 µg/L), total cobalt (1,100 µg/L), total copper (1,500 µg/L), total lead (330 µg/L), total nickel (11,000 µg/L), total vanadium (1,000 µg/L), and total zinc (2,000 µg/L) were detected in the sample collected from U-4. The maximum concentration of dissolved barium (490 µg/L) was detected in the sample collected from U-10. The maximum concentration of dissolved manganese (3,500 µg/L) was detected in the sample collected from U-11. ,

All other analytes were not detected above their respective laboratory reporting limit in the groundwater samples collected from wells U-4 through U-11 in the intermediate zone.

**UNION OIL OF CALIFORNIA
SEMIANNUAL MONITORING REPORT
SECOND HALF 2012
January 24, 2013**

Facility No.: 4186 Address: 1771 First Street, Livermore, California

Deep Zone

The maximum concentration of TBA (23 µg/L) was detected in the sample collected from U-14. TPH-G, BTEX, MTBE, TAME, ETBE, DIPE, EDB, EDC, and ethanol were not detected above the laboratory reporting limits in any of the samples collected from wells U-12 through U-15 in the deep zone.

The maximum concentration of nitrate as NO₃ (25 mg/L) was detected in U-13 and U-15. The maximum concentration of sulfate (55 mg/L), dissolved magnesium (65 mg/L), dissolved sodium (57 mg/L), dissolved potassium (12 mg/L) and total dissolved solids (910 mg/L) were detected in the samples collected from U-13. The maximum concentration of methane (0.016 mg/L) was detected in U-14. The maximum concentrations of dissolved calcium (42 mg/L), chloride (87 mg/L) and fluoride (0.13 mg/L) were detected in the samples collected from U-15.

In addition, the maximum concentration of hexavalent chromium (6.3 µg/L) was detected in U-13 and U-15. The maximum concentrations of dissolved barium (290 µg/L) and total barium (350 µg/L) were detected in the sample collected from U-15.

All other analytes were not detected above their respective laboratory reporting limit in the groundwater samples collected from wells U-12 through U-15 in the deep zone.

CONCLUSIONS AND RECOMMENDATIONS:

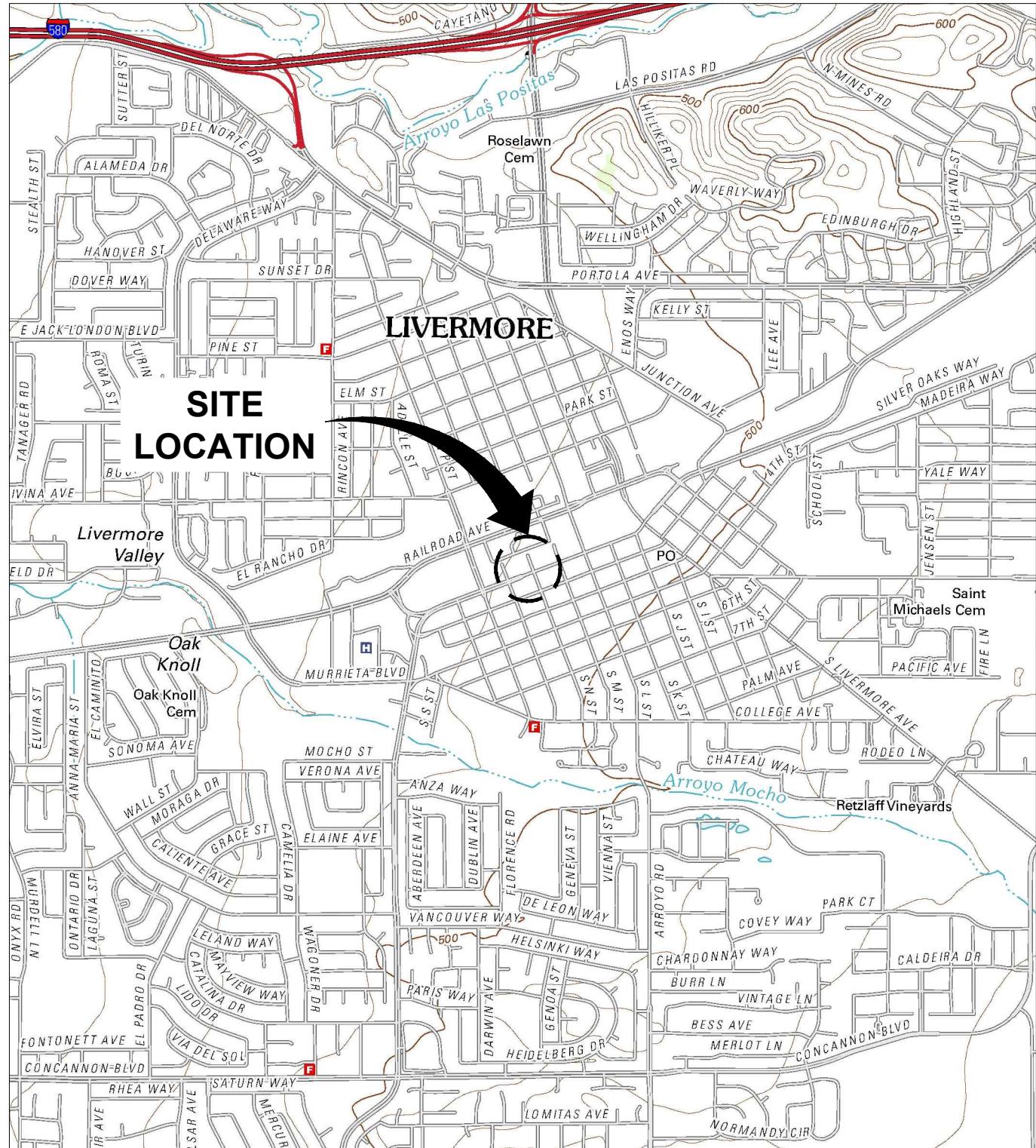
Dissolved hydrocarbon constituent concentrations have remained relatively consistent with previous quarters. ARCADIS recommends the development of a Low-Threat Underground Storage Tank Case Closure request as per the State Water Resource Control Board (SWRCB) Resolution 2012-0016.

ATTACHMENTS:

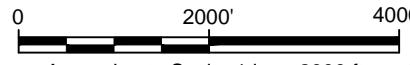
Figure 1:	Site Location Map
Figure 2:	Site Plan
Figure 3:	Groundwater Contour Map – Shallow Zone
Figure 4:	Groundwater Contour Map – Intermediate Zone
Figure 5:	TPH-G Concentration Map – Intermediate Zone
Figure 6:	Benzene Concentration Map – Intermediate Zone
Figure 7:	MTBE Concentration Map – Intermediate Zone
Figure 8:	Groundwater Contour Map – Deep Zone
Figure 9:	TPH-G Concentration Map – Deep Zone
Figure 10:	Benzene Concentration Map – Deep Zone
Figure 11:	MTBE Concentration Map – Deep Zone
Table 1:	Current Groundwater Gauging and Analytical Results
Table 1a:	Current Additional Groundwater Analytical Results
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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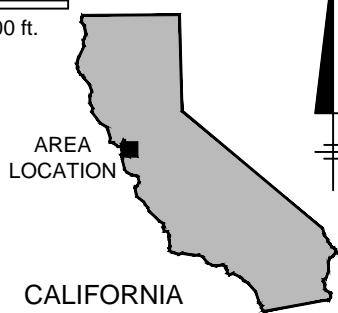
Figures



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., LIVERMORE, CALIFORNIA, 2012.



XREFS: PROJECTNAME: ---
IMAGES: Livermore.jpg
XREFS:

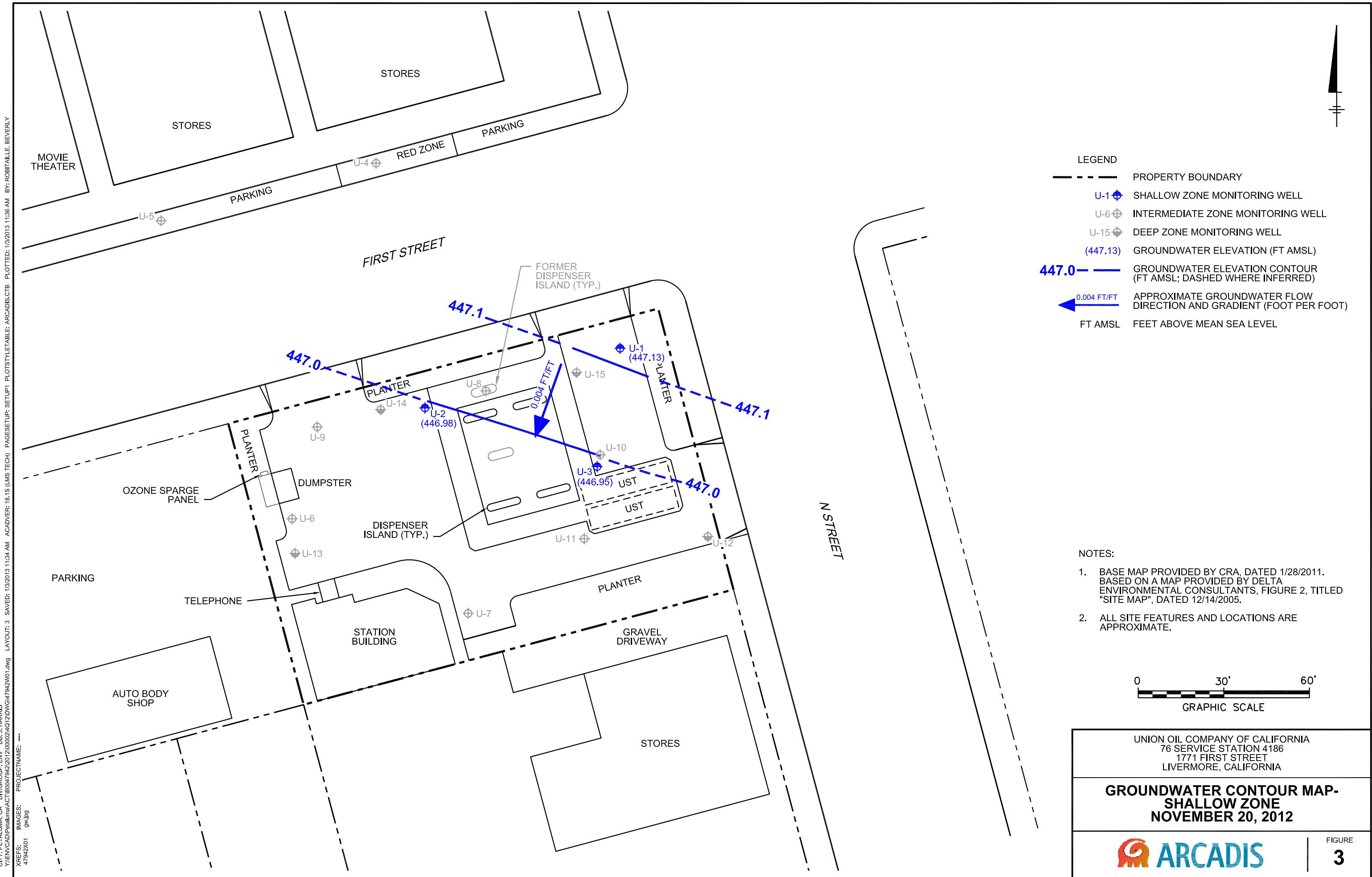


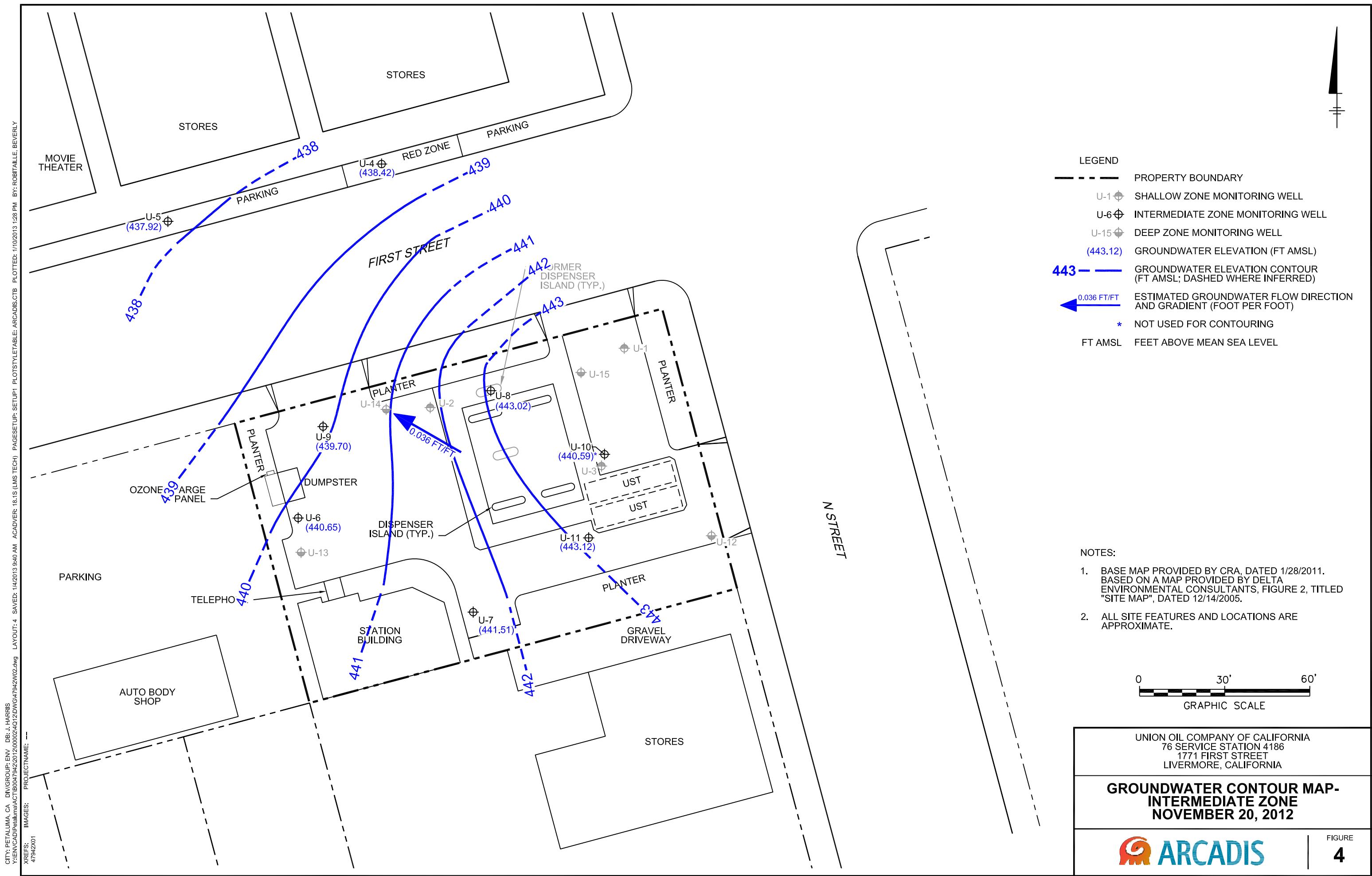
UNION OIL COMPANY OF CALIFORNIA
76 SERVICE STATION 4186
1771 FIRST STREET
LIVERMORE, CALIFORNIA

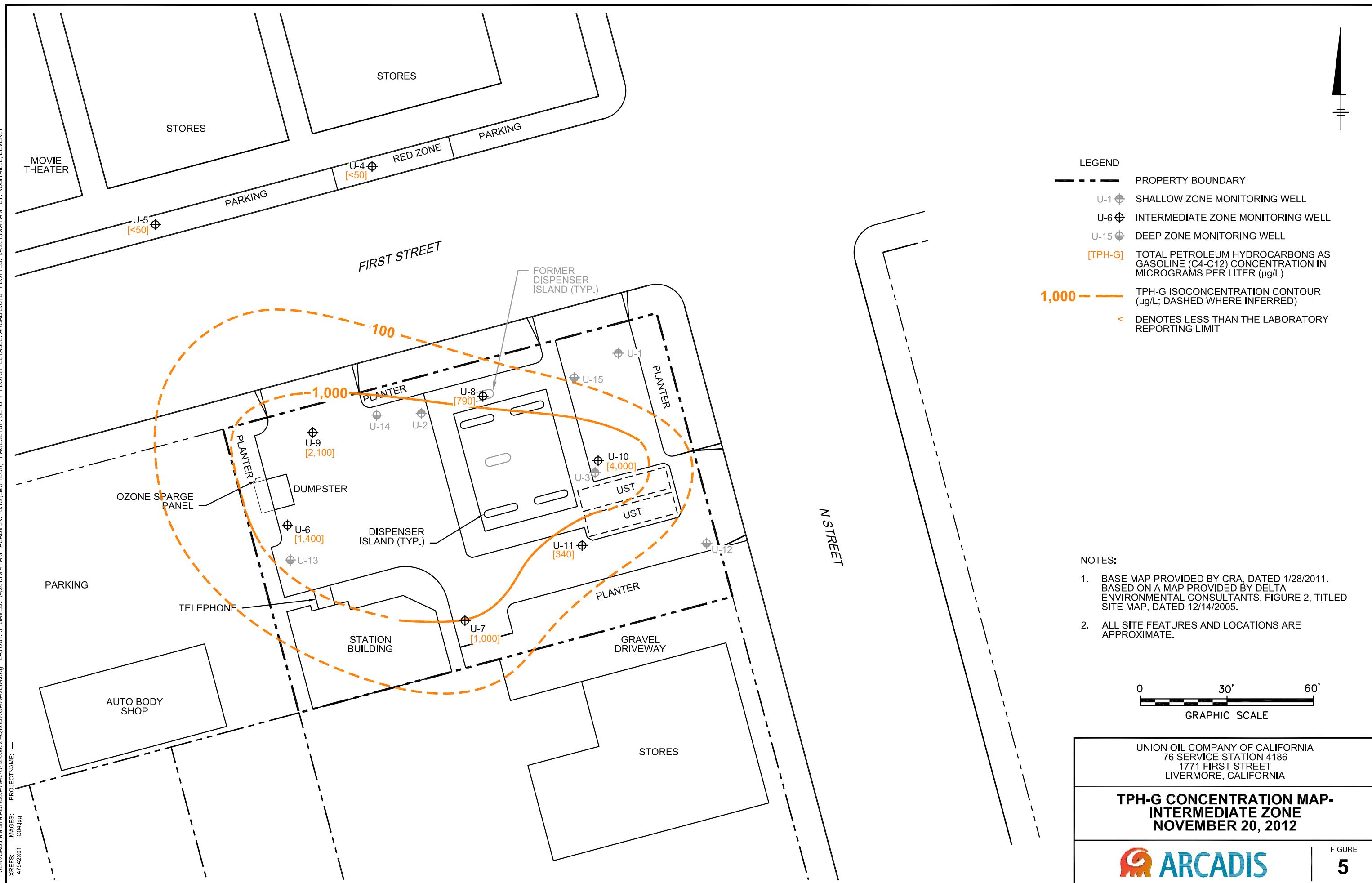
SITE LOCATION MAP

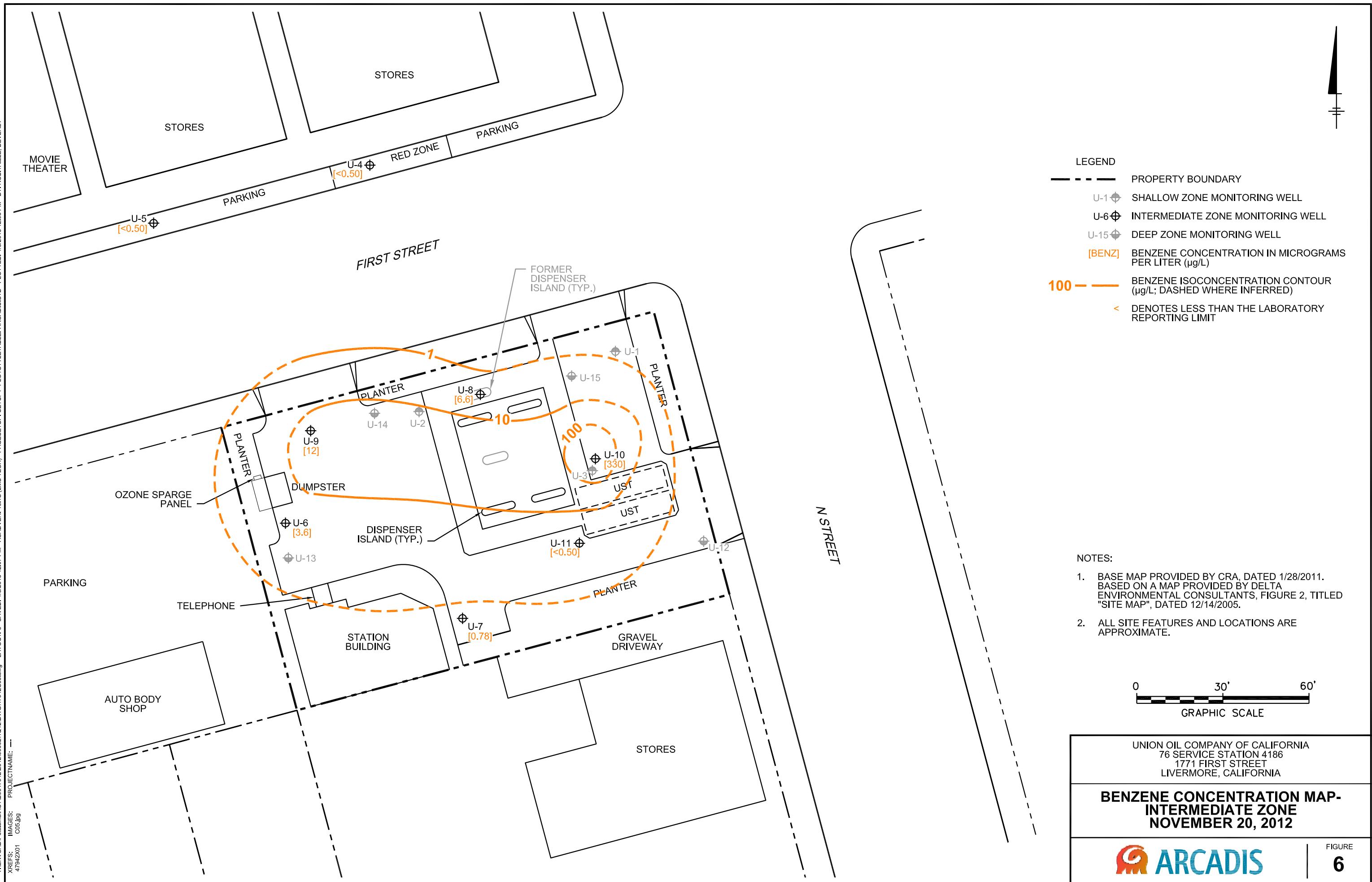


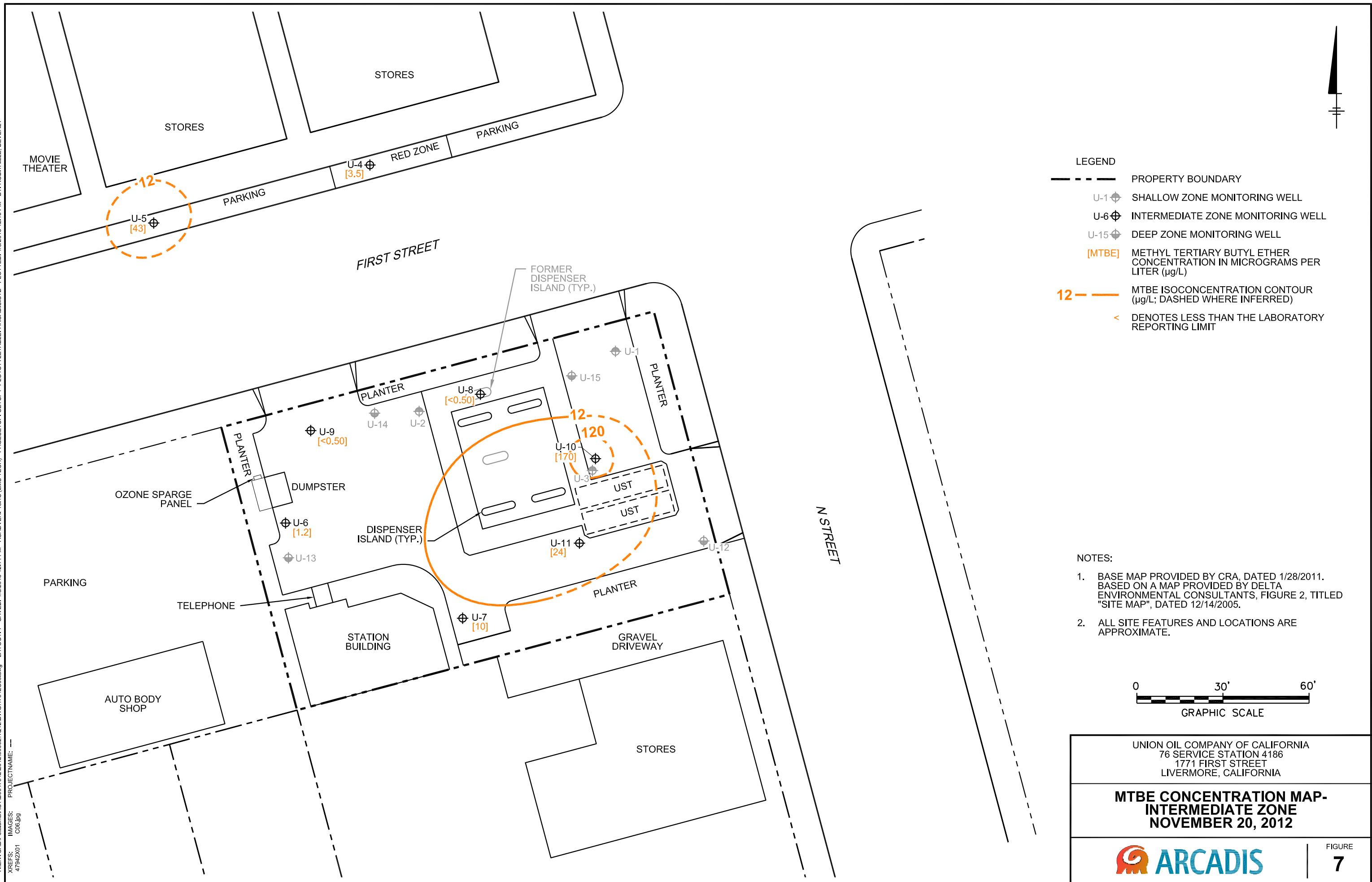
FIGURE
1

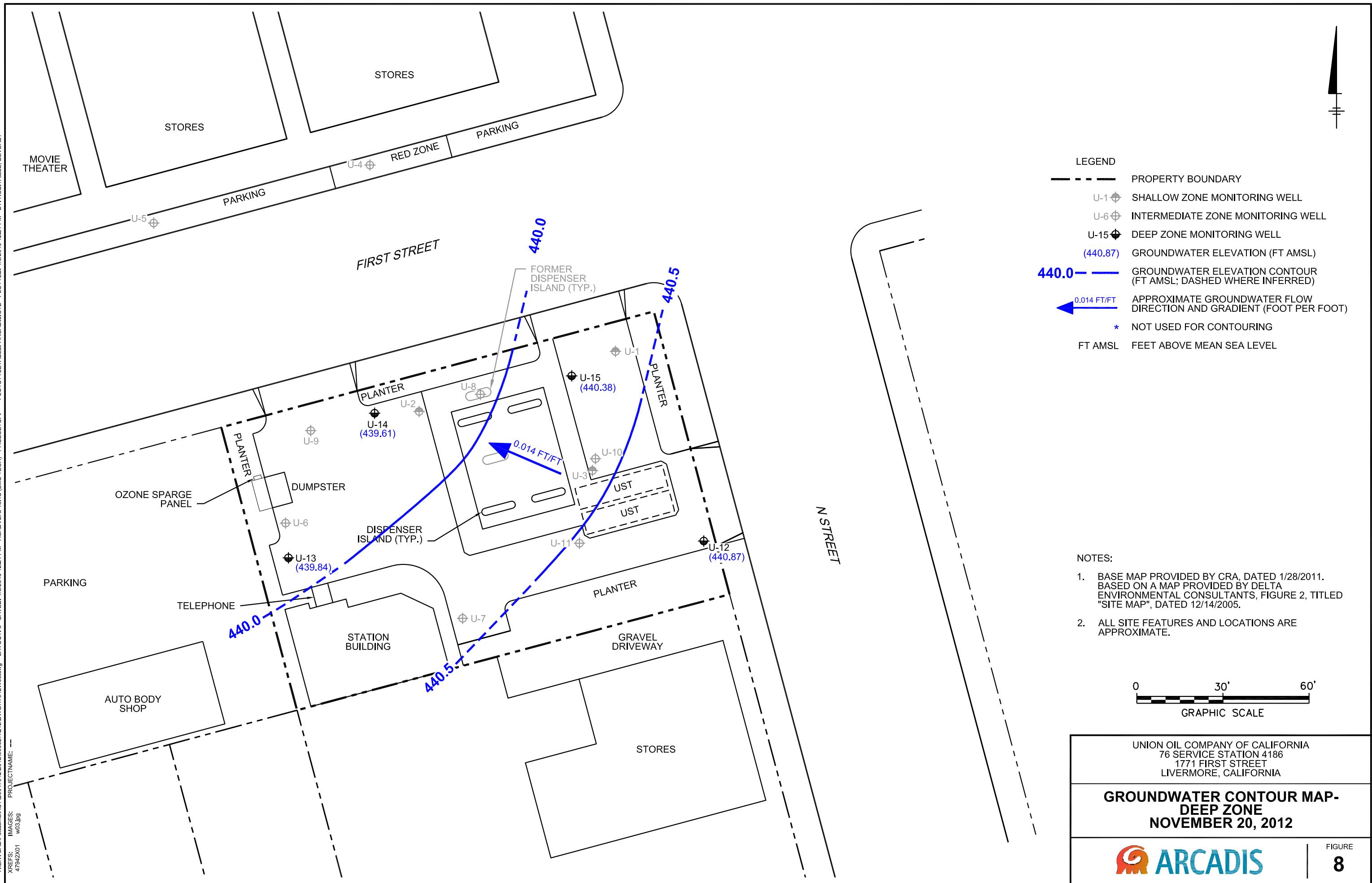


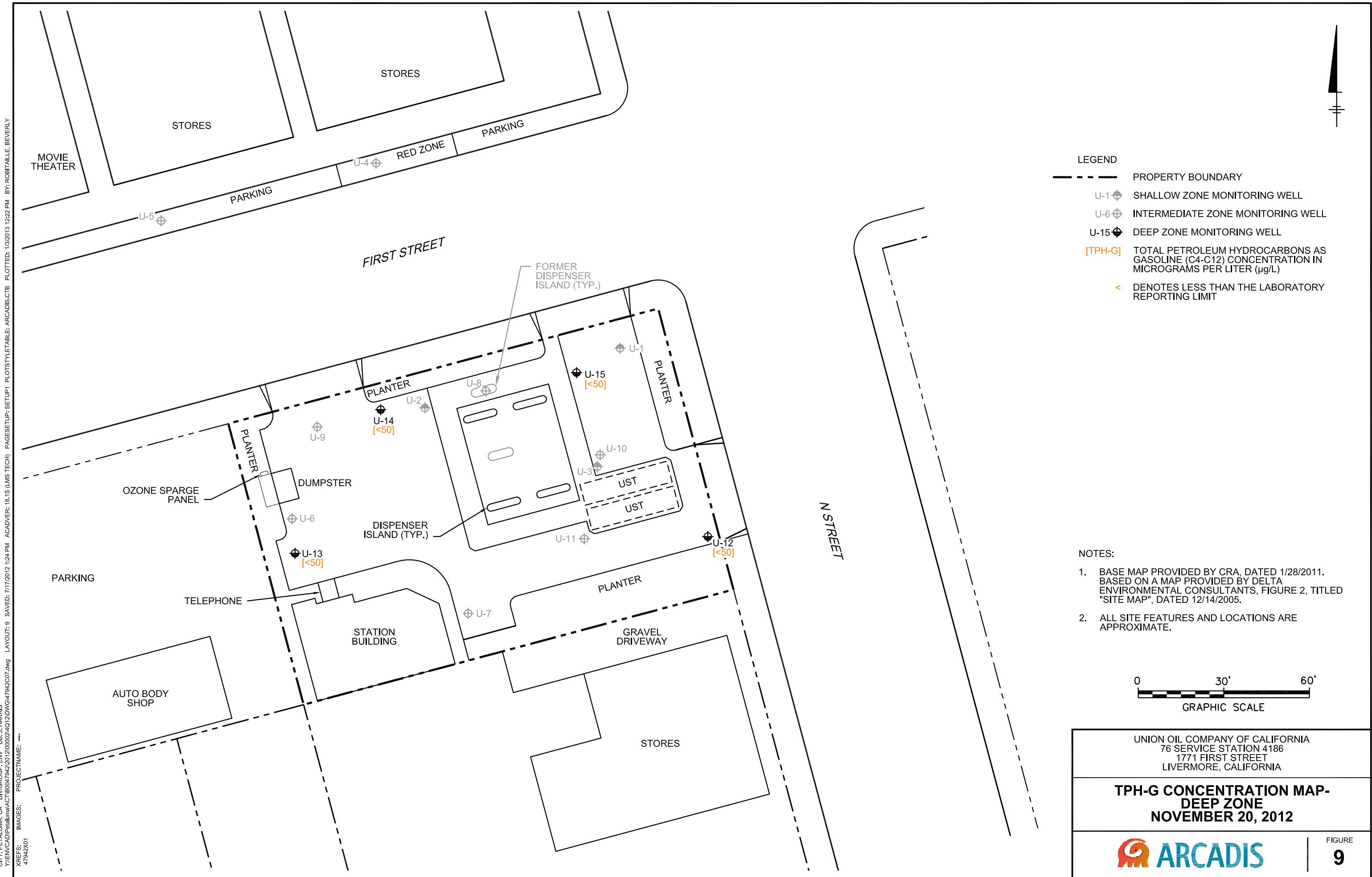


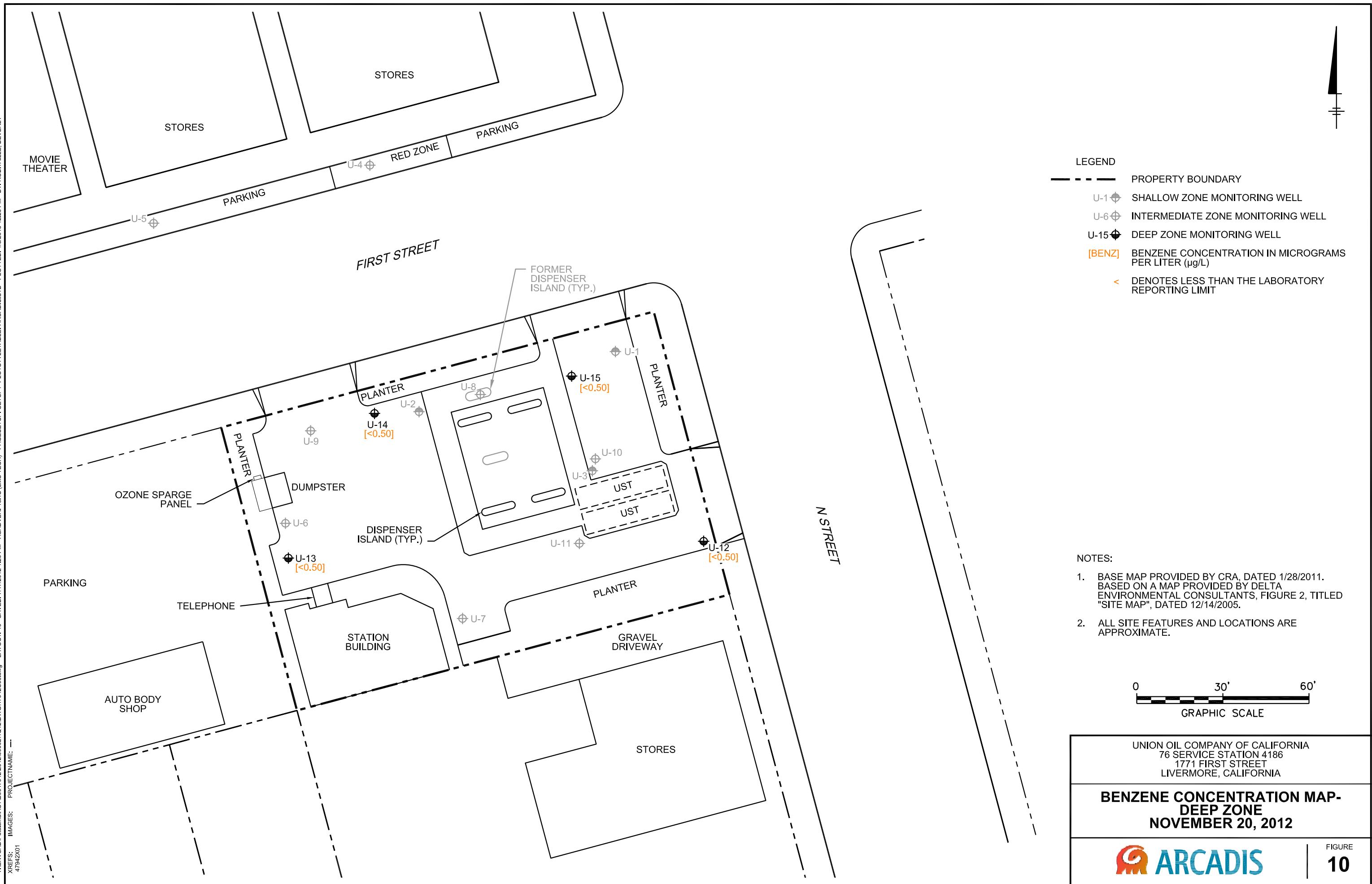


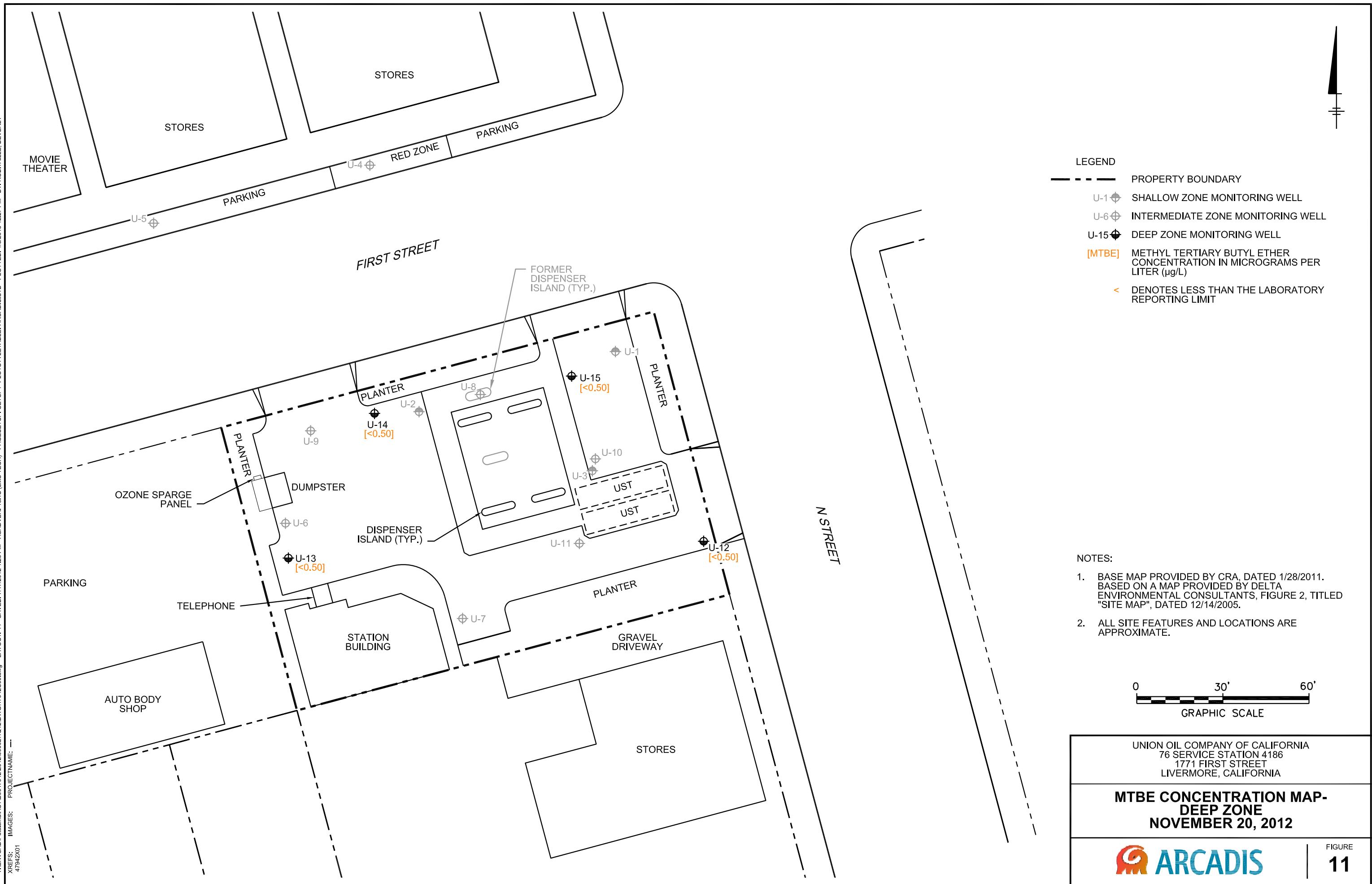












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Tables

Table 1
Current Groundwater Gauging and Analytical Results
Unocal Site 4186
1771 First Street, Livermore, California

Well ID	Date Sampled	TOC Elevation (feet MSL)	DTW bTOC (feet)	LPH Thickness (feet)	GW Elevation (feet MSL)	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	TAME	ETBE	DIPE	EDB	EDC	Ethanol	Comments
Shallow																			
U-1 ^a	11/20/2012	480.29	33.16	--	447.13	--	--	--	--	--	--	--	--	--	--	--	--	a	
U-2 ^a	11/20/2012	479.45	32.47	--	446.98	--	--	--	--	--	--	--	--	--	--	--	--	a	
U-3 ^a	11/20/2012	480.48	33.53	--	446.95	--	--	--	--	--	--	--	--	--	--	--	--	a	
Intermediate																			
U-4	11/20/2012	478.95	40.53	--	438.42	<50	<0.50	<0.50	<0.50	<1.0	3.5	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
U-5	11/20/2012	478.52	40.60	--	437.92	<50	<0.50	<0.50	<0.50	<1.0	43	27	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
U-6	11/20/2012	480.40	39.75	--	440.65	1,400	3.6	<0.50	0.68	<1.0	1.2	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
U-7	11/20/2012	480.78	39.27	--	441.51	1,000	0.78	<0.50	0.5	<1.0	10	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
U-8	11/20/2012	480.43	37.41	--	443.02	790	6.6	0.50	6.1	6.8	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
U-9	11/20/2012	479.39	39.69	--	439.70	2,100	12	2.2	4.9	2.6	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
U-10	11/20/2012	480.51	39.92	--	440.59	4,000	330	7.5	370	92	170	3,000	<2.5	<2.5	<2.5	<2.5	<2.5	<1200	
U-11	11/20/2012	480.34	37.22	--	443.12	340	<0.50	<0.50	<0.50	<1.0	24	4,500	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
Deep																			
U-12	11/20/2012	480.75	39.88	--	440.87	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
U-13	11/20/2012	480.31	40.47	--	439.84	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
U-14	11/20/2012	479.38	39.77	--	439.61	<50	<0.50	<0.50	<0.50	<1.0	<0.50	23	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
U-15	11/20/2012	479.99	39.61	--	440.38	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	

Notes

- not applicable
- < not detected at or above laboratory detection limit
- a Insufficient water, no sample collected
- b PQL's and MDL's were raised due to sample dilution.

Bold Detected above the laboratory reporting limit

Analytical results given in micrograms per liter ($\mu\text{g/l}$) unless otherwise noted

USEPA Method 8260B for TPH-g/BTEX/MTBE/Oxygenates

Standard Abbreviations

$\mu\text{g/l}$	micrograms per liter (approx. equivalent to parts per billion, ppb)
bTOC	below top of casing
DIPE	di-isopropyl ether
DTW	depth to water
EDB	1,2-dibromoethane
EDC	1,2-dichloroethane (same as ethylene dichloride)
ETBE	ethyl tertiary butyl ether
GW	groundwater
LPH	liquid-phase hydrocarbons
MSL	relative to mean sea level
MTBE	methyl tertiary butyl ether
TAME	tertiary amyl methyl ether
TBA	tertiary butyl alcohol
TOC	top of casing (surveyed reference elevation)
TPH-G	total petroleum hydrocarbons as gasoline (C6-C12), analyzed as TPPH by (GC/MS)

Table 1a
Current Additional Groundwater Analytical Results
Unocal Site 4186
1771 First Street, Livermore, California

Well ID	Date Sampled	EC @ 25°C (µS/cm)	DO (mg/l)	ORP (mV)	Nitrate as NO ₃ (mg/l)	Sulfate (mg/l)	Dissolved Ferrous Iron (µg/L)	Methane (mg/L)	Dissolved Calcium (mg/l)	Dissolved Magnesium (mg/L)	Dissolved Sodium (mg/L)	Dissolved Potassium (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Total Dissolved Solids (mg/L)	Dissolved Antimony (µg/L)	Dissolved Arsenic (µg/L)	Hexavalent Chromium (µg/L)
Shallow Zone																		
U-1 ^a	11/20/2012	--	2.61	-195	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-2 ^a	11/20/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-3 ^a	11/20/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Intermediate Zone																		
U-4	11/20/2012	966.7	1.54	218	2.0	32	<100	<0.0010	61	86	33	2.2	43	0.10	610	<100	<50	<2.0
U-5	11/20/2012	913.6	0.76	219	1.5	23	<100	0.0051	--	--	--	--	--	--	--	--	--	--
U-6	11/20/2012	1,478	0.54	-41	<0.44	31	270	1.1	--	--	--	--	--	--	--	--	--	--
U-7	11/20/2012	1,014	1.90	-33	<0.44	1.4	140	0.79	--	--	--	--	--	--	--	--	--	--
U-8	11/20/2012	1,005	2.21	-87	0.63	19	<100	2.7	38	66	51	1.5	85	0.11	510	<100	<50	<2.0
U-9	11/20/2012	1,030	0.90	-156	<0.44	<1.0	130	3.0	41	77	52	1.2	74	0.13	550	<100	<50	<2.0
U-10	11/20/2012	1,225	0.99	-121	<0.44	<1.0	<100	6.3^b	49	100	53	3.0	55	0.16	660	<100	<50	<2.0
U-11	11/20/2012	1,610	2.20	13	<0.44	350	190	2.4	74	180	57	1.8	110	0.22	1,200	<100	<50	<2.0
Deep Zone																		
U-12	11/20/2012	887.3	3.40	194	24	53	<100	<0.0010	--	--	--	--	--	--	--	--	--	--
U-13	11/20/2012	899.4	1.94	144	25	55	<100	<0.0010	37	65	57	12	85	0.12	910	<100	<50	6.3
U-14	11/20/2012	962.4	3.07	-8	10.0	17.0	<100	0.016	--	--	--	--	--	--	--	--	--	--
U-15	11/20/2012	964.4	3.44	41	25	53	<100	0.0033	42	62	53	9.4	87	0.13	540	<100	<50	6.3

Notes

-- not applicable
 < not detected at or above laboratory detection limit
^a Insufficient water, no sample collected
^b PQL's and MDL's were raised due to sample dilution.

Bold detected above the laboratory reporting limit

USEPA Method 300.0 for sulfate and nitrate as NO₃

Method SM-3500-FeD for Dissolved Ferrous Iron (Fe II)

USEPA Method 160.1 for total dissolved solids

USEPA Method 7196 for hexavalent chromium

EC, DO and ORP using field measurement

Standard Abbreviations

µS/cm	microSiemens per centimeter
µg/l	micrograms per liter (approx. equivalent to parts per billion, ppb)
mg/l	milligrams per liter (approx. equivalent to parts per million, ppm)
mV	millivolts
DO	dissolved oxygen
EC	electrical conductivity
ORP	oxidation reduction potential

Table 1a
Current Additional Groundwater Analytical Results
Unocal Site 4186
1771 First Street, Livermore, California

Well ID	Date Sampled	Dissolved Barium (µg/L)	Dissolved Beryllium (µg/L)	Dissolved Cadmium (µg/L)	Dissolved Chromium (µg/L)	Dissolved Cobalt (µg/L)	Dissolved Copper (µg/L)	Dissolved Lead (µg/L)	Dissolved Manganese (µg/L)	Dissolved Mercury (µg/L)	Dissolved Molybdenum (µg/L)	Dissolved Nickel (µg/L)	Dissolved Selenium (µg/L)	Dissolved Silver (µg/L)	Dissolved Thallium (µg/L)	Dissolved Vanadium (µg/L)	Dissolved Zinc (µg/L)
Shallow Zone																	
U-1 ^a	11/20/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-2 ^a	11/20/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-3 ^a	11/20/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Intermediate Zone																	
U-4	11/20/2012	450	<10	<10	<10	<50	<10	<50	110	<0.20	<50	<10	<100	<10	<100	<10	<10
U-5	11/20/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-6	11/20/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-7	11/20/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-8	11/20/2012	410	<10	<10	<10	<50	<10	<50	1,400	<0.20	<50	<10	<100	<10	<100	<10	<10
U-9	11/20/2012	370	<10	<10	<10	<50	<10	<50	2,300	<0.20	<50	<10	<100	<10	<100	<10	<10
U-10	11/20/2012	490	<10	<10	<10	<50	<10	<50	1,900	<0.20	<50	<10	<100	<10	<100	<10	<10
U-11	11/20/2012	95	<10	<10	<10	<50	<10	<50	3,500	<0.20	<50	<10	<100	<10	<100	<10	<10
Deep Zone																	
U-12	11/20/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-13	11/20/2012	240	<10	<10	<10	<50	<10	<50	<10	<0.20	<50	<10	<100	<10	<100	<10	<10
U-14	11/20/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-15	11/20/2012	290	<10	<10	<10	<50	<10	<50	<10	<0.20	<50	<10	<100	<10	<100	<10	<10

Notes

- not applicable
- < not detected at or above laboratory detection limit
- ^a Insufficient water, no sample collected
- ^b PQL's and MDL's were raised due to sample dilution.

Bold detected above the laboratory reporting limit

USEPA Method 300.0 for sulfate and nitrate as NO₃

Method SM-3500-FeD for Dissolved Ferrous Iron (Fe II)

USEPA Method 160.1 for total dissolved solids

USEPA Method 7196 for hexavalent chromium

EC, DO and ORP using field measurement

Standard Abbreviations

- | | |
|-------|---|
| µS/cm | microSiemens per centimeter |
| µg/l | micrograms per liter (approx. equivalent to parts per billion, ppb) |
| mg/l | milligrams per liter (approx. equivalent to parts per million, ppm) |
| mV | millivolts |
| DO | dissolved oxygen |
| EC | electrical conductivity |
| ORP | oxidation reduction potential |

Table 1a
Current Additional Groundwater Analytical Results
Unocal Site 4186
1771 First Street, Livermore, California

Well ID	Date Sampled	Total Antimony (µg/L)	Total Arsenic (µg/L)	Total Barium (µg/L)	Total Beryllium (µg/L)	Total Cadmium (µg/L)	Total Chromium (µg/L)	Total Cobalt (µg/L)	Total Copper (µg/L)	Total Lead (µg/L)	Total Mercury (µg/L)	Total Molybdenum (µg/L)	Total Nickel (µg/L)	Total Selenium (µg/L)	Total Silver (µg/L)	Total Thallium (µg/L)	Total Vanadium (µg/L)	Total Zinc (µg/L)
Shallow Zone																		
U-1 ^a	11/20/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-2 ^a	11/20/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-3 ^a	11/20/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Intermediate Zone																		
U-4	11/20/2012	<100	180	7,600	12	<10	3,100	1,100	1,500	330	<0.20	<50	11,000	<100	<10	<100	1,000	2,000
U-5	11/20/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-6	11/20/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-7	11/20/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-8	11/20/2012	<100	70	1,400	<10	<10	400	140	220	85	<0.20	<50	1,300	<100	<10	<100	190	330
U-9	11/20/2012	<100	<50	1,700	<10	<10	490	170	270	86	<0.20	<50	1,700	<100	<10	<100	210	410
U-10	11/20/2012	<100	<50	1,200	<10	<10	340	88	150	50	<0.20	<50	1,300	<100	<10	<100	120	220
U-11	11/20/2012	<100	<50	1,000	<10	<10	170	<50	100	<50	<0.20	<50	540	<100	<10	<100	84	160
Deep Zone																		
U-12	11/20/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-13	11/20/2012	<100	<50	300	<10	<10	<10	<50	<10	<50	<0.20	<50	<10	<100	<10	<100	<10	<50
U-14	11/20/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-15	11/20/2012	<100	<50	350	<10	<10	<10	<50	<10	<50	<0.20	<50	<10	<100	<10	<100	<10	<50

Notes

-- not applicable
 < not detected at or above laboratory detection limit
 a Insufficient water, no sample collected
 b PQL's and MDL's were raised due to sample dilution.

Bold detected above the laboratory reporting limit

USEPA Method 300.0 for sulfate and nitrate as NO₃

Method SM-3500-FeD for Dissolved Ferrous Iron (Fe II)

USEPA Method 160.1 for total dissolved solids

USEPA Method 7196 for hexavalent chromium

EC, DO and ORP using field measurement

Standard Abbreviations

µS/cm microSiemens per centimeter
 µg/l micrograms per liter (approx. equivalent to parts per billion, ppb)
 mg/l milligrams per liter (approx. equivalent to parts per million, ppm)
 mV millivolts
 DO dissolved oxygen
 EC electrical conductivity
 ORP oxidation reduction potential

ARCADIS

Attachment A

Field Data Sheets and General Procedures



**123 Technology Drive
Irvine, California 92618**

**949.727.9336 PHONE
949.727.7399 FAX**

www.TRCsolutions.com

DATE: November 29, 2012
TO: Katherine Brandt, ARCADIS
SITE: Unocal Site 4186
Facility 351721
1771 First Street, Livermore, CA
RE: Transmittal of Groundwater Monitoring Data

Please find attached the field data sheets, chain of custody (COC) forms, and technical services request (TSR) form for the monitoring event that was completed on November 20, 2012. Field measurements and collection of samples submitted to the laboratory were completed in general accordance with our usual groundwater monitoring protocol which is also attached for your reference.

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

Sincerely,

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

Anju Farfan
Groundwater Program Operations Manager

GENERAL FIELD PROCEDURES

Groundwater Gauging and Sampling Assignments

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

Fluid Level Measurements (Gauging)

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

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

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

Purging and Groundwater Parameter Measurement

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

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

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

Groundwater Sample Collection

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

GENERAL FIELD PROCEDURES

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

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

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

Sequence of Gauging, Purging and Sampling

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

Decontamination

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

Purge Water Disposal

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

Exceptions

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

FIELD MONITORING DATA SHEET

Technician: A. Vidules

Job #/Task #: 189791.0035.1721

Date: 11/20/12

Site # 4186

Project Manager AF

Page 2 of 2



FIELD MONITORING DATA SHEET

Technician: Joe

Job #/Task #: 189791.0035.1721

Date: 11/20/12

Site # 4186

Project Manager A. Farfan

Page 1 of 2



GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Howers

Site: 4186

Project No.: 189791.0035.1721

Date: 11/20/12

Well No. V-1

Purge Method: HB

Depth to Water (feet): 33.16

Depth to Product (feet): —

Total Depth (feet) 33.96

LPH & Water Recovered (gallons): —

Water Column (feet): 0.80

Casing Diameter (Inches): 2

80% Recharge Depth(feet): 33.32

1 Well Volume (gallons): 0.15

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity ($\mu\text{S}/\text{cm}$)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
			<u>0.15</u>				<u>2.61</u>	<u>-195</u>	<u>120</u>
			<u>0.30</u>						
			<u>0.45</u>						
Static at Time Sampled			Total Gallons Purged			Sample Time			
						<u>N/S</u>			

Comments: Well went dry while collecting pre-purge readings. Did not recover in 2 hours. Insufficient water, did not collect sample.

Well No. V-8

Purge Method: Sub

Depth to Water (feet): 37.41

Depth to Product (feet): —

Total Depth (feet) 44.77

LPH & Water Recovered (gallons): —

Water Column (feet): 7.36

Casing Diameter (Inches): 2

80% Recharge Depth(feet): 38.88

1 Well Volume (gallons): 2

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity ($\mu\text{S}/\text{cm}$)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0950	0954	<u>2</u>	<u>1005</u>	<u>21.2</u>	<u>7.12</u>	<u>2.21</u>	<u>-67</u>	<u>1000</u>	
		<u>4</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
		<u>6</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Static at Time Sampled			Total Gallons Purged			Sample Time			
			<u>3</u>			<u>1225</u>			

Comments: Dry off 3 gals., did not recover in 45 minutes.

GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Vanders

Site: 4186

Project No.: 189791.0035.1721

Date: 11/20/12

Well No. V-14

Purge Method: Sub

Depth to Water (feet): 39.77

Depth to Product (feet):

Total Depth (feet) 71.68

LPH & Water Recovered (gallons):

Water Column (feet): 31.90

Casing Diameter (Inches): 4

80% Recharge Depth(feet): 46.16

1 Well Volume (gallons): 22

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity ($\mu\text{S}/\text{cm}$)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0816		45	22	953.4	19.7	7.45	2.72	-55	13
			44	959.3	19.9	7.41	2.87	-16	23
0839		↓	66	962.4	19.9	7.41	3.07	-15	12
Static at Time Sampled			Total Gallons Purged			Sample Time			
39.89			66			0847			
Comments:									

Well No. V-15

Purge Method: Sub

Depth to Water (feet): 39.61

Depth to Product (feet):

Total Depth (feet) 71.43

LPH & Water Recovered (gallons):

Water Column (feet): 31.82

Casing Diameter (Inches): 4

80% Recharge Depth(feet): 45.97

1 Well Volume (gallons): 22

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity ($\mu\text{S}/\text{cm}$)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0904		45	22	969.3	20.6	7.54	3.28	28	19
			44	963.4	21.2	7.49	3.08	34	11
0926		↓	66	964.4	21.3	7.49	3.31	38	9.9
Static at Time Sampled			Total Gallons Purged			Sample Time			
39.87			66			0934			
Comments:									

GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Vidwers

Site: 4186

Project No.: 109791.0035.1721

Date: 11/20/12

Well No. U-9

Purge Method: HB

Depth to Water (feet): 39.69

Depth to Product (feet): —

Total Depth (feet) 44.85

LPH & Water Recovered (gallons): —

Water Column (feet) 5.16

Casing Diameter (Inches): 2

80% Recharge Depth(feet): 40.72

1 Well Volume (gallons): 1

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity ($\mu\text{S}/\text{cm}$)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
1000		1	1037	20.8	7.05	1.12	-158	-161	OR
		2	1031	20.6	7.05	0.99	-157	-157	OR
1012		3	1030	20.5	7.08	0.90	-156	-156	OR
Static at Time Sampled			Total Gallons Purged			Sample Time			
41.21			3			1241			
Comments: Did not recover in 2 hours									

Well No. U-10

Purge Method: Sub

Depth to Water (feet): 39.92

Depth to Product (feet): —

Total Depth (feet) 47.02

LPH & Water Recovered (gallons): —

Water Column (feet) 7.10

Casing Diameter (Inches): 2

80% Recharge Depth(feet): 41.34

1 Well Volume (gallons): 2

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity ($\mu\text{S}/\text{cm}$)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
1039	1045	46.5	2	1139	20.0	7.26	1.26	-133	750
1045		↓	4	1142	20.6	7.22	0.89	-136	OR
1108	1111	↓	6	1225	19.6	7.15	0.79	-121	OR
Static at Time Sampled			Total Gallons Purged			Sample Time			
41.01			6			1207			
Comments: Dry at 4 gals., recharged within 45 minutes									

GROUNDWATER SAMPLING FIELD NOTES

Technician: JOE

Site: 4186

Project No.: 139791.0035.172-1

Date: 11/20/12

Well No. U-12

Purge Method: Sub

Depth to Water (feet): 39.88

Depth to Product (feet): —

Total Depth (feet) 74.30

LPH & Water Recovered (gallons): —

Water Column (feet): 34.42

Casing Diameter (Inches): 4"

80% Recharge Depth(feet): 46.76

1 Well Volume (gallons): 23

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity ($\mu\text{S}/\text{cm}$)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
1051		45'	23	888.8	19.8	7.60	3.12	189	22.86
		↓	46	887.4	19.7	7.51	3.37	191	8.49
1112		↓	69	887.3	19.9	7.40	3.40	194	4.47
Static at Time Sampled			Total Gallons Purged			Sample Time			
39.88			69			1202			
Comments:									

Well No. U-13

Purge Method: Sub

Depth to Water (feet): 40.47

Depth to Product (feet): —

Total Depth (feet) 73.02

LPH & Water Recovered (gallons): —

Water Column (feet): 33.00

Casing Diameter (Inches): 4"

80% Recharge Depth(feet): 46.62

1 Well Volume (gallons): 22

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity ($\mu\text{S}/\text{cm}$)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0955		53'	22	893.1	19.3	7.35	1.78	131	1.75
		↓	44	898.2	19.1	7.34	1.93	140	3.29
1020		↓	66	899.4	19.2	7.49	1.94	144	1.94
Static at Time Sampled			Total Gallons Purged			Sample Time			
40.55			66			1035			
Comments:									

GROUNDWATER SAMPLING FIELD NOTES

Technician: JOE

Site: 4186

Project No.: 189791.0035.1721

Date: 11/20/12

Well No. 4-4

Purge Method: HB

Depth to Water (feet): 40.53

Depth to Product (feet): —

Total Depth (feet) 44.85

LPH & Water Recovered (gallons): —

Water Column (feet) 4.32

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): TL 41.39

1 Well Volume (gallons): 1

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity ($\mu\text{S}/\text{cm}$)	Temperature (F C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0828			1	955.3	19.6	7.04	1.68	218	982.5
			2	959.0	19.7	7.00	1.62	217	1100
	0836		3	966.7	19.8	6.96	1.54	218	1000
Static at Time Sampled			Total Gallons Purged			Sample Time			
41.39			3			0858			
Comments:									

Well No. 4-7

Purge Method: HB

Depth to Water (feet): 39.27

Depth to Product (feet): —

Total Depth (feet) 44.90

LPH & Water Recovered (gallons): —

Water Column (feet) 5.13

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 40.29

1 Well Volume (gallons): 1

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity ($\mu\text{S}/\text{cm}$)	Temperature (F C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0909			1	1011	19.5	6.93	0.59	-30	182.1
			2	1011	19.5	6.91	0.73	-31	173.4
	0920		3	1014	19.6	6.92	1.90	-33	782.1
Static at Time Sampled			Total Gallons Purged			Sample Time			
41.66			3			1218			
Comments: Dry at 3 gpm, did not recharge in 2 hrs									

GROUNDWATER SAMPLING FIELD NOTES

Technician: JOE

Site: 4186

Project No.: 189791.0035.1721

Date: 11/20/12

Well No. U-5

Purge Method: HB

Depth to Water (feet): 40.60

Depth to Product (feet):

Total Depth (feet) 46.98

LPH & Water Recovered (gallons):

Water Column (feet) 6.38

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 41.87

1 Well Volume (gallons): 1

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity ($\mu\text{S}/\text{cm}$)	Temperature ($^{\circ}\text{F}, \text{C}$)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0757		1	921.7	19.5	7.41	0.74	219	222	221.0
		2	920.6	19.4	7.12	0.71	219	219	1100
0808		3	913.6	19.0	7.03	0.76	219	219	771.5
Static at Time Sampled			Total Gallons Purged			Sample Time			
41.71			3			0816			
Comments:									

Well No. U-11

Purge Method: SUB

Depth to Water (feet): 37.22

Depth to Product (feet):

Total Depth (feet) 44.78

LPH & Water Recovered (gallons):

Water Column (feet): 7.56

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 39.73

1 Well Volume (gallons): 2

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity ($\mu\text{S}/\text{cm}$)	Temperature ($^{\circ}\text{F}, \text{C}$)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
1117	1119	2	1610	19.8	6.70	2.20	13	39	726.8
		4	—	—	—	—	—	—	—
		6	—	—	—	—	—	—	—
Static at Time Sampled			Total Gallons Purged			Sample Time			
41.15			3			1319			
Comments: Dry at 399 G.S. did not recharge in 2 Hrs.									

GROUNDWATER SAMPLING FIELD NOTES

Technician: JOE

Site: 4186

Project No.: 189791.0036.1721

Date: 11/20/12

Well No. U-6

Depth to Water (feet): 39.75

Total Depth (feet) 41.45

Water Column (feet): 1.70

80% Recharge Depth(feet): 40.09

Purge Method: HB

Depth to Product (feet): —

LPH & Water Recovered (gallons): —

Casing Diameter (Inches): 2"

1 Well Volume (gallons): .28

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity ($\mu\text{S}/\text{cm}$)	Temperature (F C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge									
0932		.28	1475	19.8	6.63	0.50	-31	66.78	
		.56	1477	19.8	6.65	0.52	-41	739.5	
0939		.84	1478	19.8	6.63	0.54	-41	742.3	
Static at Time Sampled		Total Gallons Purged			Sample Time				
40.03		.84			12.32				
Comments:									

Well No. _____

Purge Method: _____

Depth to Water (feet): _____

Depth to Product (feet): _____

Total Depth (feet) _____

LPH & Water Recovered (gallons): _____

Water Column (feet): _____

Casing Diameter (Inches): _____

80% Recharge Depth(feet): _____

1 Well Volume (gallons): _____

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

STATEMENT OF NON-COMPLETION OF JOB

DATE OF EVENT: 10 11/20/12 SITE ID: 4186

TECH: A. Vidlers CALLED SUPERVISOR: YES / NO

CALLED PM: YES / NO NAME OF PM: _____

WELL ID: U-2, U-3

Dry wells

WELL ID: U-1

Well went dry after while collecting pre-purge readings,
did not recover with any water. Unable to collect
samples.

WELL ID: _____

WELL BOX CONDITION REPORT

SITE NO.

ADDRESS

DATE

4136

ADDRESS 1771 FIRST ST.

DATE 11/20/12

PERFORMED BY:

JOE

PAGE 1 OF 2

DATE	11/07/12	Comments	
		USA Marketed Well	System Well
		Saw Cut Needed	
		Street Well	
		Paved Over	
		Foundation Damaged	
		Unable to Locate	
		Unable to Access	
		Well Box Is Below Grade	
		Well Box Is Exposed	
		Broken Lid	
		Missing Lid	
		Seal Damaged	
		# of Missing Bolts	
		# of Broken Bolts	
		# of Broken Ears	
		# of Stripped Ears	
		# of Ears	
		Current Well Box Size	
		Well Name	

WELL BOX CONDITION REPORT

SITE NO.

ADDRESS

DATE

4196

SITE NO. 1103
ADDRESS 1771 First St., Livermore, CA
DATE 11/26/12

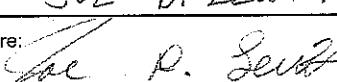
PERFORMED BY:

A. Viduosa
PAGE 2 OF 2

CHAIN OF CUSTODY FORM

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

COC 1 of 2

Union Oil Site ID:	4186			Union Oil Consultant:	Arcadis			ANALYSES REQUIRED														
Site Global ID:	T0600101777			Consultant Contact:	Kathy Brandt			Turnaround Time (TAT):														
Site Address:	1771 FIRST ST. Livermore			Consultant Phone No.:	510-596-9675			Standard <input checked="" type="checkbox"/> 24 Hours <input type="checkbox"/>														
Union Oil PM:	Roya Kambin			Sampling Company:	TRC			48 Hours <input type="checkbox"/> 72 Hours <input type="checkbox"/>														
Union Oil PM Phone No.:	925-790-6270			Sampled By (PRINT):	JOE D. LEWIS			Special Instructions														
Charge Code: NWRTB-0	351721 -0-LAB			Sampler Signature:																		
This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.					BC Laboratories, Inc.																	
SAMPLE ID					Project Manager: Molly Meyers 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911																	
Field Point Name	Matrix	DTW	Date (ymmdd)	Sample Time	# of Containers		TPH - Diesel by EPA 8015	TPH - G by GC/MS (C6 - C12)	BTEX/MTBE/OXYs by EPA 8260B	Ethanol by EPA 8260B, EOB/E DC b18260B	EPA 8260B Full List with OXYS	Sulfate, Nitrate, Methane by EPA 8015P	Dissolved Solids Iron by 3500/24B	Hexavalent Chromium by 6010,	TDS by 1601	Dissolved CRM 17 metals, Chloride / Silver Oxide	Dissolved Metals CRM Na, Mg, K, Mn	Total CRM 17 metals	Notes / Comments			
U-12	W-S-A		12/11/20	1202	7		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
U-13	W-S-A			1035	9																	
U-4	W-S-A			0858	9																	
U-7	W-S-A			1218	7																	
U-5	W-S-A			0816	7																	
U-11	W-S-A			1319	9																	
U-6	W-S-A		↓	1232	7		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
U-14	W-S-A			0847	7																	
U-15	W-S-A			0934	9																	
U-8	W-S-A			1223	9																	
U-9	W-S-A			1241	9																	
U-10	W-S-A		↓	1207	9		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
Relinquished By	Company	Date / Time:		1500	Relinquished By	Company	Date / Time:		Relinquished By										Company	Date / Time:		
	TRC	11/20/12																				
Received By	Company	Date / Time:			Received By	Company	Date / Time:		Received By										Company	Date / Time:		
		11/20/12																				

TRC SOLUTIONS
TECHNICAL SERVICES REQUEST FORM

15-Oct-12

Site ID: 4186
Address 1771 First Street
City: Livermore
Cross Street: South N St.

Project No.: 189791.0035.1721 / 00TA01
Client: Roya Kambin
Contact #: 925-790-6270
PM: Kathy Brandt Arcadis
PM Contact #: 510-596-9675

Total number of wells: 15 **Min. Well Diameter (in.):** 2 **# of Techs, # of Hrs:** 2, 6
Depth to Water (ft.): 33 **Max. Well Diameter (in.):** 2 **Travel Time (hrs):**
Max. Well Depth (ft.): 47 **Hotel PO#:**

ACTIVITIES:	Frequency	Notes
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:	<input checked="" type="checkbox"/>	
Other Activities:	<input type="checkbox"/>	
Traffic Control:	<input checked="" type="checkbox"/>	City of Livermore

Permit Number

PERMIT INFORMATION:

NOTIFICATIONS:

Thomas T. Vadakkekunnel, station owner, CTV Enterprises: 925-455-0919

SITE INFORMATION:

Take field measurements after each casing volume purged.

Ozone sparge system on site. O&M company is EnvironStrategies. If there are any problems with the system please call Darren Azarian @ 818-968-5864.

TRC SOLUTIONS
TECHNICAL SERVICES REQUEST FORM

15-Oct-12

Site ID: 4186
Address 1771 First Street
City: Livermore
Cross Street: South N St.

Project No.: 189791.0035.1721 / 00TA01
Client: Roya Kambin
Contact #: 925-790-6270
PM: Kathy Brandt
PM Contact #: 510-596-9675 Arcadis

LAB INFORMATION:

Global ID: T0600101777
Lab WO: 351721

Lab Used: BC Labs

Lab Notes: Lab Analyses for all wells:
TPH-G by GC/MS (C6-C12), BTEX/MTBE/OXYS by 8260B, EDB/EDC by 8260B, Ethanol by 8260B [Containers: 3 voas w/HCl]
Sulfate, Nitrate [Container: one 1L plastic unpreserved]
Dissolved Ferrous Iron by 350FE+B [Container: one 500 mL poly unpreserved]
Methane by EPA 8015B [containers: 2 unpreserved voas]

Additional Analyses for wells U-1, U-2, U-4, U-8, U-9, U-10, U-11, U-13 and U-15:
Hexavalent Chromium by 6010, TDS by 160.1, Dissolved CAM 17 Metals, Chloride, Fluoride, Dissolved Metals (Ca, Na, Mg, K, Mn) [Container: one 1L plastic unpreserved]
Total CAM 17 Metals [Container: one 1Pt poly w/HNO3]

TRC SOLUTIONS

TECHNICAL SERVICES REQUEST FORM

15-Oct-12

Site ID: 4186
Address: 1771 First Street
City: Livermore
Cross Street South N St.

Well IDs	Benz.	MTBE	Gauging				Sampling				Field Measurements			Comments
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Pre-Purge	Post-Purge	Type	
U-2	0	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D.O., ORP, Turbidity	2" casing
U-15	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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D.O., ORP, Turbidity	
U-14	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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D.O., ORP, Turbidity	
U-13	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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D.O., ORP, Turbidity	
U-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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D.O., ORP, Turbidity	
U-1	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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D.O., ORP, Turbidity	2" casing
U-4	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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D.O., ORP, Turbidity	2" casing
U-7	0	17	<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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D.O., ORP, Turbidity	2" casing
U-5	0	54	<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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D.O., ORP, Turbidity	2" casing
U-8	2.2	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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D.O., ORP, Turbidity	
U-3	4.9	39	<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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D.O., ORP, Turbidity	2" casing
U-11	7.3	72	<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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D.O., ORP, Turbidity	
U-6	11	24	<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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D.O., ORP, Turbidity	2" casing
U-9	15	1	<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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D.O., ORP, Turbidity	
U-10	230	130	<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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D.O., ORP, Turbidity	

ARCADIS

Attachment B

Historical Groundwater Results from TRC

Table 1
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

December 20, 2010
76 Station 4186

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)		TPH-G 8015 ($\mu\text{g/l}$)	TPH-G (GC/MS) ($\mu\text{g/l}$)		Ethyl-benzene ($\mu\text{g/l}$)	Total Xylenes ($\mu\text{g/l}$)	MTBE (8021B) ($\mu\text{g/l}$)	MTBE (8260B) ($\mu\text{g/l}$)	Comments
				Water Elevation (feet)	Change in Elevation (feet)		Benzene ($\mu\text{g/l}$)	Toluene ($\mu\text{g/l}$)					
U-1													
12/20/2010	480.29	28.90	0	451.39	2.45	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
U-2													
12/20/2010	479.45	25.99	0	453.46	4.79	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
U-3													
12/20/2010	480.48	29.58	0	450.90	0.33	--	1100	5.1	ND<0.50	ND<0.50	ND<1.0	--	49
U-4													
12/20/2010	478.95	34.57	0	444.38	-0.67	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	7.5
U-5													
12/20/2010	478.52	34.67	0	443.85	-0.84	--	51	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	52
U-6													
12/20/2010	480.40	34.49	0	445.91	-1.12	--	2000	29	2.9	94	10	--	12
U-7													
12/20/2010	480.78	33.53	0	447.25	0.31	--	1600	2.9	0.83	7.9	ND<1.0	--	13
U-8													
12/20/2010	480.43	29.57	0	450.86	3.34	--	2400	11	ND<1.0	22	12	--	ND<1.0
U-9													
12/20/2010	479.39	32.35	0	447.04	1.29	--	1900	7.0	2.0	45	9.7	--	4.3
U-10													
12/20/2010	480.51	34.32	0	446.19	0.10	--	2100	79	2.4	98	33	--	98
U-11													
12/20/2010	480.34	32.66	0	447.68	-0.25	--	1700	ND<10	ND<10	ND<10	ND<20	--	1400
U-12													
12/20/2010	480.75	34.02	0	446.73	-0.49	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
U-13													
12/20/2010	480.31	34.44	0	445.87	-0.30	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
U-14													
12/20/2010	479.38	33.74	0	445.64	-0.34	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
U-15													
12/20/2010	479.99	33.79	0	446.20	-0.57	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50

Table 1a
ADDITIONAL CURRENT ANALYTICAL RESULTS

76 Station 4186

Date Sampled	TBA (µg/l)	Ethanol (8260B) (µg/l)	Ethylene-dibromide (EDB) (µg/l)	1,2-DCA (EDC) (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (µg/l)	Antimony (total) (µg/l)	Antimony (dissolved) (µg/l)	Arsenic (total) (µg/l)	Arsenic (dissolved) (µg/l)	Barium (total) (µg/l)	Comments
U-1													
12/20/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	140	ND<50	3500	
U-2													
12/20/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	850	
U-3													
12/20/2010	2800	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	130	ND<50	1700	
U-4													
12/20/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	1200	
U-5													
12/20/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	520	
U-6													
12/20/2010	ND<20	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<100	ND<100	ND<50	ND<50	720	
U-7													
12/20/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	460	
U-8													
12/20/2010	ND<20	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<100	ND<100	ND<50	ND<50	430	
U-9													
12/20/2010	ND<20	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<100	ND<100	ND<50	ND<50	460	
U-10													
12/20/2010	610	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<100	ND<100	ND<50	ND<50	290	
U-11													
12/20/2010	3700	ND<5000	ND<10	ND<10	ND<10	ND<10	ND<10	ND<100	ND<100	ND<50	ND<50	370	
U-12													
12/20/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	370	
U-13													
12/20/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	46	
U-14													
12/20/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	250	
U-15													
12/20/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	55	

Table 1b
ADDITIONAL CURRENT ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Barium (dissolved) ($\mu\text{g/l}$)	Beryllium (total) ($\mu\text{g/l}$)	Beryllium dissolved ($\mu\text{g/l}$)	Cadmium (total) ($\mu\text{g/l}$)	Cadmium dissolved ($\mu\text{g/l}$)	Calcium ()	Chromium VI ($\mu\text{g/l}$)	Chromium (total) ($\mu\text{g/l}$)	Chromium dissolved ($\mu\text{g/l}$)	Cobalt (total) ($\mu\text{g/l}$)	Cobalt dissolved ($\mu\text{g/l}$)	Copper (dissolved) ($\mu\text{g/l}$)	Comments
U-1 12/20/2010	390	ND<10	ND<10	ND<10	ND<10	60	2.6	1400	ND<10	390	ND<50	ND<10	
U-2 12/20/2010	250	ND<10	ND<10	ND<10	ND<10	43	2.7	230	ND<10	64	ND<50	ND<10	
U-3 12/20/2010	360	ND<10	ND<10	ND<10	ND<10	44	ND<2.0	560	ND<10	170	ND<50	ND<10	
U-4 12/20/2010	440	ND<10	ND<10	ND<10	ND<10	59	ND<2.0	240	ND<10	80	ND<50	ND<10	
U-5 12/20/2010	390	ND<10	ND<10	ND<10	ND<10	60	ND<2.0	12	ND<10	ND<50	ND<50	ND<10	
U-6 12/20/2010	510	ND<10	ND<10	ND<10	ND<10	72	ND<2.0	54	ND<10	ND<50	ND<50	ND<10	
U-7 12/20/2010	440	ND<10	ND<10	ND<10	ND<10	42	ND<2.0	ND<10	ND<10	ND<50	ND<50	ND<10	
U-8 12/20/2010	390	ND<10	ND<10	ND<10	ND<10	44	ND<2.0	13	ND<10	ND<50	ND<50	ND<10	
U-9 12/20/2010	350	ND<10	ND<10	ND<10	ND<10	43	ND<2.0	53	ND<10	ND<50	ND<50	ND<10	
U-10 12/20/2010	150	ND<10	ND<10	ND<10	ND<10	48	ND<2.0	83	ND<10	ND<50	ND<50	ND<10	
U-11 12/20/2010	43	ND<10	ND<10	ND<10	ND<10	120	ND<2.0	44	ND<10	ND<50	ND<50	ND<10	
U-12 12/20/2010	340	ND<10	ND<10	ND<10	ND<10	50	2.5	ND<10	ND<10	ND<50	ND<50	36	
U-13 12/20/2010	42	ND<10	ND<10	ND<10	ND<10	8.0	26	28	28	ND<50	ND<50	10	
U-14 12/20/2010	240	ND<10	ND<10	ND<10	ND<10	40	3.9	ND<10	ND<10	ND<50	ND<50	23	
U-15 12/20/2010	38	ND<10	ND<10	ND<10	ND<10	6.5	34	39	36	ND<50	ND<50	ND<10	

Table 1c
ADDITIONAL CURRENT ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Copper (total) ($\mu\text{g/l}$)	Lead (dissolved) ()	Lead (total) ($\mu\text{g/l}$)	Magnesium (dissolved) (mg/l)	Manganese (dissolved) ($\mu\text{g/l}$)	Mercury (total) ($\mu\text{g/l}$)	Mercury (dissolved) ($\mu\text{g/l}$)	Molyb-denum (total) ($\mu\text{g/l}$)	Molyb-denum (dissolved) ($\mu\text{g/l}$)	Nickel (total) ($\mu\text{g/l}$)	Nickel (dissolved) ($\mu\text{g/l}$)	Potassium ()	Comments
U-1													
12/20/2010	860	ND<50	180	85	ND<10	1.1	ND<0.20	ND<50	ND<50	3700	ND<10	3.5	
U-2													
12/20/2010	140	ND<50	ND<50	64	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	630	ND<10	3.6	
U-3													
12/20/2010	300	ND<50	77	71	1900	0.52	ND<0.20	ND<50	ND<50	1500	ND<10	2.2	
U-4													
12/20/2010	120	ND<50	ND<50	85	210	0.36	ND<0.20	ND<50	ND<50	750	ND<10	3.3	
U-5													
12/20/2010	12	ND<50	ND<50	79	500	ND<0.20	ND<0.20	ND<50	ND<50	47	ND<10	2.7	
U-6													
12/20/2010	27	ND<50	ND<50	120	3500	ND<0.20	ND<0.20	ND<50	ND<50	160	ND<10	2.1	
U-7													
12/20/2010	ND<10	ND<50	ND<50	70	1900	ND<0.20	ND<0.20	ND<50	ND<50	17	ND<10	2.8	
U-8													
12/20/2010	ND<10	ND<50	ND<50	77	1900	ND<0.20	ND<0.20	ND<50	ND<50	28	ND<10	2.1	
U-9													
12/20/2010	27	ND<50	ND<50	83	2100	ND<0.20	ND<0.20	ND<50	ND<50	150	ND<10	2.8	
U-10													
12/20/2010	39	ND<50	ND<50	96	2100	0.28	ND<0.20	ND<50	ND<50	260	ND<10	8.4	
U-11													
12/20/2010	27	ND<50	ND<50	450	7000	ND<0.20	ND<0.20	ND<50	ND<50	180	43	3.8	
U-12													
12/20/2010	43	ND<50	ND<50	71	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	12	ND<10	2.8	
U-13													
12/20/2010	13	ND<50	ND<50	64	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	ND<10	ND<10	63	
U-14													
12/20/2010	31	ND<50	ND<50	47	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	ND<10	ND<10	4.8	
U-15													
12/20/2010	ND<10	ND<50	ND<50	67	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	15	12	72	

Table 1d
ADDITIONAL CURRENT ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Selenium (total) ($\mu\text{g/l}$)	Selenium dissolved ($\mu\text{g/l}$)	Silver (total) ($\mu\text{g/l}$)	Silver dissolved ($\mu\text{g/l}$)	Sodium ()	Thallium (total) ($\mu\text{g/l}$)	Thallium dissolved ($\mu\text{g/l}$)	Vanadium (total) ($\mu\text{g/l}$)	Vanadium dissolved ($\mu\text{g/l}$)	Zinc (dissolved) ($\mu\text{g/l}$)	Zinc (total) ($\mu\text{g/l}$)	Chloride (mg/l)	Comments
U-1	12/20/2010	ND<100	ND<100	ND<10	ND<10	55	ND<100	ND<100	570	ND<10	ND<10	1300	42
U-2	12/20/2010	ND<100	ND<100	ND<10	ND<10	56	ND<100	ND<100	110	ND<10	ND<10	260	17
U-3	12/20/2010	ND<100	ND<100	ND<10	ND<10	32	ND<100	ND<100	230	ND<10	ND<10	470	6.9
U-4	12/20/2010	ND<100	ND<100	ND<10	ND<10	33	ND<100	ND<100	94	ND<10	ND<10	190	31
U-5	12/20/2010	ND<100	ND<100	ND<10	ND<10	38	ND<100	ND<100	ND<10	ND<10	ND<10	ND<50	67
U-6	12/20/2010	ND<100	ND<100	ND<10	ND<10	93	ND<100	ND<100	22	ND<10	ND<10	57	190
U-7	12/20/2010	ND<100	ND<100	ND<10	ND<10	64	ND<100	ND<100	ND<10	ND<10	ND<10	ND<50	87
U-8	12/20/2010	ND<100	ND<100	ND<10	ND<10	47	ND<100	ND<100	ND<10	ND<10	ND<10	ND<50	50
U-9	12/20/2010	ND<100	ND<100	ND<10	ND<10	54	ND<100	ND<100	22	ND<10	ND<10	55	64
U-10	12/20/2010	ND<100	ND<100	ND<10	ND<10	55	ND<100	ND<100	31	ND<10	ND<10	85	34
U-11	12/20/2010	ND<100	ND<100	ND<10	ND<10	59	ND<100	ND<100	27	ND<10	ND<10	64	55
U-12	12/20/2010	ND<100	ND<100	ND<10	ND<10	51	ND<100	ND<100	ND<10	ND<10	160	170	87
U-13	12/20/2010	ND<100	ND<100	ND<10	ND<10	100	ND<100	ND<100	ND<10	ND<10	14	ND<50	81
U-14	12/20/2010	ND<100	ND<100	ND<10	ND<10	36	ND<100	ND<100	ND<10	ND<10	59	84	56
U-15	12/20/2010	ND<100	ND<100	ND<10	ND<10	100	ND<100	ND<100	ND<10	ND<10	ND<10	ND<50	82

Table 1e
ADDITIONAL CURRENT ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Nitrogen			Field Conductivity ()	Field pH ()	Field Temp. ()	Post-purge		Comments
	Fluoride (mg/l)	Nitrate (mg/l)	Sulfate (mg/l)				Dissolved Oxygen ()	Post-purge ORP ()	
U-1 12/20/2010	0.098	19	37	610	937.4	6.93	20.3	1.18	227
U-2 12/20/2010	0.099	16	47	500	878.7	6.89	18.9	4.44	246
U-3 12/20/2010	0.11	0.71	9.3	460	758.2	6.58	20.0	1.29	-63
U-4 12/20/2010	0.12	7.5	28	570	945.4	7.43	18.8	3.30	253
U-5 12/20/2010	0.14	4.5	36	600	933.6	7.47	17.8	0.62	240
U-6 12/20/2010	0.10	1.5	32	940	1580	6.50	17.3	0.90	9
U-7 12/20/2010	0.074	17	22	570	1040	8.05	17.5	0.84	40
U-8 12/20/2010	0.13	1.1	24	520	1078	7.01	18.9	0.96	-56
U-9 12/20/2010	0.12	ND<0.44	17	570	984.9	7.49	17.8	0.55	-41
U-10 12/20/2010	0.18	ND<0.44	4.7	600	1066	7.06	18.1	0.99	-92
U-11 12/20/2010	0.22	2.7	1500	2800	2203	6.69	18.0	0.82	-33
U-12 12/20/2010	0.13	23	54	600	962.8	7.28	19.5	3.22	104
U-13 12/20/2010	0.10	24	55	640	914.8	7.76	17.3	2.23	179
U-14 12/20/2010	0.094	23	38	420	874.8	7.78	18.3	2.33	236
U-15 12/20/2010	0.13	20	53	620	983.7	7.52	18.5	2.38	118

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

December 20, 2010
76 Station 4186

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water		TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)		Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Water Elevation (feet)	Change in Elevation (feet)		Benzene (µg/l)	Toluene (µg/l)					
U-1													
7/13/1998	478.27	23.28	0	454.99	--	ND	--	ND	ND	ND	ND	--	--
10/7/1998	478.27	26.43	0	451.84	-3.15	ND	--	ND	ND	ND	ND	--	--
1/15/1999	478.27	30.42	0	447.85	-3.99	ND	--	ND	ND	ND	1.1	7.3	--
4/14/1999	478.27	24.21	0	454.06	6.21	ND	--	ND	ND	ND	ND	160	--
7/19/1999	478.27	27.10	0	451.17	-2.89	ND	--	ND	ND	ND	ND	92	--
10/12/1999	478.27	29.40	0	448.87	-2.30	ND	--	ND	ND	ND	ND	37	--
1/24/2000	478.27	27.90	0	450.37	1.50	ND	--	ND	ND	ND	ND	28	--
4/10/2000	478.27	26.16	0	452.11	1.74	ND	--	ND	0.930	ND	ND	ND	--
7/17/2000	478.27	28.04	0	450.23	-1.88	ND	--	ND	ND	ND	ND	160	--
10/2/2000	478.27	28.41	0	449.86	-0.37	ND	--	ND	ND	ND	ND	120	--
1/8/2001	478.27	28.68	0	449.59	-0.27	ND	--	ND	ND	ND	ND	103	--
4/3/2001	478.27	25.74	0	452.53	2.94	ND	--	ND	ND	ND	ND	55.1	--
7/2/2001	478.27	30.67	0	447.60	-4.93	ND	--	ND	ND	ND	ND	--	--
10/8/2001	478.27	33.13	0	445.14	-2.46	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--
1/3/2002	478.27	27.67	0	450.60	5.46	160	--	ND<0.50	0.51	ND<0.50	0.69	31	--
4/5/2002	478.27	29.40	0	448.87	-1.73	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	60	--
7/2/2002	478.27	31.17	0	447.10	-1.77	--	1100	ND<0.50	1.7	0.73	130	--	35
10/1/2002	478.27	33.00	0	445.27	-1.83	--	120	ND<0.50	ND<0.50	ND<0.50	8.8	--	28
12/30/2002	478.27	22.03	0	456.24	10.97	--	ND<50	ND<0.50	ND<0.50	ND<0.50	1.2	--	90
5/2/2003	478.27	24.13	0	454.14	-2.10	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	50
7/1/2003	478.27	25.35	0	452.92	-1.22	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0
10/3/2003	478.27	27.24	0	451.03	-1.89	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0
1/8/2004	478.27	22.67	0	455.60	4.57	--	54	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5.5
4/15/2004	478.27	25.33	0	452.94	-2.66	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
7/15/2004	478.27	26.47	0	451.80	-1.14	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
12/8/2004	478.27	31.17	0	447.10	-4.70	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
3/23/2005	478.27	22.47	0	455.80	8.70	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
6/28/2005	478.27	25.37	0	452.90	-2.90	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
9/23/2005	478.27	29.15	0	449.12	-3.78	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
12/30/2005	478.27	23.69	0	454.58	5.46	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
3/24/2006	478.27	22.54	0	455.73	1.15	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.6
6/26/2006	478.27	24.99	0	453.28	-2.45	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
9/26/2006	478.27	30.19	0	448.08	-5.20	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
11/21/2006	478.27	28.27	0	450.00	1.92	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

December 20, 2010
76 Station 4186

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water		Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)		Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Water Elevation (feet)	Water Thickness (feet)			Benzene (µg/l)	Toluene (µg/l)					
3/26/2007	478.27	26.92	0	451.35	1.35	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
6/27/2007	478.27	30.78	0	447.49	-3.86	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
9/23/2007	478.27	33.17	0	445.10	-2.39	--	--	--	--	--	--	--	--	--
12/20/2007	478.27	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
3/17/2008	478.27	31.20	0	447.07	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/12/2008	478.27	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
9/3/2008	478.27	--	--	--	--	--	--	--	--	--	--	--	--	Dry
12/3/2008	480.29	--	--	--	--	--	--	--	--	--	--	--	--	Dry
2/18/2009	480.29	--	--	--	--	--	--	--	--	--	--	--	--	Dry
6/11/2009	480.29	--	--	--	--	--	--	--	--	--	--	--	--	Dry
12/9/2009	480.29	--	--	--	--	--	--	--	--	--	--	--	--	Dry
6/15/2010	480.29	31.35	0	448.94	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/20/2010	480.29	28.90	0	451.39	2.45	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
U-2														
7/13/1998	477.44	23.52	0	453.92	--	1200	--	130	12	62	180	1100	--	--
10/7/1998	477.44	25.31	0	452.13	-1.79	ND	--	ND	ND	ND	ND	160	--	--
1/15/1999	477.44	30.22	0	447.22	-4.91	ND	--	ND	ND	ND	ND	280	--	--
4/14/1999	477.44	24.50	0	452.94	5.72	ND	--	ND	ND	ND	ND	460	--	--
7/19/1999	477.44	28.54	0	448.90	-4.04	ND	--	ND	ND	ND	ND	220	--	--
10/12/1999	477.44	30.48	0	446.96	-1.94	ND	--	ND	ND	ND	ND	160	--	--
1/24/2000	477.44	24.52	0	452.92	5.96	ND	--	ND	ND	ND	ND	150	--	--
4/10/2000	477.44	23.68	0	453.76	0.84	ND	--	ND	ND	ND	ND	177	--	--
7/17/2000	477.44	28.35	0	449.09	-4.67	ND	--	ND	ND	ND	ND	62.7	--	--
10/2/2000	477.44	28.72	0	448.72	-0.37	ND	--	ND	ND	ND	ND	52	--	--
1/8/2001	477.44	29.11	0	448.33	-0.39	ND	--	ND	ND	ND	ND	57.3	--	--
4/3/2001	477.44	25.95	0	451.49	3.16	ND	--	ND	ND	ND	ND	30.2	--	--
7/2/2001	477.44	29.01	0	448.43	-3.06	ND	--	ND	ND	ND	ND	16	--	--
10/8/2001	477.44	30.94	0	446.50	-1.93	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	82	--	--
1/3/2002	477.44	27.33	0	450.11	3.61	260	--	7.7	11	1.7	15	42	--	--
4/5/2002	477.44	30.02	0	447.42	-2.69	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	25	--	--
7/2/2002	477.44	31.23	0	446.21	-1.21	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
10/1/2002	477.44	32.00	0	445.44	-0.77	--	ND<50	ND<0.50	0.62	ND<0.50	ND<1.0	--	ND<2.0	--
12/30/2002	477.44	22.32	0	455.12	9.68	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--
5/2/2003	477.44	25.92	0	451.52	-3.60	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--
7/1/2003	477.44	24.99	0	452.45	0.93	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

December 20, 2010
76 Station 4186

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water		Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)		Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Water Elevation (feet)	Water Thickness (feet)			Benzene (µg/l)	Toluene (µg/l)					
10/3/2003	477.44	25.31	0	452.13	-0.32	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--
1/8/2004	477.44	21.94	0	455.50	3.37	--	ND<50	ND<0.50	ND<0.50	0.51	ND<1.0	--	ND<2.0	--
4/15/2004	477.44	25.20	0	452.24	-3.26	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
7/15/2004	477.44	24.45	0	452.99	0.75	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/8/2004	477.44	29.89	0	447.55	-5.44	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
3/23/2005	477.44	22.00	0	455.44	7.89	--	ND<50	ND<0.50	ND<0.50	ND<0.50	1.1	--	ND<0.50	--
6/28/2005	477.44	25.30	0	452.14	-3.30	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
9/23/2005	477.44	28.25	0	449.19	-2.95	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/30/2005	477.44	24.33	0	453.11	3.92	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
3/24/2006	477.44	22.34	0	455.10	1.99	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/26/2006	477.44	23.15	0	454.29	-0.81	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
9/26/2006	477.44	28.52	0	448.92	-5.37	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
11/21/2006	477.44	25.85	0	451.59	2.67	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
3/26/2007	477.44	25.62	0	451.82	0.23	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
6/27/2007	477.44	28.37	0	449.07	-2.75	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
9/23/2007	477.44	31.40	0	446.04	-3.03	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
12/20/2007	477.44	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
3/17/2008	477.44	30.45	0	446.99	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/12/2008	477.44	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
9/3/2008	477.44	--	--	--	--	--	--	--	--	--	--	--	--	Dry
12/3/2008	479.45	--	--	--	--	--	--	--	--	--	--	--	--	Dry
2/18/2009	479.45	--	--	--	--	--	--	--	--	--	--	--	--	Dry
6/11/2009	479.45	--	--	--	--	--	--	--	--	--	--	--	--	Dry
12/9/2009	479.45	--	--	--	--	--	--	--	--	--	--	--	--	Dry
6/15/2010	479.45	30.78	0	448.67	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/20/2010	479.45	25.99	0	453.46	4.79	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
U-3														
7/13/1998	478.46	23.82	0	454.64	--	70000	--	3100	5500	2700	16000	7500	--	--
10/7/1998	478.46	25.64	0	452.82	-1.82	54000	--	5000	1100	3100	14000	6100	--	--
1/15/1999	478.46	30.92	0	447.54	-5.28	41000	--	3100	ND	1800	3800	15000	--	--
4/14/1999	478.46	24.48	0	453.98	6.44	33000	--	86	290	2200	7800	39000	--	--
7/19/1999	478.46	28.46	0	450.00	-3.98	48000	--	3900	2500	3600	14000	12000	16000	--
10/12/1999	478.46	30.39	0	448.07	-1.93	35000	--	4200	ND	2300	1800	22000	8300	--
1/24/2000	478.46	23.43	0	455.03	6.96	13000	--	260	ND	770	3200	53000	42000	--
4/10/2000	478.46	23.31	0	455.15	0.12	35200	--	1070	241	2820	8850	35600	40900	--

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

December 20, 2010
76 Station 4186

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water		TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)		Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Water Elevation (feet)	Change in Elevation (feet)		Benzene (µg/l)	Toluene (µg/l)					
7/17/2000	478.46	27.53	0	450.93	-4.22	29000	--	3570	525	3180	5660	22500	21000
10/2/2000	478.46	28.19	0	450.27	-0.66	11000	--	2100	31	2000	780	25000	28000
1/8/2001	478.46	29.85	0	448.61	-1.66	33600	--	3060	427	3040	4190	24700	30900
4/3/2001	478.46	24.98	0	453.48	4.87	5390	--	660	10.8	304	356	15200	19300
7/2/2001	478.46	31.35	0	447.11	-6.37	13000	--	1200	58	1300	930	25000	26000
10/8/2001	478.46	32.69	0	445.77	-1.34	6100	--	500	ND<10	570	130	23000	22000
1/3/2002	478.46	23.73	0	454.73	8.96	9900	--	700	130	24	1000	14000	12000
4/5/2002	477.44	28.27	0	449.17	-5.56	9800	--	1100	180	220	1400	16000	30000
7/2/2002	478.46	29.71	0	448.75	-0.42	--	ND<25000	ND<250	ND<250	ND<250	ND<500	12000	12000
10/1/2002	478.46	31.18	0	447.28	-1.47	--	ND<25000	ND<250	ND<250	ND<250	ND<500	12000	12000
12/30/2002	478.46	21.62	0	456.84	9.56	--	23000	330	170	870	4900	18000	18000
5/2/2003	478.46	23.11	0	455.35	-1.49	--	19000	280	ND<50	880	1500	15000	15000
7/1/2003	478.46	24.89	0	453.57	-1.78	--	19000	120	ND<100	180	880	22000	22000
10/3/2003	478.46	26.59	0	451.87	-1.70	--	20000	170	ND<50	250	730	--	16000
1/8/2004	478.46	21.92	0	456.54	4.67	--	17000	250	ND<100	770	1500	--	9700
4/15/2004	478.46	23.59	0	454.87	-1.67	--	4600	ND<25	ND<25	36	100	--	3700
7/15/2004	478.46	24.80	0	453.66	-1.21	--	2700	ND<25	ND<25	ND<25	ND<50	--	3400
12/8/2004	478.46	29.13	0	449.33	-4.33	--	12000	ND<50	ND<50	250	140	--	13000
3/23/2005	478.46	21.64	0	456.82	7.49	--	21000	94	ND<50	630	1200	--	6200
6/28/2005	478.46	24.57	0	453.89	-2.93	--	6600	24	0.64	150	70	--	4700
9/23/2005	478.46	27.64	0	450.82	-3.07	--	6000	31	ND<25	150	ND<50	--	8900
12/30/2005	478.46	23.96	0	454.50	3.68	--	390	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	840
3/24/2006	478.46	22.52	0	455.94	1.44	--	2700	28	ND<5.0	57	120	--	690
6/26/2006	478.46	23.89	0	454.57	-1.37	--	2000	51	0.77	84	45	--	560
9/26/2006	478.46	28.08	0	450.38	-4.19	--	1200	20	ND<2.5	5.2	2.8	--	170
11/21/2006	478.46	27.23	0	451.23	0.85	--	1500	22	ND<5.0	5.8	ND<5.0	--	180
3/26/2007	478.46	25.27	0	453.19	1.96	--	3900	65	0.61	50	160	--	95
6/27/2007	478.46	27.51	0	450.95	-2.24	--	1400	29	ND<0.50	5.6	2.3	--	170
9/23/2007	478.46	31.70	0	446.76	-4.19	--	1600	16	0.61	2.7	3.7	--	88
12/20/2007	478.46	--	--	--	--	--	--	--	--	--	--	--	Dry well
3/17/2008	478.46	28.84	0	449.62	--	--	1400	17	ND<1.0	2.3	ND<2.0	--	150
6/12/2008	478.46	31.23	0	447.23	-2.39	--	770	4.1	ND<1.0	ND<1.0	ND<2.0	--	27
9/3/2008	478.46	--	--	--	--	--	--	--	--	--	--	--	Dry
12/3/2008	480.48	--	--	--	--	--	--	--	--	--	--	--	Dry
2/18/2009	480.48	--	--	--	--	--	--	--	--	--	--	--	Dry

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

December 20, 2010
76 Station 4186

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water		TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)		Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Water Elevation (feet)	Change in Elevation (feet)		Benzene (µg/l)	Toluene (µg/l)					
6/11/2009	480.48	--	--	--	--	--	--	--	--	--	--	--	Dry
12/9/2009	480.48	31.73	0	448.75	--	--	1100	4.2	ND<0.50	2.1	2.9	--	62
6/15/2010	480.48	29.91	0	450.57	1.82	--	810	5.5	ND<1.0	ND<1.0	ND<2.0	--	48
12/20/2010	480.48	29.58	0	450.90	0.33	--	1100	5.1	ND<0.50	ND<0.50	ND<1.0	--	49
U-4													
4/3/2001	476.93	31.63	0	445.30	--	ND	--	ND	ND	ND	ND	37.8	38.2
7/2/2001	476.93	37.96	0	438.97	-6.33	ND	--	ND	ND	ND	ND	5.3	--
10/8/2001	476.93	44.24	0	432.69	-6.28	--	--	--	--	--	--	--	--
1/3/2002	476.93	36.15	0	440.78	8.09	100	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	10	8.5
4/5/2002	476.93	37.64	0	439.29	-1.49	ND<50	--	0.50	ND<0.50	ND<0.50	ND<0.50	4.1	--
7/2/2002	476.93	36.85	0	440.08	0.79	--	67	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	12
10/1/2002	476.93	38.54	0	438.39	-1.69	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	9.8
12/30/2002	476.93	32.64	0	444.29	5.90	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	25
5/2/2003	476.93	31.40	0	445.53	1.24	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.1
7/1/2003	476.93	33.60	0	443.33	-2.20	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	2.1
10/3/2003	476.93	37.63	0	439.30	-4.03	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	9.1
1/8/2004	476.93	29.23	0	447.70	8.40	--	ND<50	0.55	ND<0.50	1.6	3.7	--	2.5
4/15/2004	476.93	29.80	0	447.13	-0.57	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5.2
7/15/2004	476.93	35.05	0	441.88	-5.25	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5.1
12/8/2004	476.93	35.10	0	441.83	-0.05	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	3.0
3/23/2005	476.93	25.38	0	451.55	9.72	--	ND<50	ND<0.50	ND<0.50	1.3	1.2	--	0.65
6/28/2005	476.93	28.67	0	448.26	-3.29	--	34J	ND<0.50	0.15J	ND<0.50	ND<1.0	--	0.23J
9/23/2005	476.93	32.25	0	444.68	-3.58	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	11
12/30/2005	476.93	31.02	0	445.91	1.23	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	17
3/24/2006	476.93	26.51	0	450.42	4.51	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	21
6/26/2006	476.93	27.98	0	448.95	-1.47	--	63	ND<0.50	ND<0.50	0.56	ND<1.0	--	11
9/26/2006	476.93	33.72	0	443.21	-5.74	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	13
11/21/2006	476.93	33.43	0	443.50	0.29	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
3/26/2007	476.93	30.52	0	446.41	2.91	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50
6/27/2007	476.93	38.20	0	438.73	-7.68	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	0.78
9/23/2007	476.93	--	--	--	--	--	--	--	--	--	--	--	parked over
12/20/2007	476.93	--	--	--	--	--	--	--	--	--	--	--	Dry well
3/17/2008	476.93	34.18	0	442.75	--	--	71	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.9
6/12/2008	476.93	39.50	0	437.43	-5.32	--	71	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	7.5
9/3/2008	476.93	--	--	--	--	--	--	--	--	--	--	--	Dry

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

December 20, 2010
76 Station 4186

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)		TPH-G 8015 ($\mu\text{g/l}$)	TPH-G (GC/MS) ($\mu\text{g/l}$)		Ethyl-benzene ($\mu\text{g/l}$)	Total Xylenes ($\mu\text{g/l}$)	MTBE (8021B) ($\mu\text{g/l}$)	MTBE (8260B) ($\mu\text{g/l}$)	Comments
				Water Elevation (feet)	Change in Elevation (feet)		Benzene ($\mu\text{g/l}$)	Toluene ($\mu\text{g/l}$)					
12/3/2008	478.95	--	--	--	--	--	--	--	--	--	--	--	--
2/18/2009	478.95	--	--	--	--	--	--	--	--	--	--	--	Dry
6/11/2009	478.95	--	--	--	--	--	--	--	--	--	--	--	Dry
12/9/2009	478.95	40.98	0	437.97	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	3.3
6/15/2010	478.95	33.90	0	445.05	7.08	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
12/20/2010	478.95	34.57	0	444.38	-0.67	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	7.5
U-5													
4/3/2001	476.51	31.75	0	444.76	--	ND	--	ND	0.728	ND	0.993	54.8	55.4
7/2/2001	476.51	38.68	0	437.83	-6.93	ND	--	ND	ND	ND	ND	88	94
10/8/2001	476.51	46.31	0	430.20	-7.63	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	37	54
1/3/2002	476.51	36.55	0	439.96	9.76	ND<50	--	ND<0.50	0.59	ND<0.50	0.91	51	53
4/5/2002	476.51	37.83	0	438.68	-1.28	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	37	--
7/2/2002	476.51	36.92	0	439.59	0.91	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	43
10/1/2002	476.51	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2002	476.51	--	--	--	--	--	--	--	--	--	--	--	--
5/2/2003	476.51	31.55	0	444.96	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	18
7/1/2003	476.51	33.83	0	442.68	-2.28	--	73	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	46
10/3/2003	476.51	37.72	0	438.79	-3.89	--	58	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	44
1/8/2004	476.51	29.21	0	447.30	8.51	--	ND<50	ND<0.50	ND<0.50	1.1	2.7	--	17
4/15/2004	476.51	30.05	0	446.46	-0.84	--	57	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	37
7/15/2004	476.51	35.15	0	441.36	-5.10	--	60	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	27
12/8/2004	476.51	35.33	0	441.18	-0.18	--	62	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	39
3/23/2005	476.51	25.45	0	451.06	9.88	--	ND<50	ND<0.50	ND<0.50	0.51	ND<1.0	--	4.5
6/28/2005	476.51	28.90	0	447.61	-3.45	--	73	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	40
9/23/2005	476.51	33.01	0	443.50	-4.11	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	53
12/30/2005	476.51	30.96	0	445.55	2.05	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	72
3/24/2006	476.51	22.42	0	454.09	8.54	--	2400	13	ND<5.0	48	58	--	54
6/26/2006	476.51	29.31	0	447.20	-6.89	--	72	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	82
9/26/2006	476.51	34.35	0	442.16	-5.04	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	51
11/21/2006	476.51	32.43	0	444.08	1.92	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	25
3/26/2007	476.51	31.20	0	445.31	1.23	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	29
6/27/2007	476.51	38.62	0	437.89	-7.42	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	30
9/23/2007	476.51	--	--	--	--	--	--	--	--	--	--	--	--
12/20/2007	476.51	--	--	--	--	--	--	--	--	--	--	--	Dry well
3/17/2008	476.51	34.28	0	442.23	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	25
													parked over

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

December 20, 2010
76 Station 4186

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 ($\mu\text{g/l}$)	TPH-G (GC/MS) ($\mu\text{g/l}$)		Ethyl-benzene ($\mu\text{g/l}$)	Total Xylenes ($\mu\text{g/l}$)	MTBE (8021B) ($\mu\text{g/l}$)	MTBE (8260B) ($\mu\text{g/l}$)	Comments
							Benzene ($\mu\text{g/l}$)	Toluene ($\mu\text{g/l}$)					
6/12/2008	476.51	39.90	0	436.61	-5.62	--	55	ND<0.50	ND<0.50	ND<1.0	--	28	--
9/3/2008	476.51	--	--	--	--	--	--	--	--	--	--	--	Dry
12/3/2008	478.52	--	--	--	--	--	--	--	--	--	--	--	Dry
2/18/2009	478.52	--	--	--	--	--	--	--	--	--	--	--	Dry
6/11/2009	478.52	--	--	--	--	--	--	--	--	--	--	--	Dry
12/9/2009	478.52	41.35	0	437.17	--	--	83	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	41
6/15/2010	478.52	33.83	0	444.69	7.52	--	50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	76
12/20/2010	478.52	34.67	0	443.85	-0.84	--	51	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	52
U-6													
1/3/2002	478.38	33.99	0	444.39	--	5000	--	36	ND<25	260	450	ND<250	ND<10
4/5/2002	478.38	36.18	0	442.20	-2.19	1300	--	16	ND<5.0	54	ND<5.0	ND<25	--
7/2/2002	478.38	36.33	0	442.05	-0.15	--	1100	1.4	ND<0.50	16	ND<1.0	--	0.94
10/1/2002	478.38	37.70	0	440.68	-1.37	--	2000	5.4	ND<0.50	62	ND<1.0	--	2.6
12/30/2002	478.38	31.63	0	446.75	6.07	--	130	ND<0.50	ND<0.50	2.3	ND<1.0	--	ND<2.0
5/2/2003	478.38	31.49	0	446.89	0.14	--	150	ND<0.50	ND<0.50	1.8	1.7	--	82
7/1/2003	478.38	32.88	0	445.50	-1.39	--	190	1.8	ND<0.50	9.4	8.7	--	36
10/3/2003	478.38	36.54	0	441.84	-3.66	--	ND<10000	140	ND<100	940	560	--	ND<400
1/8/2004	478.38	30.45	0	447.93	6.09	--	3500	29	32	90	89	--	27
4/15/2004	478.38	29.48	0	448.90	0.97	--	2400	19	ND<2.5	91	53	--	16
7/15/2004	478.38	34.30	0	444.08	-4.82	--	8500	150	5.7	970	560	--	24
12/8/2004	478.38	34.80	0	443.58	-0.50	--	2700	16	ND<2.5	28	ND<5.0	--	10
3/23/2005	478.38	25.08	0	453.30	9.72	--	960	2.7	ND<0.50	9.6	4.8	--	2.5
6/28/2005	478.38	28.75	0	449.63	-3.67	--	12000	120	4.9	930	780	--	21
9/23/2005	478.38	32.38	0	446.00	-3.63	--	5200	78	ND<25	540	230	--	34
12/30/2005	478.38	30.43	0	447.95	1.95	--	2400	15	0.67	99	12	--	3.5
3/24/2006	478.38	25.94	0	452.44	4.49	--	4300	52	ND<5.0	440	160	--	11
6/26/2006	478.38	28.07	0	450.31	-2.13	--	5300	59	ND<5.0	520	300	--	ND<5.0
9/26/2006	478.38	33.31	0	445.07	-5.24	--	7400	78	ND<5.0	490	160	--	6.4
11/21/2006	478.38	31.65	0	446.73	1.66	--	1500	5.5	ND<0.50	37	2.4	--	1.4
3/26/2007	478.38	29.25	0	449.13	2.40	--	480	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	0.50
6/27/2007	478.38	35.09	0	443.29	-5.84	--	110	1.2	ND<0.50	1.3	ND<0.50	--	0.86
9/23/2007	478.38	--	--	--	--	--	--	--	--	--	--	--	Dry well
12/20/2007	478.38	--	--	--	--	--	--	--	--	--	--	--	Dry well
3/17/2008	478.38	33.82	0	444.56	--	--	580	1.5	ND<0.50	3.2	ND<1.0	--	ND<0.50
6/12/2008	478.38	38.16	0	440.22	-4.34	--	2100	11	0.79	27	2.3	--	1.1

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

December 20, 2010
76 Station 4186

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water		TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)		Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Water Elevation (feet)	Change in Elevation (feet)		Benzene (µg/l)	Toluene (µg/l)					
9/3/2008	478.38	--	--	--	--	--	--	--	--	--	--	--	-- Dry
12/3/2008	480.40	--	--	--	--	--	--	--	--	--	--	--	-- Dry
2/18/2009	480.40	--	--	--	--	--	--	--	--	--	--	--	-- Dry
6/11/2009	480.40	--	--	--	--	--	--	--	--	--	--	--	-- Dry
12/9/2009	480.40	--	--	--	--	--	--	--	--	--	--	--	-- Dry
6/15/2010	480.40	33.37	0	447.03	--	--	1900	35	2.7	50	7.1	--	14
12/20/2010	480.40	34.49	0	445.91	-1.12	--	2000	29	2.9	94	10	--	12
U-7													
1/3/2002	478.74	32.43	0	446.31	--	3100	--	93	ND<10	35	73	140	130
4/5/2002	478.74	34.06	0	444.68	-1.63	630	--	22	0.53	2.6	ND<0.50	45	--
7/2/2002	478.74	35.28	0	443.46	-1.22	--	1100	21	ND<0.50	6.9	ND<1.0	--	60
10/1/2002	478.74	37.70	0	441.04	-2.42	--	1700	11	ND<0.50	3.1	ND<1.0	--	25
12/30/2002	478.74	31.93	0	446.81	5.77	--	4600	41	5.3	32	13	--	34
5/2/2003	478.74	31.81	0	446.93	0.12	--	3000	17	2.7	14	5.1	--	42
7/1/2003	478.74	33.47	0	445.27	-1.66	--	2300	11	0.53	8.0	1.5	--	35
10/3/2003	478.74	35.84	0	442.90	-2.37	--	6500	30	ND<5.0	41	ND<10	--	53
1/8/2004	478.74	30.35	0	448.39	5.49	--	1600	4.0	ND<1.0	4.2	8.7	--	56
4/15/2004	478.74	29.03	0	449.71	1.32	--	3600	22	1.3	64	40	--	57
7/15/2004	478.74	33.52	0	445.22	-4.49	--	4700	15	1.2	59	57	--	50
12/8/2004	478.74	34.68	0	444.06	-1.16	--	5800	26	1.9	63	27	--	52
3/23/2005	478.74	24.49	0	454.25	10.19	--	5600	18	1.3	42	14	--	39
6/28/2005	478.74	28.83	0	449.91	-4.34	--	5400	16	1.1	35	10	--	45
9/23/2005	478.74	32.35	0	446.39	-3.52	--	2400	13	1.3	31	6.9	--	46
12/30/2005	478.74	30.18	0	448.56	2.17	--	2500	11	1.1	28	4.3	--	35
3/24/2006	478.74	25.06	0	453.68	5.12	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	32
6/26/2006	478.74	28.30	0	450.44	-3.24	--	2500	11	1.1	45	15	--	55
9/26/2006	478.74	33.47	0	445.27	-5.17	--	2300	7.8	0.84	17	2.1	--	61
11/21/2006	478.74	31.66	0	447.08	1.81	--	3000	15	1.1	26	2.2	--	69
3/26/2007	478.74	29.82	0	448.92	1.84	--	2200	1.2	ND<0.50	ND<0.50	ND<0.50	--	70
6/27/2007	478.74	36.59	0	442.15	-6.77	--	590	5.8	ND<0.50	3.3	0.94	--	100
9/23/2007	478.74	44.05	0	434.69	-7.46	--	--	--	--	--	--	--	--
12/20/2007	478.74	--	--	--	--	--	--	--	--	--	--	--	Dry well
3/17/2008	478.74	33.83	0	444.91	--	--	1200	1.9	ND<0.50	0.82	ND<1.0	--	27
6/12/2008	478.74	38.56	0	440.18	-4.73	--	1200	1.9	ND<0.50	1.1	ND<1.0	--	40
9/3/2008	478.74	--	--	--	--	--	--	--	--	--	--	--	Dry

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

December 20, 2010
76 Station 4186

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water		TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)		Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Water Elevation (feet)	Change in Elevation (feet)		Benzene (µg/l)	Toluene (µg/l)					
12/3/2008	480.78	--	--	--	--	--	--	--	--	--	--	--	-- Dry
2/18/2009	480.78	--	--	--	--	--	--	--	--	--	--	--	-- Dry
6/11/2009	480.78	38.80	0	441.98	--	--	1100	2.4	0.80	3.2	ND<1.0	--	8.2
12/9/2009	480.78	37.08	0	443.70	1.72	--	1200	2.8	0.72	5.3	1.5	--	8.1
6/15/2010	480.78	33.84	0	446.94	3.24	--	1700	4.3	1.7	24	1.2	--	26
12/20/2010	480.78	33.53	0	447.25	0.31	--	1600	2.9	0.83	7.9	ND<1.0	--	13
U-8													
12/3/2008	480.43	--	--	--	--	--	--	--	--	--	--	--	-- Dry
2/18/2009	480.43	--	--	--	--	--	--	--	--	--	--	--	-- Dry
6/11/2009	480.43	--	--	--	--	--	--	--	--	--	--	--	-- Dry
12/9/2009	480.43	38.22	0	442.21	--	--	7200	42	ND<2.5	50	250	--	ND<2.5
6/15/2010	480.43	32.91	0	447.52	5.31	--	2000	22	1.3	12	4.2	--	ND<1.0
12/20/2010	480.43	29.57	0	450.86	3.34	--	2400	11	ND<1.0	22	12	--	ND<1.0
U-9													
12/3/2008	479.39	--	--	--	--	--	--	--	--	--	--	--	-- Dry
2/18/2009	479.39	--	--	--	--	--	--	--	--	--	--	--	-- Dry
6/11/2009	479.39	--	--	--	--	--	--	--	--	--	--	--	-- Dry
12/9/2009	479.39	40.70	0	438.69	--	--	8800	51	ND<0.50	300	74	--	23
6/15/2010	479.39	33.64	0	445.75	7.06	--	2000	10	2.1	61	18	--	4.9
12/20/2010	479.39	32.35	0	447.04	1.29	--	1900	7.0	2.0	45	9.7	--	4.3
U-10													
12/3/2008	480.51	--	--	--	--	--	--	--	--	--	--	--	-- Dry
2/18/2009	480.51	--	--	--	--	--	--	--	--	--	--	--	-- Dry
6/11/2009	480.51	44.30	0	436.21	--	--	1400	15	1.1	12	12	--	88
12/9/2009	480.51	41.45	0	439.06	2.85	--	4300	280	71	180	900	--	320
6/15/2010	480.51	34.42	0	446.09	7.03	--	12000	550	70	780	1400	--	530
12/20/2010	480.51	34.32	0	446.19	0.10	--	2100	79	2.4	98	33	--	98
U-11													
12/3/2008	480.34	--	--	--	--	--	--	--	--	--	--	--	-- Dry
2/18/2009	480.34	--	--	--	--	--	--	--	--	--	--	--	-- Dry
6/11/2009	480.34	43.18	0	437.16	--	--	1200	0.93	ND<0.50	ND<0.50	ND<1.0	--	2500
12/9/2009	480.34	39.62	0	440.72	3.56	--	1300	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	2100
6/15/2010	480.34	32.41	0	447.93	7.21	--	2800	ND<12	ND<12	21	ND<25	--	3600
12/20/2010	480.34	32.66	0	447.68	-0.25	--	1700	ND<10	ND<10	ND<10	ND<20	--	1400
U-12													

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

December 20, 2010
76 Station 4186

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)		TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)		Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Change in Elevation (feet)	TPH-G 8015 (µg/l)		Benzene (µg/l)	Toluene (µg/l)					
12/3/2008	480.75	50.08	0	430.67	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
2/18/2009	480.75	46.10	0	434.65	3.98	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
6/11/2009	480.75	45.85	0	434.90	0.25	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
12/9/2009	480.75	40.74	0	440.01	5.11	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
6/15/2010	480.75	33.53	0	447.22	7.21	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
12/20/2010	480.75	34.02	0	446.73	-0.49	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
U-13													
12/3/2008	480.31	50.74	0	429.57	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.85
2/18/2009	480.31	45.87	0	434.44	4.87	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.87
6/11/2009	480.31	46.60	0	433.71	-0.73	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.81
12/9/2009	480.31	41.28	0	439.03	5.32	--	ND<50	ND<0.50	1.1	ND<0.50	ND<1.0	--	ND<0.50
6/15/2010	480.31	34.14	0	446.17	7.14	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
12/20/2010	480.31	34.44	0	445.87	-0.30	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
U-14													
12/3/2008	479.38	49.90	0	429.48	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.4
2/18/2009	479.38	46.65	0	432.73	3.25	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
6/11/2009	479.38	45.75	0	433.63	0.90	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
12/9/2009	479.38	40.60	0	438.78	5.15	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
6/15/2010	479.38	33.40	0	445.98	7.20	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
12/20/2010	479.38	33.74	0	445.64	-0.34	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
U-15													
12/3/2008	479.99	49.58	0	430.41	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
2/18/2009	479.99	45.58	0	434.41	4.00	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.2
6/11/2009	479.99	45.45	0	434.54	0.13	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.6
12/9/2009	479.99	40.38	0	439.61	5.07	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50
6/15/2010	479.99	33.22	0	446.77	7.16	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.75
12/20/2010	479.99	33.79	0	446.20	-0.57	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50

Table 2a
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	TBA ($\mu\text{g/l}$)	Ethylene-dibromide				DIPE ($\mu\text{g/l}$)	ETBE ($\mu\text{g/l}$)	TAME ($\mu\text{g/l}$)	Antimony (total) ($\mu\text{g/l}$)	Antimony (dissolved) ($\mu\text{g/l}$)	Arsenic (total) ($\mu\text{g/l}$)	Arsenic (dissolved) ($\mu\text{g/l}$)	Barium (total) ($\mu\text{g/l}$)	Comments
		Ethanol (8260B) ($\mu\text{g/l}$)	(EDB) ($\mu\text{g/l}$)	(EDC) ($\mu\text{g/l}$)	1,2-DCA ($\mu\text{g/l}$)									
U-1														
10/2/2000	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/2003	--	ND<500000C	--	--	--	--	--	--	--	--	--	--	--	--
10/3/2003	--	ND<500	--	--	--	--	--	--	--	--	--	--	--	--
1/8/2004	--	ND<500	--	--	--	--	--	--	--	--	--	--	--	--
4/15/2004	--	ND<50	--	--	--	--	--	--	--	--	--	--	--	--
7/15/2004	--	ND<50	--	--	--	--	--	--	--	--	--	--	--	--
12/8/2004	--	ND<50	--	--	--	--	--	--	--	--	--	--	--	--
3/23/2005	--	ND<50	--	--	--	--	--	--	--	--	--	--	--	--
6/28/2005	--	ND<1000	--	--	--	--	--	--	--	--	--	--	--	--
9/23/2005	--	ND<1000	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2005	--	ND<250	--	--	--	--	--	--	--	--	--	--	--	--
3/24/2006	--	ND<250	--	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	--	ND<250	--	--	--	--	--	--	--	--	--	--	--	--
9/26/2006	--	ND<250	--	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
3/26/2007	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
6/27/2007	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
3/17/2008	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
6/15/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	--	ND<50	--	--	--
12/20/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	140	ND<50	3500	
U-2														
10/2/2000	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/2003	--	ND<500000C	--	--	--	--	--	--	--	--	--	--	--	--
10/3/2003	--	ND<500	--	--	--	--	--	--	--	--	--	--	--	--
1/8/2004	--	ND<500	--	--	--	--	--	--	--	--	--	--	--	--
4/15/2004	--	ND<50	--	--	--	--	--	--	--	--	--	--	--	--
7/15/2004	--	ND<50	--	--	--	--	--	--	--	--	--	--	--	--
12/8/2004	--	ND<50	--	--	--	--	--	--	--	--	--	--	--	--
3/23/2005	--	730	--	--	--	--	--	--	--	--	--	--	--	--

Table 2a
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	TBA ($\mu\text{g/l}$)	Ethanol (8260B) ($\mu\text{g/l}$)	Ethylene-dibromide (EDB) ($\mu\text{g/l}$)	1,2-DCA (EDC) ($\mu\text{g/l}$)	DIPE ($\mu\text{g/l}$)	ETBE ($\mu\text{g/l}$)	TAME ($\mu\text{g/l}$)	Antimony (total) ($\mu\text{g/l}$)	Antimony (dissolved) ($\mu\text{g/l}$)	Arsenic (total) ($\mu\text{g/l}$)	Arsenic (dissolved) ($\mu\text{g/l}$)	Barium (total) ($\mu\text{g/l}$)	Comments
6/28/2005	--	ND<1000	--	--	--	--	--	--	--	--	--	--	
9/23/2005	--	ND<1000	--	--	--	--	--	--	--	--	--	--	
12/30/2005	--	ND<250	--	--	--	--	--	--	--	--	--	--	
3/24/2006	--	ND<250	--	--	--	--	--	--	--	--	--	--	
6/26/2006	--	ND<250	--	--	--	--	--	--	--	--	--	--	
9/26/2006	--	ND<250	--	--	--	--	--	--	--	--	--	--	
11/21/2006	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	
3/26/2007	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	
6/27/2007	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	
9/23/2007	69	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	
3/17/2008	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	--	58	--	2000	
6/12/2008	--	--	--	--	--	--	--	--	--	--	--	--	
6/15/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<100	--	ND<50	--	
12/20/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	850	
U-3													
10/2/2000	63000	--	--	--	--	--	--	--	--	--	--	--	
1/8/2001	49300	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
4/3/2001	22200	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
7/2/2001	27000	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
10/8/2001	33000	D<1400000	ND<290	ND<290	ND<290	ND<290	ND<290	--	--	--	--	--	
1/3/2002	17000	D<5000000	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	--	--	
4/5/2002	66000	D<2500000	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	--	--	
7/2/2002	47000	D<1300000	ND<250	ND<250	ND<500	ND<250	ND<250	--	--	--	--	--	
10/1/2002	ND<50000	D<2500000	ND<1000	ND<1000	ND<1000	ND<1000	ND<1000	--	--	--	--	--	
12/30/2002	23000	D<1000000	ND<400	ND<400	ND<400	ND<400	ND<400	--	--	--	--	--	
5/2/2003	25000	D<5000000	ND<200	ND<200	ND<200	ND<200	ND<200	--	--	--	--	--	
7/1/2003	32000	D<1000000	ND<400	ND<400	ND<400	ND<400	ND<400	--	--	--	--	--	
10/3/2003	39000	ND<50000	ND<200	ND<200	ND<2.0	ND<200	ND<200	--	--	--	--	--	
1/8/2004	ND<20000	ND<10000	ND<400	ND<400	ND<400	ND<400	ND<400	--	--	--	--	--	
4/15/2004	18000	ND<2500	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<0.5	--	--	--	--	--	
7/15/2004	15000	ND<2500	ND<25	ND<25	ND<50	ND<25	ND<25	--	--	--	--	--	
12/8/2004	34000	ND<5000	ND<50	ND<50	ND<100	ND<50	ND<50	--	--	--	--	--	
3/23/2005	--	ND<5000	--	--	--	--	--	--	--	--	--	--	
6/28/2005	--	ND<1000	--	--	--	--	--	--	--	--	--	--	
9/23/2005	--	ND<50000	--	--	--	--	--	--	--	--	--	--	

Table 2a
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	TBA ($\mu\text{g/l}$)	Ethanol (8260B) ($\mu\text{g/l}$)	Ethylene-dibromide (EDB) ($\mu\text{g/l}$)	1,2-DCA (EDC) ($\mu\text{g/l}$)	DIPE ($\mu\text{g/l}$)	ETBE ($\mu\text{g/l}$)	TAME ($\mu\text{g/l}$)	Antimony (total) ($\mu\text{g/l}$)	Antimony (dissolved) ($\mu\text{g/l}$)	Arsenic (total) ($\mu\text{g/l}$)	Arsenic (dissolved) ($\mu\text{g/l}$)	Barium (total) ($\mu\text{g/l}$)	Comments
12/30/2005	2000	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.58	--	--	--	--	--	--
3/24/2006	--	ND<2500	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	18000	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
9/26/2006	--	ND<1200	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	33000	ND<2500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	--	--	--	--	--	--
3/26/2007	13000	ND<250	ND<0.50	0.95	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
6/27/2007	20000	ND<250	ND<0.50	0.79	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
9/23/2007	19000	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
3/17/2008	15000	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<100	ND<100	95	ND<50	1700	
6/12/2008	21000	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<100	--	210	--	2800	
12/9/2009	8800	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	
6/15/2010	11000	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<100	ND<100	92	ND<50	1600	
12/20/2010	2800	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	130	ND<50	1700	
U-4													
4/3/2001	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--
7/2/2001	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--
1/3/2002	ND<20	ND<500000C	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--	--	--	--	--	--
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/2003	--	ND<500000C	--	--	--	--	--	--	--	--	--	--	--
10/3/2003	--	ND<500	--	--	--	--	--	--	--	--	--	--	--
1/8/2004	--	ND<500	--	--	--	--	--	--	--	--	--	--	--
4/15/2004	--	ND<50	--	--	--	--	--	--	--	--	--	--	--
7/15/2004	--	ND<50	--	--	--	--	--	--	--	--	--	--	--
12/8/2004	--	ND<50	--	--	--	--	--	--	--	--	--	--	--
3/23/2005	--	ND<50	--	--	--	--	--	--	--	--	--	--	--
6/28/2005	--	ND<1000	--	--	--	--	--	--	--	--	--	--	--
9/23/2005	--	ND<1000	--	--	--	--	--	--	--	--	--	--	--
12/30/2005	--	ND<250	--	--	--	--	--	--	--	--	--	--	--
3/24/2006	--	ND<250	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	--	ND<250	--	--	--	--	--	--	--	--	--	--	--
9/26/2006	--	ND<250	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
3/26/2007	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--

Table 2a
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	TBA ($\mu\text{g/l}$)	Ethanol (8260B) ($\mu\text{g/l}$)	Ethylene-dibromide (EDB) ($\mu\text{g/l}$)	1,2-DCA (EDC) ($\mu\text{g/l}$)	DIPE ($\mu\text{g/l}$)	ETBE ($\mu\text{g/l}$)	TAME ($\mu\text{g/l}$)	Antimony (total) ($\mu\text{g/l}$)	Antimony (dissolved) ($\mu\text{g/l}$)	Arsenic (total) ($\mu\text{g/l}$)	Arsenic (dissolved) ($\mu\text{g/l}$)	Barium (total) ($\mu\text{g/l}$)	Comments
6/27/2007	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	
3/17/2008	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	2000	
6/12/2008	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	2500	
12/9/2009	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	2200	
6/15/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	1200	
12/20/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	1200	
U-5													
4/3/2001	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
7/2/2001	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
10/8/2001	ND<100	ND<1000000	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	--	--	--	--	--	
1/3/2002	ND<20	ND<5000000	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--	--	--	--	--	
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	
7/1/2003	--	ND<500	--	--	--	--	--	--	--	--	--	--	
10/3/2003	--	ND<500	--	--	--	--	--	--	--	--	--	--	
1/8/2004	--	ND<500	--	--	--	--	--	--	--	--	--	--	
4/15/2004	--	ND<50	--	--	--	--	--	--	--	--	--	--	
7/15/2004	--	ND<50	--	--	--	--	--	--	--	--	--	--	
12/8/2004	--	ND<50	--	--	--	--	--	--	--	--	--	--	
3/23/2005	--	ND<50	--	--	--	--	--	--	--	--	--	--	
6/28/2005	--	ND<1000	--	--	--	--	--	--	--	--	--	--	
9/23/2005	--	ND<1000	--	--	--	--	--	--	--	--	--	--	
12/30/2005	--	ND<250	--	--	--	--	--	--	--	--	--	--	
3/24/2006	--	ND<2500	--	--	--	--	--	--	--	--	--	--	
6/26/2006	--	ND<250	--	--	--	--	--	--	--	--	--	--	
9/26/2006	--	ND<250	--	--	--	--	--	--	--	--	--	--	
11/21/2006	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	
3/26/2007	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	
6/27/2007	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	
3/17/2008	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	1300	
6/12/2008	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	830	
12/9/2009	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	1300	
6/15/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	460	
12/20/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	520	
U-6													
1/3/2002	ND<200	ND<5000000	ND<10	ND<10	ND<10	ND<10	ND<10	--	--	--	--	--	

Table 2a
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	TBA ($\mu\text{g/l}$)	Ethanol (8260B) ($\mu\text{g/l}$)	Ethylene-dibromide (EDB) ($\mu\text{g/l}$)	1,2-DCA (EDC) ($\mu\text{g/l}$)	DIPE ($\mu\text{g/l}$)	ETBE ($\mu\text{g/l}$)	TAME ($\mu\text{g/l}$)	Antimony (total) ($\mu\text{g/l}$)	Antimony (dissolved) ($\mu\text{g/l}$)	Arsenic (total) ($\mu\text{g/l}$)	Arsenic (dissolved) ($\mu\text{g/l}$)	Barium (total) ($\mu\text{g/l}$)	Comments
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/2003	--	ND<500000C	--	--	--	--	--	--	--	--	--	--	--
10/3/2003	--	ND<100000C	--	--	--	--	--	--	--	--	--	--	--
1/8/2004	--	ND<5000	--	--	--	--	--	--	--	--	--	--	--
4/15/2004	--	ND<250	--	--	--	--	--	--	--	--	--	--	--
7/15/2004	--	ND<250	--	--	--	--	--	--	--	--	--	--	--
12/8/2004	--	ND<250	--	--	--	--	--	--	--	--	--	--	--
3/23/2005	--	ND<50	--	--	--	--	--	--	--	--	--	--	--
6/28/2005	--	ND<1000	--	--	--	--	--	--	--	--	--	--	--
9/23/2005	--	ND<50000	--	--	--	--	--	--	--	--	--	--	--
12/30/2005	--	ND<250	--	--	--	--	--	--	--	--	--	--	--
3/24/2006	--	ND<2500	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	--	ND<2500	--	--	--	--	--	--	--	--	--	--	--
9/26/2006	--	ND<2500	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
3/26/2007	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
6/27/2007	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
3/17/2008	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	520	
6/12/2008	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	910	
6/15/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	690	
12/20/2010	ND<20	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<100	ND<100	ND<50	ND<50	720	
U-7													
1/3/2002	30	ND<500000C	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--	--	--	--	--	--
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/2003	--	ND<500000C	--	--	--	--	--	--	--	--	--	--	--
10/3/2003	--	ND<5000	--	--	--	--	--	--	--	--	--	--	--
1/8/2004	--	ND<1000	--	--	--	--	--	--	--	--	--	--	--
4/15/2004	--	ND<100	--	--	--	--	--	--	--	--	--	--	--
7/15/2004	--	ND<100	--	--	--	--	--	--	--	--	--	--	--
12/8/2004	--	ND<100	--	--	--	--	--	--	--	--	--	--	--
3/23/2005	--	ND<100	--	--	--	--	--	--	--	--	--	--	--

Table 2a
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	TBA ($\mu\text{g/l}$)	Ethanol (8260B) ($\mu\text{g/l}$)	Ethylene-dibromide (EDB) ($\mu\text{g/l}$)	1,2-DCA (EDC) ($\mu\text{g/l}$)	DIPE ($\mu\text{g/l}$)	ETBE ($\mu\text{g/l}$)	TAME ($\mu\text{g/l}$)	Antimony (total) ($\mu\text{g/l}$)	Antimony (dissolved) ($\mu\text{g/l}$)	Arsenic (total) ($\mu\text{g/l}$)	Arsenic (dissolved) ($\mu\text{g/l}$)	Barium (total) ($\mu\text{g/l}$)	Comments
6/28/2005	--	ND<1000	--	--	--	--	--	--	--	--	--	--	--
9/23/2005	--	ND<1000	--	--	--	--	--	--	--	--	--	--	--
12/30/2005	--	ND<250	--	--	--	--	--	--	--	--	--	--	--
3/24/2006	--	ND<250	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	--	ND<250	--	--	--	--	--	--	--	--	--	--	--
9/26/2006	--	ND<250	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
3/26/2007	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
6/27/2007	14	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	--
3/17/2008	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	670	
6/12/2008	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	520	
6/11/2009	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	380	
12/9/2009	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	390	
6/15/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	340	
12/20/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	460	
U-8													
12/9/2009	ND<50	ND<1200	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<100	ND<100	ND<50	ND<50	650	
6/15/2010	ND<20	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<100	ND<100	ND<50	ND<50	390	
12/20/2010	ND<20	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<100	ND<100	ND<50	ND<50	430	
U-9													
12/9/2009	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	96	
6/15/2010	ND<20	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<100	ND<100	ND<50	ND<50	510	
12/20/2010	ND<20	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<100	ND<100	ND<50	ND<50	460	
U-10													
6/11/2009	98	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<100	--	ND<50	--	
12/9/2009	1100	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	150	
6/15/2010	2400	ND<1200	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<100	ND<100	ND<50	ND<50	290	
12/20/2010	610	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<100	ND<100	ND<50	ND<50	290	
U-11													
6/11/2009	6800	ND<250	ND<0.50	1.8	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--	
12/9/2009	10000	ND<1200	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<100	ND<100	ND<50	ND<50	170	
6/15/2010	6600	ND<6200	ND<12	ND<12	ND<12	ND<12	ND<12	ND<100	ND<100	51	ND<50	560	
12/20/2010	3700	ND<5000	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<100	ND<50	ND<50	370	
U-12													
12/3/2008	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	330	

Table 2a
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	TBA (µg/l)	Ethanol (8260B) (µg/l)	Ethylene-dibromide (EDB) (µg/l)	1,2-DCA (EDC) (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (µg/l)	Antimony (total) (µg/l)	Antimony (dissolved) (µg/l)	Arsenic (total) (µg/l)	Arsenic (dissolved) (µg/l)	Barium (total) (µg/l)	Comments
2/18/2009	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	370	
6/11/2009	15	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	400	
12/9/2009	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	360	
6/15/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	350	
12/20/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	370	
U-13													
12/3/2008	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	140	
2/18/2009	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	120	
6/11/2009	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	120	
12/9/2009	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	15	
6/15/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	13	
12/20/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	46	
U-14													
12/3/2008	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	340	
2/18/2009	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	350	
6/11/2009	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	340	
12/9/2009	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	310	
6/15/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	260	
12/20/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	250	
U-15													
12/3/2008	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	320	
2/18/2009	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	140	
6/11/2009	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	52	
12/9/2009	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	96	
6/15/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	28	
12/20/2010	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	55	

Table 2b
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Barium (dissolved) (µg/l)	Beryllium (total) (µg/l)	Beryllium dissolved (µg/l)	Cadmium (total) (µg/l)	Cadmium dissolved (µg/l)	Calcium ()	Chromium VI (µg/l)	Chromium (total) (µg/l)	Chromium dissolved (µg/l)	Cobalt (total) (µg/l)	Cobalt dissolved (µg/l)	Copper (dissolved) (µg/l)	Comments
U-1													
10/2/2000	--	--	--	--	--	--	--	--	--	--	--	--	
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	
3/17/2008	--	--	--	--	--	--	ND<2.0	--	--	--	--	--	
6/15/2010	430	--	ND<10	--	ND<10	73	ND<2.0	--	ND<10	--	ND<50	ND<10	
12/20/2010	390	ND<10	ND<10	ND<10	ND<10	60	2.6	1400	ND<10	390	ND<50	ND<10	
U-2													
10/2/2000	--	--	--	--	--	--	--	--	--	--	--	--	
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	

Table 2b
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Barium (dissolved) (µg/l)	Beryllium (total) (µg/l)	Beryllium dissolved (µg/l)	Cadmium (total) (µg/l)	Cadmium dissolved (µg/l)	Calcium ()	Chromium VI (µg/l)	Chromium (total) (µg/l)	Chromium dissolved (µg/l)	Cobalt (total) (µg/l)	Cobalt dissolved (µg/l)	Copper (dissolved) (µg/l)	Comments
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	
9/23/2007	--	--	--	--	--	--	--	--	--	--	--	--	
3/17/2008	--	ND<10	--	ND<10	--	--	ND<2.0	540	--	150	--	--	
6/12/2008	--	--	--	--	--	--	--	--	--	--	--	--	
6/15/2010	300	--	ND<10	--	ND<10	57	ND<2.0	--	ND<10	--	ND<50	ND<10	
12/20/2010	250	ND<10	ND<10	ND<10	ND<10	43	2.7	230	ND<10	64	ND<50	ND<10	
U-3													
10/2/2000	--	--	--	--	--	--	--	--	--	--	--	--	
1/8/2001	--	--	--	--	--	--	--	--	--	--	--	--	
4/3/2001	--	--	--	--	--	--	--	--	--	--	--	--	
7/2/2001	--	--	--	--	--	--	--	--	--	--	--	--	
10/8/2001	--	--	--	--	--	--	--	--	--	--	--	--	
1/3/2002	--	--	--	--	--	--	--	--	--	--	--	--	
4/5/2002	--	--	--	--	--	--	--	--	--	--	--	--	
7/2/2002	--	--	--	--	--	--	--	--	--	--	--	--	
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	

Table 2b
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Barium (dissolved) (µg/l)	Beryllium (total) (µg/l)	Beryllium dissolved (µg/l)	Cadmium (total) (µg/l)	Cadmium dissolved (µg/l)	Calcium ()	Chromium VI (µg/l)	Chromium (total) (µg/l)	Chromium dissolved (µg/l)	Cobalt (total) (µg/l)	Cobalt dissolved (µg/l)	Copper (dissolved) (µg/l)	Comments
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
9/23/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
3/17/2008	410	ND<10	ND<10	ND<10	ND<10	59	ND<2.0	450	ND<10	140	ND<50	ND<10	
6/12/2008	--	ND<10	--	ND<10	--	--	--	980	--	350	--	--	
12/9/2009	--	--	--	--	--	--	--	--	--	--	--	--	
6/15/2010	410	ND<10	ND<10	ND<10	ND<10	56	ND<2.0	420	ND<10	130	ND<50	ND<10	
12/20/2010	360	ND<10	ND<10	ND<10	ND<10	44	ND<2.0	560	ND<10	170	ND<50	ND<10	
U-4													
4/3/2001	--	--	--	--	--	--	--	--	--	--	--	--	--
7/2/2001	--	--	--	--	--	--	--	--	--	--	--	--	--
1/3/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2b
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Barium (dissolved) ($\mu\text{g/l}$)	Beryllium (total) ($\mu\text{g/l}$)	Beryllium dissolved ($\mu\text{g/l}$)	Cadmium (total) ($\mu\text{g/l}$)	Cadmium dissolved ($\mu\text{g/l}$)	Calcium ()	Chromium VI ($\mu\text{g/l}$)	Chromium (total) ($\mu\text{g/l}$)	Chromium dissolved ($\mu\text{g/l}$)	Cobalt (total) ($\mu\text{g/l}$)	Cobalt dissolved ($\mu\text{g/l}$)	Copper (dissolved) ($\mu\text{g/l}$)	Comments
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
3/17/2008	470	ND<10	ND<10	ND<10	ND<10	68	ND<2.0	410	ND<10	140	ND<50	ND<10	
6/12/2008	52	ND<10	ND<10	ND<10	ND<10	2.4	ND<2.0	610	ND<10	180	ND<50	ND<10	
12/9/2009	500	ND<10	ND<10	ND<10	ND<10	62	ND<2.0	610	ND<10	200	ND<50	ND<10	
6/15/2010	420	ND<10	ND<10	ND<10	ND<10	69	30	270	29	80	ND<50	ND<10	
12/20/2010	440	ND<10	ND<10	ND<10	ND<10	59	ND<2.0	240	ND<10	80	ND<50	ND<10	
U-5													
4/3/2001	--	--	--	--	--	--	--	--	--	--	--	--	
7/2/2001	--	--	--	--	--	--	--	--	--	--	--	--	
10/8/2001	--	--	--	--	--	--	--	--	--	--	--	--	
1/3/2002	--	--	--	--	--	--	--	--	--	--	--	--	
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	
3/17/2008	390	ND<10	ND<10	ND<10	ND<10	67	ND<2.0	110	--	ND<50	ND<50	ND<10	
6/12/2008	370	ND<10	ND<10	ND<10	ND<10	66	ND<2.0	86	ND<10	ND<50	ND<50	ND<10	
12/9/2009	410	ND<10	ND<10	ND<10	ND<10	62	ND<2.0	180	ND<10	50	ND<50	ND<10	
6/15/2010	390	ND<10	ND<10	ND<10	ND<10	59	ND<2.0	ND<10	ND<10	ND<50	ND<50	ND<10	
12/20/2010	390	ND<10	ND<10	ND<10	ND<10	60	ND<2.0	12	ND<10	ND<50	ND<50	ND<10	
U-6													
1/3/2002	--	--	--	--	--	--	--	--	--	--	--	--	

Table 2b
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Barium (dissolved) (µg/l)	Beryllium (total) (µg/l)	Beryllium dissolved (µg/l)	Cadmium (total) (µg/l)	Cadmium dissolved (µg/l)	Calcium ()	Chromium VI (µg/l)	Chromium (total) (µg/l)	Chromium dissolved (µg/l)	Cobalt (total) (µg/l)	Cobalt dissolved (µg/l)	Copper (dissolved) (µg/l)	Comments
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
3/17/2008	330	ND<10	ND<10	ND<10	ND<10	73	ND<2.0	34	ND<10	ND<50	ND<50	ND<10	
6/12/2008	600	ND<10	ND<10	ND<10	ND<10	69	ND<2.0	ND<10	ND<10	ND<50	ND<50	ND<10	
6/15/2010	500	ND<10	ND<10	ND<10	ND<10	79	ND<2.0	37	ND<10	ND<50	ND<50	ND<10	
12/20/2010	510	ND<10	ND<10	ND<10	ND<10	72	ND<2.0	54	ND<10	ND<50	ND<50	ND<10	

U-7

1/3/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2b
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Barium (dissolved) (µg/l)	Beryllium (total) (µg/l)	Beryllium dissolved (µg/l)	Cadmium (total) (µg/l)	Cadmium dissolved (µg/l)	Calcium ()	Chromium VI (µg/l)	Chromium (total) (µg/l)	Chromium dissolved (µg/l)	Cobalt (total) (µg/l)	Cobalt dissolved (µg/l)	Copper (dissolved) (µg/l)	Comments
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
3/17/2008	510	ND<10	ND<10	ND<10	ND<10	68	ND<2.0	28	ND<10	ND<50	ND<50	ND<10	
6/12/2008	490	ND<10	ND<10	ND<10	ND<10	60	ND<2.0	10	ND<10	ND<50	ND<50	ND<10	
6/11/2009	340	ND<10	ND<10	ND<10	ND<10	31	ND<2.0	ND<10	ND<10	ND<50	ND<50	ND<10	
12/9/2009	280	ND<10	ND<10	ND<10	ND<10	37	ND<2.0	27	ND<10	ND<50	ND<50	ND<10	
6/15/2010	300	ND<10	ND<10	ND<10	ND<10	40	ND<2.0	ND<10	ND<10	ND<50	ND<50	ND<10	
12/20/2010	440	ND<10	ND<10	ND<10	ND<10	42	ND<2.0	ND<10	ND<10	ND<50	ND<50	ND<10	
U-8													
12/9/2009	200	ND<10	ND<10	ND<10	ND<10	53	ND<2.0	ND<10	ND<10	78	ND<50	ND<10	
6/15/2010	320	ND<10	ND<10	ND<10	ND<10	47	ND<2.0	27	ND<10	ND<50	ND<50	ND<10	
12/20/2010	390	ND<10	ND<10	ND<10	ND<10	44	ND<2.0	13	ND<10	ND<50	ND<50	ND<10	
U-9													
12/9/2009	64	ND<10	ND<10	ND<10	ND<10	69	ND<2.0	18	ND<10	ND<50	ND<50	ND<10	
6/15/2010	270	ND<10	ND<10	ND<10	ND<10	50	ND<2.0	79	ND<10	ND<50	ND<50	ND<10	
12/20/2010	350	ND<10	ND<10	ND<10	ND<10	43	ND<2.0	53	ND<10	ND<50	ND<50	ND<10	
U-10													
6/11/2009	50	--	ND<10	--	ND<10	40	ND<2.0	--	ND<10	--	ND<50	ND<10	
12/9/2009	59	ND<10	ND<10	ND<10	ND<10	47	ND<2.0	34	ND<10	ND<50	ND<50	ND<10	
6/15/2010	250	ND<10	ND<10	ND<10	ND<10	50	ND<2.0	23	ND<10	ND<50	ND<50	ND<10	
12/20/2010	150	ND<10	ND<10	ND<10	ND<10	48	ND<2.0	83	ND<10	ND<50	ND<50	ND<10	
U-11													
6/11/2009	--	--	--	--	--	--	--	--	--	--	--	--	
12/9/2009	89	ND<10	ND<10	ND<10	ND<10	61	ND<2.0	31	ND<10	ND<50	ND<50	ND<10	
6/15/2010	30	ND<10	ND<10	ND<10	ND<10	230	ND<2.0	54	ND<10	50	ND<50	ND<10	
12/20/2010	43	ND<10	ND<10	ND<10	ND<10	120	ND<2.0	44	ND<10	ND<50	ND<50	ND<10	
U-12													
12/3/2008	330	ND<10	ND<10	ND<10	ND<10	51	2.7	11	ND<10	ND<50	ND<50	ND<10	

Table 2b
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Barium (dissolved) (µg/l)	Beryllium (total) (µg/l)	Beryllium dissolved (µg/l)	Cadmium (total) (µg/l)	Cadmium dissolved (µg/l)	Calcium ()	Chromium VI (µg/l)	Chromium (total) (µg/l)	Chromium dissolved (µg/l)	Cobalt (total) (µg/l)	Cobalt dissolved (µg/l)	Copper (dissolved) (µg/l)	Comments
2/18/2009	330	ND<10	ND<10	ND<10	ND<10	50	2.7	ND<10	ND<10	ND<50	ND<50	ND<10	
6/11/2009	320	ND<10	ND<10	ND<10	ND<10	47	ND<2.0	21	ND<10	ND<50	ND<50	ND<10	
12/9/2009	330	ND<10	ND<10	ND<10	ND<10	47	2.3	ND<10	ND<10	ND<50	ND<50	ND<10	
6/15/2010	320	ND<10	ND<10	ND<10	ND<10	48	2.2	ND<10	ND<10	ND<50	ND<50	ND<10	
12/20/2010	340	ND<10	ND<10	ND<10	ND<10	50	2.5	ND<10	ND<10	ND<50	ND<50	36	
U-13													
12/3/2008	110	ND<10	ND<10	ND<10	ND<10	24	85	93	86	ND<50	ND<50	ND<10	
2/18/2009	98	ND<10	ND<10	ND<10	ND<10	22	88	88	88	ND<50	ND<50	ND<10	
6/11/2009	110	ND<10	ND<10	ND<10	ND<10	24	82	84	78	ND<50	ND<50	ND<10	
12/9/2009	10	ND<10	ND<10	ND<10	ND<10	3.9	67	74	70	ND<50	ND<50	ND<10	
6/15/2010	13	ND<10	ND<10	ND<10	ND<10	1.8	48	50	48	ND<50	ND<50	ND<10	
12/20/2010	42	ND<10	ND<10	ND<10	ND<10	8.0	26	28	28	ND<50	ND<50	10	
U-14													
12/3/2008	320	ND<10	ND<10	ND<10	ND<10	47	3.0	ND<10	ND<10	ND<50	ND<50	ND<10	
2/18/2009	320	ND<10	ND<10	ND<10	ND<10	46	3.4	ND<10	ND<10	ND<50	ND<50	ND<10	
6/11/2009	310	ND<10	ND<10	ND<10	ND<10	45	2.9	16	ND<10	ND<50	ND<50	ND<10	
12/9/2009	270	ND<10	ND<10	ND<10	ND<10	42	2.9	ND<10	ND<10	ND<50	ND<50	ND<10	
6/15/2010	220	ND<10	ND<10	ND<10	ND<10	36	3.9	ND<10	ND<10	ND<50	ND<50	ND<10	
12/20/2010	240	ND<10	ND<10	ND<10	ND<10	40	3.9	ND<10	ND<10	ND<50	ND<50	23	
U-15													
12/3/2008	300	ND<10	ND<10	ND<10	ND<10	47	3.7	ND<10	ND<10	ND<50	ND<50	ND<10	
2/18/2009	91	ND<10	ND<10	ND<10	ND<10	14	10	11	ND<10	ND<50	ND<50	ND<10	
6/11/2009	30	ND<10	ND<10	ND<10	ND<10	4.6	9.0	12	ND<10	ND<50	ND<50	ND<10	
12/9/2009	64	ND<10	ND<10	ND<10	ND<10	13	17	20	17	ND<50	ND<50	ND<10	
6/15/2010	19	ND<10	ND<10	ND<10	ND<10	3.8	22	25	21	ND<50	ND<50	ND<10	
12/20/2010	38	ND<10	ND<10	ND<10	ND<10	6.5	34	39	36	ND<50	ND<50	ND<10	

Table 2c
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Copper (total) ($\mu\text{g/l}$)	Lead (dissolved) ()	Lead (total) ($\mu\text{g/l}$)	Magnesium (dissolved) (mg/l)	Manganese (dissolved) ($\mu\text{g/l}$)	Mercury (total) ($\mu\text{g/l}$)	Mercury (dissolved) ($\mu\text{g/l}$)	Molybdenum (total) ($\mu\text{g/l}$)	Molybdenum (dissolved) ($\mu\text{g/l}$)	Nickel (total) ($\mu\text{g/l}$)	Nickel (dissolved) ($\mu\text{g/l}$)	Potassium ()	Comments
U-1													
10/2/2000	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
3/17/2008	--	--	--	--	--	--	--	--	--	--	--	--	--
6/15/2010	--	ND<50	--	100	11	--	ND<0.20	--	ND<50	--	ND<10	2.9	
12/20/2010	860	ND<50	180	85	ND<10	1.1	ND<0.20	ND<50	ND<50	3700	ND<10	3.5	
U-2													
10/2/2000	--	--	--	--	--	--	--	--	--	--	--	--	--
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2c
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Copper (total) ($\mu\text{g/l}$)	Lead (dissolved) ($\mu\text{g/l}$)	Lead (total) ($\mu\text{g/l}$)	Magnesium (dissolved) (mg/l)	Manganese (dissolved) ($\mu\text{g/l}$)	Mercury (total) ($\mu\text{g/l}$)	Mercury (dissolved) ($\mu\text{g/l}$)	Molybdenum (total) ($\mu\text{g/l}$)	Molybdenum (dissolved) ($\mu\text{g/l}$)	Nickel (total) ($\mu\text{g/l}$)	Nickel (dissolved) ($\mu\text{g/l}$)	Potassium ()	Comments
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
9/23/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
3/17/2008	330	--	71	--	--	1.7	--	ND<50	--	1500	--	--	--
6/12/2008	--	--	--	--	--	--	--	--	--	--	--	--	--
6/15/2010	--	ND<50	--	85	ND<10	--	ND<0.20	--	ND<50	--	ND<10	2.2	
12/20/2010	140	ND<50	ND<50	64	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	630	ND<10	3.6	
U-3													
10/2/2000	--	--	--	--	--	--	--	--	--	--	--	--	--
1/8/2001	--	--	--	--	--	--	--	--	--	--	--	--	--
4/3/2001	--	--	--	--	--	--	--	--	--	--	--	--	--
7/2/2001	--	--	--	--	--	--	--	--	--	--	--	--	--
10/8/2001	--	--	--	--	--	--	--	--	--	--	--	--	--
1/3/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
4/5/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
7/2/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2c
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Copper (total) ($\mu\text{g/l}$)	Lead (dissolved) ()	Lead (total) ($\mu\text{g/l}$)	Magnesium (dissolved) (mg/l)	Manganese (dissolved) ($\mu\text{g/l}$)	Mercury (total) ($\mu\text{g/l}$)	Mercury (dissolved) ($\mu\text{g/l}$)	Molybdenum (total) ($\mu\text{g/l}$)	Molybdenum (dissolved) ($\mu\text{g/l}$)	Nickel (total) ($\mu\text{g/l}$)	Nickel (dissolved) ($\mu\text{g/l}$)	Potassium ()	Comments
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
9/23/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
3/17/2008	240	ND<50	65	94	2600	0.84	ND<0.20	ND<50	ND<50	1200	ND<10	1.6	
6/12/2008	590	--	160	--	--	2.4	--	81	--	2800	--	--	
12/9/2009	--	--	--	--	--	--	--	--	--	--	--	--	
6/15/2010	230	ND<50	67	91	2300	ND<0.20	ND<0.20	ND<50	ND<50	1200	ND<10	1.6	
12/20/2010	300	ND<50	77	71	1900	0.52	ND<0.20	ND<50	ND<50	1500	ND<10	2.2	
U-4													
4/3/2001	--	--	--	--	--	--	--	--	--	--	--	--	
7/2/2001	--	--	--	--	--	--	--	--	--	--	--	--	
1/3/2002	--	--	--	--	--	--	--	--	--	--	--	--	
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	

Table 2c
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Copper (total) ($\mu\text{g/l}$)	Lead (dissolved) ()	Lead (total) ($\mu\text{g/l}$)	Magnesium (dissolved) (mg/l)	Manganese (dissolved) ($\mu\text{g/l}$)	Mercury (total) ($\mu\text{g/l}$)	Mercury (dissolved) ($\mu\text{g/l}$)	Molybdenum (total) ($\mu\text{g/l}$)	Molybdenum (dissolved) ($\mu\text{g/l}$)	Nickel (total) ($\mu\text{g/l}$)	Nickel (dissolved) ($\mu\text{g/l}$)	Potassium ()	Comments
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
3/17/2008	250	ND<50	ND<50	88	2000	ND<0.20	ND<0.20	ND<50	ND<50	1300	ND<10	2.3	
6/12/2008	360	ND<50	53	7.7	720	2.5	ND<0.20	ND<50	ND<50	ND<50	2100	ND<10	ND<1.0
12/9/2009	300	ND<50	59	91	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	ND<50	2000	ND<10	2.7
6/15/2010	110	ND<50	ND<50	87	ND<10	0.63	ND<0.20	ND<50	ND<50	ND<50	770	ND<10	2.8
12/20/2010	120	ND<50	ND<50	85	210	0.36	ND<0.20	ND<50	ND<50	ND<50	750	ND<10	3.3
U-5													
4/3/2001	--	--	--	--	--	--	--	--	--	--	--	--	--
7/2/2001	--	--	--	--	--	--	--	--	--	--	--	--	--
10/8/2001	--	--	--	--	--	--	--	--	--	--	--	--	--
1/3/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
3/17/2008	72	ND<50	ND<50	89	76	0.55	ND<0.20	ND<50	ND<50	360	ND<10	2.4	
6/12/2008	53	ND<50	ND<50	73	36	0.26	ND<0.20	ND<50	ND<50	290	ND<10	1.9	
12/9/2009	110	ND<50	ND<50	79	1000	ND<0.20	ND<0.20	ND<50	ND<50	540	ND<10	2.4	
6/15/2010	ND<10	ND<50	ND<50	78	660	ND<0.20	ND<0.20	ND<50	ND<50	30	ND<10	2.2	
12/20/2010	12	ND<50	ND<50	79	500	ND<0.20	ND<0.20	ND<50	ND<50	47	ND<10	2.7	
U-6													
1/3/2002	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2c
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Copper (total) ($\mu\text{g/l}$)	Lead (dissolved) ()	Lead (total) ($\mu\text{g/l}$)	Magnesium (dissolved) (mg/l)	Manganese (dissolved) ($\mu\text{g/l}$)	Mercury (total) ($\mu\text{g/l}$)	Mercury (dissolved) ($\mu\text{g/l}$)	Molyb-denum (total) ($\mu\text{g/l}$)	Molyb-denum (dissolved) ($\mu\text{g/l}$)	Nickel (total) ($\mu\text{g/l}$)	Nickel (dissolved) ($\mu\text{g/l}$)	Potassium ()	Comments
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
3/17/2008	17	ND<50	ND<50	120	4300	ND<0.20	ND<0.20	ND<50	ND<50	91	ND<10	1.0	
6/12/2008	ND<10	ND<50	ND<50	110	3800	0.60	ND<0.20	ND<50	ND<50	47	ND<10	1.3	
6/15/2010	25	ND<50	ND<50	140	3900	ND<0.20	ND<0.20	ND<50	ND<50	100	ND<10	1.4	
12/20/2010	27	ND<50	ND<50	120	3500	ND<0.20	ND<0.20	ND<50	ND<50	160	ND<10	2.1	
U-7													
1/3/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2c
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Copper (total) ($\mu\text{g/l}$)	Lead (dissolved) ()	Lead (total) ($\mu\text{g/l}$)	Magnesium (dissolved) (mg/l)	Manganese (dissolved) ($\mu\text{g/l}$)	Mercury (total) ($\mu\text{g/l}$)	Mercury (dissolved) ($\mu\text{g/l}$)	Molybdenum (total) ($\mu\text{g/l}$)	Molybdenum (dissolved) ($\mu\text{g/l}$)	Nickel (total) ($\mu\text{g/l}$)	Nickel (dissolved) ($\mu\text{g/l}$)	Potassium ()	Comments
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
3/17/2008	16	ND<50	ND<50	110	2300	ND<0.20	ND<0.20	ND<50	ND<50	79	ND<10	2.4	
6/12/2008	ND<10	ND<50	ND<50	92	2400	ND<0.20	ND<0.20	ND<50	ND<50	38	ND<10	2.4	
6/11/2009	ND<10	ND<0.05	ND<50	50	1100	ND<0.20	ND<0.20	ND<50	ND<50	25	ND<10	2.6	
12/9/2009	14	ND<50	ND<50	64	1800	ND<0.20	ND<0.20	ND<50	ND<50	74	ND<10	2.1	
6/15/2010	ND<10	ND<50	ND<50	68	1900	ND<0.20	ND<0.20	ND<50	ND<50	12	ND<10	1.8	
12/20/2010	ND<10	ND<50	ND<50	70	1900	ND<0.20	ND<0.20	ND<50	ND<50	17	ND<10	2.8	
U-8													
12/9/2009	130	ND<50	ND<50	91	4000	ND<0.20	ND<0.20	ND<50	ND<50	690	ND<10	2.8	
6/15/2010	11	ND<50	ND<50	83	2600	ND<0.20	ND<0.20	ND<50	ND<50	57	ND<10	1.8	
12/20/2010	ND<10	ND<50	ND<50	77	1900	ND<0.20	ND<0.20	ND<50	ND<50	28	ND<10	2.1	
U-9													
12/9/2009	15	ND<50	ND<50	120	3800	ND<0.20	ND<0.20	ND<50	ND<50	35	ND<10	8.5	
6/15/2010	40	ND<50	ND<50	96	2500	ND<0.20	ND<0.20	ND<50	ND<50	230	ND<10	3.2	
12/20/2010	27	ND<50	ND<50	83	2100	ND<0.20	ND<0.20	ND<50	ND<50	150	ND<10	2.8	
U-10													
6/11/2009	--	ND<0.05	--	87	780	--	ND<0.20	--	ND<50	--	ND<10	30	
12/9/2009	17	ND<50	ND<50	110	1400	ND<0.20	ND<0.20	ND<50	ND<50	110	ND<10	29	
6/15/2010	19	ND<50	ND<50	110	2200	ND<0.20	ND<0.20	ND<50	ND<50	68	ND<10	7.5	
12/20/2010	39	ND<50	ND<50	96	2100	0.28	ND<0.20	ND<50	ND<50	260	ND<10	8.4	
U-11													
6/11/2009	--	--	--	--	--	--	--	--	--	--	--	--	
12/9/2009	22	ND<50	ND<50	110	2500	ND<0.20	ND<0.20	ND<50	ND<50	83	ND<10	4.3	
6/15/2010	33	ND<50	ND<50	1800	20000	ND<0.20	ND<0.20	ND<50	ND<50	230	93	4.1	
12/20/2010	27	ND<50	ND<50	450	7000	ND<0.20	ND<0.20	ND<50	ND<50	180	43	3.8	
U-12													
12/3/2008	12	ND<50	ND<50	73	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	24	ND<10	2.6	

Table 2c
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Copper (total) ($\mu\text{g/l}$)	Lead (dissolved) ()	Lead (total) ($\mu\text{g/l}$)	Magnesium (dissolved) (mg/l)	Manganese (dissolved) ($\mu\text{g/l}$)	Mercury (total) ($\mu\text{g/l}$)	Mercury (dissolved) ($\mu\text{g/l}$)	Molyb-denum (total) ($\mu\text{g/l}$)	Molyb-denum (dissolved) ($\mu\text{g/l}$)	Nickel (total) ($\mu\text{g/l}$)	Nickel (dissolved) ($\mu\text{g/l}$)	Potassium ()	Comments
2/18/2009	ND<10	ND<50	ND<50	71	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	12	ND<10	2.3	
6/11/2009	ND<10	ND<0.05	ND<50	70	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	62	ND<10	2.2	
12/9/2009	ND<10	ND<50	ND<50	70	26	ND<0.20	ND<0.20	ND<50	ND<50	10	ND<10	2.7	
6/15/2010	ND<10	ND<50	ND<50	69	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	10	ND<10	2.4	
12/20/2010	43	ND<50	ND<50	71	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	12	ND<10	2.8	
U-13													
12/3/2008	21	ND<50	ND<50	53	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	ND<10	ND<10	8.3	
2/18/2009	ND<10	ND<50	ND<50	52	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	ND<10	ND<10	14	
6/11/2009	ND<10	ND<0.05	ND<50	53	12	ND<0.20	ND<0.20	ND<50	ND<50	ND<10	ND<10	13	
12/9/2009	ND<10	ND<50	ND<50	45	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	ND<10	ND<10	88	
6/15/2010	ND<10	ND<50	ND<50	47	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	ND<10	ND<10	71	
12/20/2010	13	ND<50	ND<50	64	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	ND<10	ND<10	63	
U-14													
12/3/2008	26	ND<50	ND<50	67	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	15	ND<10	2.6	
2/18/2009	ND<10	ND<50	ND<50	66	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	ND<10	ND<10	2.5	
6/11/2009	ND<10	ND<0.05	ND<50	64	17	ND<0.20	ND<0.20	ND<50	ND<50	40	ND<10	2.5	
12/9/2009	ND<10	ND<50	ND<50	53	27	ND<0.20	ND<0.20	ND<50	ND<50	10	ND<10	3.1	
6/15/2010	ND<10	ND<50	ND<50	44	21	ND<0.20	ND<0.20	ND<50	ND<50	13	ND<10	3.9	
12/20/2010	31	ND<50	ND<50	47	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	ND<10	ND<10	4.8	
U-15													
12/3/2008	12	ND<50	ND<50	69	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	ND<10	ND<10	3.7	
2/18/2009	ND<10	ND<50	ND<50	62	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	ND<10	ND<10	39	
6/11/2009	ND<10	ND<0.05	ND<50	62	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	ND<10	ND<10	36	
12/9/2009	ND<10	ND<50	ND<50	70	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	11	ND<10	41	
6/15/2010	ND<10	ND<50	ND<50	65	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	17	10	52	
12/20/2010	ND<10	ND<50	ND<50	67	ND<10	ND<0.20	ND<0.20	ND<50	ND<50	15	12	72	

Table 2d
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Selenium (total) ($\mu\text{g/l}$)	Selenium dissolved ($\mu\text{g/l}$)	Silver (total) ($\mu\text{g/l}$)	Silver dissolved ($\mu\text{g/l}$)	Sodium ()	Thallium (total) ($\mu\text{g/l}$)	Thallium dissolved ($\mu\text{g/l}$)	Vanadium (total) ($\mu\text{g/l}$)	Vanadium dissolved ($\mu\text{g/l}$)	Zinc (dissolved) ($\mu\text{g/l}$)	Zinc (total) ($\mu\text{g/l}$)	Chloride (mg/l)	Comments
U-1													
10/2/2000	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
3/17/2008	--	--	--	--	--	--	--	--	--	--	--	--	--
6/15/2010	--	ND<100	--	ND<10	61	--	ND<100	--	ND<10	ND<10	--	58	
12/20/2010	ND<100	ND<100	ND<10	ND<10	55	ND<100	ND<100	570	ND<10	ND<10	1300	42	
U-2													
10/2/2000	--	--	--	--	--	--	--	--	--	--	--	--	--
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2d
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Selenium (total) ($\mu\text{g/l}$)	Selenium dissolved ($\mu\text{g/l}$)	Silver (total) ($\mu\text{g/l}$)	Silver dissolved ($\mu\text{g/l}$)	Sodium ()	Thallium (total) ($\mu\text{g/l}$)	Thallium dissolved ($\mu\text{g/l}$)	Vanadium (total) ($\mu\text{g/l}$)	Vanadium dissolved ($\mu\text{g/l}$)	Zinc (dissolved) ($\mu\text{g/l}$)	Zinc (total) ($\mu\text{g/l}$)	Chloride (mg/l)	Comments
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
9/23/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
3/17/2008	ND<100	--	ND<10	--	--	ND<100	--	240	--	--	590	--	
6/12/2008	--	--	--	--	--	--	--	--	--	--	--	--	
6/15/2010	--	ND<100	--	ND<10	66	--	ND<100	--	ND<10	ND<10	--	28	
12/20/2010	ND<100	ND<100	ND<10	ND<10	56	ND<100	ND<100	110	ND<10	ND<10	260	17	
U-3													
10/2/2000	--	--	--	--	--	--	--	--	--	--	--	--	
1/8/2001	--	--	--	--	--	--	--	--	--	--	--	--	
4/3/2001	--	--	--	--	--	--	--	--	--	--	--	--	
7/2/2001	--	--	--	--	--	--	--	--	--	--	--	--	
10/8/2001	--	--	--	--	--	--	--	--	--	--	--	--	
1/3/2002	--	--	--	--	--	--	--	--	--	--	--	--	
4/5/2002	--	--	--	--	--	--	--	--	--	--	--	--	
7/2/2002	--	--	--	--	--	--	--	--	--	--	--	--	
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	

Table 2d
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Selenium (total) ($\mu\text{g/l}$)	Selenium dissolved ($\mu\text{g/l}$)	Silver (total) ($\mu\text{g/l}$)	Silver dissolved ($\mu\text{g/l}$)	Sodium ()	Thallium (total) ($\mu\text{g/l}$)	Thallium dissolved ($\mu\text{g/l}$)	Vanadium (total) ($\mu\text{g/l}$)	Vanadium dissolved ($\mu\text{g/l}$)	Zinc (dissolved) ($\mu\text{g/l}$)	Zinc (total) ($\mu\text{g/l}$)	Chloride (mg/l)	Comments
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
9/23/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
3/17/2008	ND<100	ND<100	ND<10	ND<10	41	ND<100	ND<100	190	ND<10	ND<10	360	14	
6/12/2008	ND<100	--	ND<10	--	--	ND<100	--	410	--	--	970	--	
12/9/2009	--	--	--	--	--	--	--	--	--	--	--	--	
6/15/2010	ND<100	ND<100	ND<10	ND<10	36	ND<100	ND<100	170	ND<10	ND<10	360	9.9	
12/20/2010	ND<100	ND<100	ND<10	ND<10	32	ND<100	ND<100	230	ND<10	ND<10	470	6.9	
U-4													
4/3/2001	--	--	--	--	--	--	--	--	--	--	--	--	--
7/2/2001	--	--	--	--	--	--	--	--	--	--	--	--	--
1/3/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2d
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Selenium (total) ($\mu\text{g/l}$)	Selenium dissolved ($\mu\text{g/l}$)	Silver (total) ($\mu\text{g/l}$)	Silver dissolved ($\mu\text{g/l}$)	Sodium ()	Thallium (total) ($\mu\text{g/l}$)	Thallium dissolved ($\mu\text{g/l}$)	Vanadium (total) ($\mu\text{g/l}$)	Vanadium dissolved ($\mu\text{g/l}$)	Zinc (dissolved) ($\mu\text{g/l}$)	Zinc (total) ($\mu\text{g/l}$)	Chloride (mg/l)	Comments
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
3/17/2008	ND<100	ND<100	ND<10	ND<10	35	ND<100	ND<100	190	ND<10	ND<10	340	37	
6/12/2008	ND<100	ND<100	ND<10	ND<10	9.0	ND<100	ND<100	260	ND<10	ND<10	420	38	
12/9/2009	ND<100	ND<100	ND<10	ND<10	35	ND<100	ND<100	230	ND<10	ND<10	400	35	
6/15/2010	ND<100	ND<100	ND<10	ND<10	65	ND<100	ND<100	96	ND<10	ND<10	190	44	
12/20/2010	ND<100	ND<100	ND<10	ND<10	33	ND<100	ND<100	94	ND<10	ND<10	190	31	
U-5													
4/3/2001	--	--	--	--	--	--	--	--	--	--	--	--	
7/2/2001	--	--	--	--	--	--	--	--	--	--	--	--	
10/8/2001	--	--	--	--	--	--	--	--	--	--	--	--	
1/3/2002	--	--	--	--	--	--	--	--	--	--	--	--	
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	
3/17/2008	ND<100	ND<100	ND<10	ND<10	49	ND<100	ND<100	60	ND<100	ND<10	120	32	
6/12/2008	ND<100	ND<100	ND<10	ND<10	26	ND<100	ND<100	44	ND<10	ND<10	87	31	
12/9/2009	ND<100	ND<100	ND<10	ND<10	32	ND<100	ND<100	93	ND<10	ND<10	180	43	
6/15/2010	ND<100	ND<100	ND<10	ND<10	42	ND<100	ND<100	ND<10	ND<10	ND<10	ND<50	61	
12/20/2010	ND<100	ND<100	ND<10	ND<10	38	ND<100	ND<100	ND<10	ND<10	ND<10	ND<50	67	
U-6													
1/3/2002	--	--	--	--	--	--	--	--	--	--	--	--	

Table 2d
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Selenium (total) ($\mu\text{g/l}$)	Selenium (dissolved) ($\mu\text{g/l}$)	Silver (total) ($\mu\text{g/l}$)	Silver (dissolved) ($\mu\text{g/l}$)	Sodium ()	Thallium (total) ($\mu\text{g/l}$)	Thallium (dissolved) ($\mu\text{g/l}$)	Vanadium (total) ($\mu\text{g/l}$)	Vanadium (dissolved) ($\mu\text{g/l}$)	Zinc (dissolved) ($\mu\text{g/l}$)	Zinc (total) ($\mu\text{g/l}$)	Chloride (mg/l)	Comments
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
3/17/2008	ND<100	ND<100	ND<10	ND<10	90	ND<100	ND<100	15	ND<10	ND<10	79	160	
6/12/2008	ND<100	ND<100	ND<10	ND<10	76	ND<100	ND<100	ND<10	ND<10	11	ND<50	190	
6/15/2010	ND<100	ND<100	ND<10	ND<10	96	ND<100	ND<100	14	ND<10	ND<10	72	170	
12/20/2010	ND<100	ND<100	ND<10	ND<10	93	ND<100	ND<100	22	ND<10	ND<10	57	190	

U-7

1/3/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	--
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
10/3/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
1/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
4/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
7/15/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
12/8/2004	--	--	--	--	--	--	--	--	--	--	--	--	--
3/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2d
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Selenium (total) ($\mu\text{g/l}$)	Selenium (dissolved) ($\mu\text{g/l}$)	Silver (total) ($\mu\text{g/l}$)	Silver (dissolved) ($\mu\text{g/l}$)	Sodium ()	Thallium (total) ($\mu\text{g/l}$)	Thallium (dissolved) ($\mu\text{g/l}$)	Vanadium (total) ($\mu\text{g/l}$)	Vanadium (dissolved) ($\mu\text{g/l}$)	Zinc (dissolved) ($\mu\text{g/l}$)	Zinc (total) ($\mu\text{g/l}$)	Chloride (mg/l)	Comments
6/28/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
9/23/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
3/24/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
6/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
9/26/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
11/21/2006	--	--	--	--	--	--	--	--	--	--	--	--	--
3/26/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	--
3/17/2008	ND<100	ND<100	ND<10	ND<10	68	ND<100	ND<100	12	ND<10	ND<10	51	91	
6/12/2008	ND<100	ND<100	ND<10	ND<10	59	ND<100	ND<100	ND<10	ND<10	11	ND<50	120	
6/11/2009	ND<100	ND<100	ND<10	ND<10	62	ND<100	ND<100	ND<10	ND<10	26	ND<50	110	
12/9/2009	ND<100	ND<100	ND<10	ND<10	64	ND<100	ND<100	13	ND<10	ND<10	ND<50	110	
6/15/2010	ND<100	ND<100	ND<10	ND<10	66	ND<100	ND<100	ND<10	ND<10	ND<10	ND<50	110	
12/20/2010	ND<100	ND<100	ND<10	ND<10	64	ND<100	ND<100	ND<10	ND<10	ND<10	ND<50	87	
U-8													
12/9/2009	ND<100	ND<100	ND<10	ND<10	58	ND<100	ND<100	96	ND<10	ND<10	180	59	
6/15/2010	ND<100	ND<100	ND<10	ND<10	50	ND<100	ND<100	10	ND<10	ND<10	ND<50	59	
12/20/2010	ND<100	ND<100	ND<10	ND<10	47	ND<100	ND<100	ND<10	ND<10	ND<10	ND<50	50	
U-9													
12/9/2009	ND<100	ND<100	ND<10	ND<10	84	ND<100	ND<100	ND<10	ND<10	ND<10	55	100	
6/15/2010	ND<100	ND<100	ND<10	ND<10	61	ND<100	ND<100	31	ND<10	ND<10	94	70	
12/20/2010	ND<100	ND<100	ND<10	ND<10	54	ND<100	ND<100	22	ND<10	ND<10	55	64	
U-10													
6/11/2009	--	ND<100	--	ND<10	170	--	ND<100	--	ND<10	24	--	110	
12/9/2009	ND<100	ND<100	ND<10	ND<10	130	ND<100	ND<100	16	ND<10	ND<10	ND<50	47	
6/15/2010	ND<100	ND<100	ND<10	ND<10	67	ND<100	ND<100	ND<10	ND<10	30	ND<50	46	
12/20/2010	ND<100	ND<100	ND<10	ND<10	55	ND<100	ND<100	31	ND<10	ND<10	85	34	
U-11													
6/11/2009	--	--	--	--	--	--	--	--	--	--	--	--	
12/9/2009	ND<100	ND<100	ND<10	ND<10	67	ND<100	ND<100	19	ND<10	ND<10	ND<50	70	
6/15/2010	ND<100	ND<100	ND<10	ND<10	120	ND<100	ND<100	29	ND<10	10	62	60	
12/20/2010	ND<100	ND<100	ND<10	ND<10	59	ND<100	ND<100	27	ND<10	ND<10	64	55	
U-12													
12/3/2008	ND<100	ND<100	ND<10	ND<10	49	ND<100	ND<100	ND<10	ND<10	26	ND<50	85	

Table 2d
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Selenium (total) ($\mu\text{g/l}$)	Selenium dissolved ($\mu\text{g/l}$)	Silver (total) ($\mu\text{g/l}$)	Silver dissolved ($\mu\text{g/l}$)	Sodium ()	Thallium (total) ($\mu\text{g/l}$)	Thallium dissolved ($\mu\text{g/l}$)	Vanadium (total) ($\mu\text{g/l}$)	Vanadium dissolved ($\mu\text{g/l}$)	Zinc (dissolved) ($\mu\text{g/l}$)	Zinc (total) ($\mu\text{g/l}$)	Chloride (mg/l)	Comments
2/18/2009	ND<100	ND<100	ND<10	ND<10	48	ND<100	ND<100	ND<10	ND<10	13	ND<50	86	
6/11/2009	ND<100	ND<100	ND<10	ND<10	50	ND<100	ND<100	ND<10	ND<10	30	ND<50	91	
12/9/2009	ND<100	ND<100	ND<10	ND<10	51	ND<100	ND<100	ND<10	ND<10	ND<10	ND<50	83	
6/15/2010	ND<100	ND<100	ND<10	ND<10	50	ND<100	ND<100	ND<10	ND<10	18	ND<50	85	
12/20/2010	ND<100	ND<100	ND<10	ND<10	51	ND<100	ND<100	ND<10	ND<10	160	170	87	
U-13													
12/3/2008	ND<100	ND<100	ND<10	ND<10	59	ND<100	ND<100	ND<10	ND<10	ND<10	ND<50	95	
2/18/2009	ND<100	ND<100	ND<10	ND<10	65	ND<100	ND<100	ND<10	ND<10	ND<10	ND<50	96	
6/11/2009	ND<100	ND<100	ND<10	ND<10	66	ND<100	ND<100	ND<10	ND<10	29	ND<50	100	
12/9/2009	ND<100	ND<100	ND<10	ND<10	110	ND<100	ND<10	ND<10	ND<10	ND<10	ND<50	82	
6/15/2010	ND<100	ND<100	ND<10	ND<10	110	ND<100	ND<100	ND<10	ND<10	ND<10	ND<50	80	
12/20/2010	ND<100	ND<100	ND<10	ND<10	100	ND<100	ND<100	ND<10	ND<10	14	ND<50	81	
U-14													
12/3/2008	ND<100	ND<100	ND<10	ND<10	48	ND<100	ND<100	ND<10	ND<10	43	69	85	
2/18/2009	ND<100	ND<100	ND<10	ND<10	47	ND<100	ND<100	ND<10	ND<10	24	53	84	
6/11/2009	ND<100	ND<100	ND<10	ND<10	47	ND<100	ND<100	ND<10	ND<10	34	ND<50	86	
12/9/2009	ND<100	ND<100	ND<10	ND<10	41	ND<100	ND<100	ND<10	ND<10	21	64	66	
6/15/2010	ND<100	ND<100	ND<10	ND<10	35	ND<100	ND<100	ND<10	ND<10	19	57	55	
12/20/2010	ND<100	ND<100	ND<10	ND<10	36	ND<100	ND<100	ND<10	ND<10	59	84	56	
U-15													
12/3/2008	ND<100	ND<100	ND<10	ND<10	48	ND<100	ND<100	ND<10	ND<10	36	54	87	
2/18/2009	ND<100	ND<100	ND<10	ND<10	78	ND<100	ND<100	ND<10	ND<10	ND<10	ND<50	86	
6/11/2009	ND<100	ND<100	ND<10	ND<10	76	ND<100	ND<100	ND<10	ND<10	24	ND<50	92	
12/9/2009	ND<100	ND<100	ND<10	ND<10	80	ND<100	ND<100	ND<10	ND<10	ND<10	ND<10	52	85
6/15/2010	ND<100	ND<100	ND<10	ND<10	95	ND<100	ND<100	ND<10	ND<10	ND<10	ND<50	84	
12/20/2010	ND<100	ND<100	ND<10	ND<10	100	ND<100	ND<100	ND<10	ND<10	ND<10	ND<50	82	

Table 2e
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Nitrogen				Field Conductivity ()	Field pH ()	Field Temp. ()	Post-purge Dissolved Oxygen ()	Pre-purge Dissolved Oxygen ()	Pre-purge ORP ()	Post-purge ORP ()	Comments
	Fluoride (mg/l)	Nitrate (mg/l)	Sulfate (mg/l)	TDS (mg/l)								
U-1												
10/2/2000	--	--	--	--	--	--	--	--	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	0.60	--	--	--	91
5/2/2003	--	--	--	--	--	--	--	0.50	--	--	--	90
7/1/2003	--	--	--	--	--	--	--	0.60	--	--	--	110
10/3/2003	--	--	--	--	--	--	--	3.79	--	--	--	329
1/8/2004	--	--	--	--	--	--	--	12.36	--	--	--	184
4/15/2004	--	--	--	--	--	--	--	10.56	--	--	--	213
7/15/2004	--	--	--	--	--	--	--	6.62	--	--	--	251
12/8/2004	--	--	--	--	--	--	--	2.66	--	--	--	68
3/23/2005	--	--	--	--	--	--	--	3.12	--	--	--	091
6/28/2005	--	--	--	--	--	--	--	8.84	--	--	--	153
9/23/2005	--	--	--	--	--	--	--	2.26	--	--	--	187
12/30/2005	--	--	--	--	--	--	--	7.74	--	--	--	159
3/24/2006	--	--	--	--	--	--	--	4.02	3.88	036	016	
6/26/2006	--	--	--	--	--	--	--	7.05	5.50	008	007	
9/26/2006	--	--	--	--	--	--	--	4.24	4.66	203	200	
11/21/2006	--	--	--	--	--	--	--	4.24	4.56	1.97	2.00	
3/26/2007	--	--	--	--	--	--	--	6.58	6.98	107	102	
6/27/2007	--	--	--	--	--	--	--	4.98	4.85	20	34	
3/17/2008	--	--	--	--	--	--	--	3.12	2.43	151	153	
6/15/2010	0.15	17	40	740	1295	6.62	19.5	1.36	--	--	221	
12/20/2010	0.098	19	37	610	937.4	6.93	20.3	1.18	--	--	227	
U-2												
10/2/2000	--	--	--	--	--	--	--	--	--	--	--	--
10/1/2002	--	--	--	--	--	--	--	1.40	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	2.80	--	--	--	120
5/2/2003	--	--	--	--	--	--	--	150.00	--	--	--	120
7/1/2003	--	--	--	--	--	--	--	1.20	--	--	--	110
10/3/2003	--	--	--	--	--	--	--	5.61	--	--	--	321
1/8/2004	--	--	--	--	--	--	--	12.11	--	--	--	- 6
4/15/2004	--	--	--	--	--	--	--	11.39	--	--	--	259
7/15/2004	--	--	--	--	--	--	--	7.46	--	--	--	238
12/8/2004	--	--	--	--	--	--	--	3.57	--	--	--	132
3/23/2005	--	--	--	--	--	--	--	4.57	--	--	--	024

Table 2e
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Nitrogen				Field Conductivity ()	Field pH ()	Field Temp. ()	Post-purge Dissolved Oxygen ()	Pre-purge Dissolved Oxygen ()	Pre-purge ORP ()	Post-purge ORP ()	Comments
	Fluoride (mg/l)	Nitrate (mg/l)	Sulfate (mg/l)	TDS (mg/l)								
6/28/2005	--	--	--	--	--	--	--	8.08	--	--	--	230
9/23/2005	--	--	--	--	--	--	--	5.47	--	--	--	188
12/30/2005	--	--	--	--	--	--	--	8.33	--	--	--	177
3/24/2006	--	--	--	--	--	--	--	4.80	6.20	-004	002	
6/26/2006	--	--	--	--	--	--	--	6.20	4.51	040	046	
9/26/2006	--	--	--	--	--	--	--	3.70	3.49	-31	-17	
11/21/2006	--	--	--	--	--	--	--	3.70	3.45	-29	-20	
3/26/2007	--	--	--	--	--	--	--	10.05	10.31	90	95	
6/27/2007	--	--	--	--	--	--	--	3.87	4.21	-63	-41	
9/23/2007	--	--	--	--	--	--	--	--	--	-133	-48	
3/17/2008	--	--	--	600	--	--	--	3.31	3.13	154	153	
6/12/2008	--	--	--	--	--	--	--	--	8.32	177	--	
6/15/2010	0.16	16	74	680	1108	6.54	19.5	3.00	--	--	202	
12/20/2010	0.099	16	47	500	878.7	6.89	18.9	4.44	--	--	246	
U-3												
10/2/2000	--	--	--	--	--	--	--	--	--	--	--	
1/8/2001	--	--	--	--	--	--	--	--	--	--	--	
4/3/2001	--	--	--	--	--	--	--	--	--	--	--	
7/2/2001	--	--	--	--	--	--	--	--	--	--	--	
10/8/2001	--	--	--	--	--	--	--	--	--	--	--	
1/3/2002	--	--	--	--	--	--	--	--	--	--	--	
4/5/2002	--	--	--	--	--	--	--	--	--	--	--	
7/2/2002	--	--	--	--	--	--	--	--	--	--	--	
10/1/2002	--	--	--	--	--	--	--	0.50	--	--	-47	
12/30/2002	--	--	--	--	--	--	--	0.20	--	--	106	
5/2/2003	--	--	--	--	--	--	--	0.50	--	--	85	
7/1/2003	--	--	--	--	--	--	--	0.50	--	--	90	
10/3/2003	--	--	--	--	--	--	--	3.80	--	--	-27	
1/8/2004	--	--	--	--	--	--	--	12.82	--	--	133	
4/15/2004	--	--	--	--	--	--	--	3.11	--	--	24	
7/15/2004	--	--	--	--	--	--	--	1.90	--	--	53	
12/8/2004	--	--	--	--	--	--	--	1.30	--	--	-81	
3/23/2005	--	--	--	--	--	--	--	0.52	--	--	-087	
6/28/2005	--	--	--	--	--	--	--	1.47	--	--	-151	
9/23/2005	--	--	--	--	--	--	--	1.40	--	--	-80	

Table 2e
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Nitrogen				Field Conductivity ()	Field pH ()	Field Temp. ()	Post-purge Dissolved Oxygen ()	Pre-purge Dissolved Oxygen ()	Pre-purge ORP ()	Post-purge ORP ()	Comments
	Fluoride (mg/l)	Nitrate (mg/l)	Sulfate (mg/l)	TDS (mg/l)								
12/30/2005	--	--	--	--	--	--	--	1.45	--	--	-068	
3/24/2006	--	--	--	--	--	--	--	1.53	0.79	003	009	
6/26/2006	--	--	--	--	--	--	--	2.19	3.56	015	017	
9/26/2006	--	--	--	--	--	--	--	1.06	1.10	-72	-95	
11/21/2006	--	--	--	--	--	--	--	1.04	1.10	-83	-96	
3/26/2007	--	--	--	--	--	--	--	7.08	6.99	78	68	
6/27/2007	--	--	--	--	--	--	--	4.89	4.79	-79	-82	
9/23/2007	--	--	--	--	--	--	--	--	--	-114	-88	
3/17/2008	0.073	ND<0.44	ND<1.0	530	--	--	--	2.88	1.96	-5	-33	
6/12/2008	--	--	--	--	--	--	--	0.11	1.30	-17	-40	
12/9/2009	--	--	--	--	781	6.95	16.7	--	--	--	--	
6/15/2010	0.15	ND<0.44	ND<1.0	630	1019	6.52	19.6	0.94	--	--	7	
12/20/2010	0.11	0.71	9.3	460	758.2	6.58	20.0	1.29	--	--	-63	
U-4												
4/3/2001	--	--	--	--	--	--	--	--	--	--	--	
7/2/2001	--	--	--	--	--	--	--	--	--	--	--	
1/3/2002	--	--	--	--	--	--	--	--	--	--	--	
10/1/2002	--	--	--	--	--	--	--	1.00	--	--	83	
12/30/2002	--	--	--	--	--	--	--	0.40	--	--	126	
5/2/2003	--	--	--	--	--	--	--	0.70	--	--	120	
7/1/2003	--	--	--	--	--	--	--	0.60	--	--	130	
10/3/2003	--	--	--	--	--	--	--	2.06	--	--	3.05	
1/8/2004	--	--	--	--	--	--	--	11.90	--	--	76	
4/15/2004	--	--	--	--	--	--	--	3.30	--	--	116	
7/15/2004	--	--	--	--	--	--	--	2.50	--	--	32	
12/8/2004	--	--	--	--	--	--	--	2.09	--	--	47	
3/23/2005	--	--	--	--	--	--	--	0.04	--	--	021	
6/28/2005	--	--	--	--	--	--	--	2.24	--	--	120	
9/23/2005	--	--	--	--	--	--	--	3.01	--	--	176	
12/30/2005	--	--	--	--	--	--	--	1.96	--	--	175	
3/24/2006	--	--	--	--	--	--	--	1.17	1.48	015	014	
6/26/2006	--	--	--	--	--	--	--	2.55	1.31	031	034	
9/26/2006	--	--	--	--	--	--	--	1.38	1.23	-54	-7	
11/21/2006	--	--	--	--	--	--	--	1.38	1.13	-60	-10	
3/26/2007	--	--	--	--	--	--	--	7.09	7.28	14	25	

Table 2e
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Nitrogen				Field Conductivity ()	Field pH ()	Field Temp. ()	Post-purge Dissolved Oxygen ()	Pre-purge Dissolved Oxygen ()	Pre-purge ORP ()	Post-purge ORP ()	Comments
	Fluoride (mg/l)	Nitrate (mg/l)	Sulfate (mg/l)	TDS (mg/l)								
6/27/2007	--	--	--	--	--	--	--	2.82	2.62	82	73	
3/17/2008	0.12	0.61	29	540	--	--	--	2.47	2.71	153	150	
6/12/2008	0.14	ND<0.44	30	610	--	--	--	1.26	4.00	185	188	
12/9/2009	0.096	0.59	37	590	927	7.55	15.5	1.82	--	--	-84	
6/15/2010	0.18	24	37	630	1057	7.71	20.2	1.02	--	--	54	
12/20/2010	0.12	7.5	28	570	945.4	7.43	18.8	3.30	--	--	253	
U-5												
4/3/2001	--	--	--	--	--	--	--	--	--	--	--	
7/2/2001	--	--	--	--	--	--	--	--	--	--	--	
10/8/2001	--	--	--	--	--	--	--	--	--	--	--	
1/3/2002	--	--	--	--	--	--	--	--	--	--	--	
5/2/2003	--	--	--	--	--	--	--	0.60	--	--	120	
7/1/2003	--	--	--	--	--	--	--	0.90	--	--	145	
10/3/2003	--	--	--	--	--	--	--	2.21	--	--	3.13	
1/8/2004	--	--	--	--	--	--	--	11.27	--	--	104	
4/15/2004	--	--	--	--	--	--	--	3.35	--	--	65	
7/15/2004	--	--	--	--	--	--	--	2.87	--	--	66	
12/8/2004	--	--	--	--	--	--	--	1.67	--	--	102	
3/23/2005	--	--	--	--	--	--	--	0.75	--	--	131	
6/28/2005	--	--	--	--	--	--	--	2.29	--	--	103	
9/23/2005	--	--	--	--	--	--	--	2.05	--	--	172	
12/30/2005	--	--	--	--	--	--	--	1.39	--	--	171	
3/24/2006	--	--	--	--	--	--	--	0.97	0.97	011	013	
6/26/2006	--	--	--	--	--	--	--	7.18	7.23	091	084	
9/26/2006	--	--	--	--	--	--	--	1.19	0.80	44	44	
11/21/2006	--	--	--	--	--	--	--	1.12	0.79	41	47	
3/26/2007	--	--	--	--	--	--	--	3.20	3.60	31	52	
6/27/2007	--	--	--	--	--	--	--	2.01	1.67	66	58	
3/17/2008	0.086	3.8	31	530	--	--	--	2.91	1.98	151	156	
6/12/2008	0.070	1.8	26	550	--	--	--	1.89	1.22	172	171	
12/9/2009	0.17	ND<0.44	30	530	792	7.40	18.2	1.12	--	--	-101	
6/15/2010	0.13	3.3	36	550	1087	7.59	21.4	0.25	--	--	67	
12/20/2010	0.14	4.5	36	600	933.6	7.47	17.8	0.62	--	--	240	
U-6												
1/3/2002	--	--	--	--	--	--	--	--	--	--	--	

Table 2e
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Nitrogen				Field Conductivity ()	Field pH ()	Field Temp. ()	Post-purge Dissolved Oxygen ()	Pre-purge Dissolved Oxygen ()	Pre-purge ORP ()	Post-purge ORP ()	Comments
	Fluoride (mg/l)	Nitrate (mg/l)	Sulfate (mg/l)	TDS (mg/l)								
10/1/2002	--	--	--	--	--	--	--	0.90	--	--	--	--
12/30/2002	--	--	--	--	--	--	--	0.20	--	--	--	88
5/2/2003	--	--	--	--	--	--	--	0.90	--	--	--	145
7/1/2003	--	--	--	--	--	--	--	0.70	--	--	--	120
10/3/2003	--	--	--	--	--	--	--	2.26	--	--	--	12
1/8/2004	--	--	--	--	--	--	--	11.95	--	--	--	-37
4/15/2004	--	--	--	--	--	--	--	3.47	--	--	--	-20
7/15/2004	--	--	--	--	--	--	--	3.25	--	--	--	-43
12/8/2004	--	--	--	--	--	--	--	0.94	--	--	--	-91
3/23/2005	--	--	--	--	--	--	--	0.55	--	--	--	-077
6/28/2005	--	--	--	--	--	--	--	0.86	--	--	--	-129
9/23/2005	--	--	--	--	--	--	--	1.97	--	--	--	-82
12/30/2005	--	--	--	--	--	--	--	1.01	--	--	--	-66
3/24/2006	--	--	--	--	--	--	--	0.79	1.25	011	009	
6/26/2006	--	--	--	--	--	--	--	1.23	5.48	015	027	
9/26/2006	--	--	--	--	--	--	--	6.97	7.05	-67	-69	
11/21/2006	--	--	--	--	--	--	--	0.83	1.05	-65	-69	
3/26/2007	--	--	--	--	--	--	--	6.40	6.26	15	9	
6/27/2007	--	--	--	--	--	--	--	3.51	3.20	-64	-54	
3/17/2008	0.066	ND<0.44	51	860	--	--	--	1.19	1.87	101	26	
6/12/2008	0.11	0.45	27	860	--	--	--	1.10	2.08	-20	-26	
6/15/2010	0.17	ND<0.44	13	960	1830	6.57	19.3	1.04	--	--	-55	
12/20/2010	0.10	1.5	32	940	1580	6.50	17.3	0.90	--	--	9	
U-7												
1/3/2002	--	--	--	--	--	--	--	--	--	--	--	
10/1/2002	--	--	--	--	--	--	--	1.80	--	--	-60	
12/30/2002	--	--	--	--	--	--	--	0.10	--	--	121	
5/2/2003	--	--	--	--	--	--	--	0.40	--	--	105	
7/1/2003	--	--	--	--	--	--	--	0.50	--	--	95	
10/3/2003	--	--	--	--	--	--	--	2.91	--	--	-21	
1/8/2004	--	--	--	--	--	--	--	11.85	--	--	-51	
4/15/2004	--	--	--	--	--	--	--	4.68	--	--	-16	
7/15/2004	--	--	--	--	--	--	--	2.55	--	--	-52	
12/8/2004	--	--	--	--	--	--	--	1.20	--	--	-88	
3/23/2005	--	--	--	--	--	--	--	0.21	--	--	-088	

Table 2e
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Fluoride (mg/l)	Nitrogen as Nitrate (mg/l)	Sulfate (mg/l)	TDS (mg/l)	Field Conductivity (mS/cm)	Field pH	Field Temp. (°C)	Post-purge Dissolved Oxygen (%)	Pre-purge Dissolved Oxygen (%)	Pre-purge ORP (mV)	Post-purge ORP (mV)	Comments
6/28/2005	--	--	--	--	--	--	--	1.32	--	--	-160	
9/23/2005	--	--	--	--	--	--	--	2.25	--	--	108	
12/30/2005	--	--	--	--	--	--	--	1.12	--	--	105	
3/24/2006	--	--	--	--	--	--	--	1.09	0.99	008	009	
6/26/2006	--	--	--	--	--	--	--	1.46	1.27	025	032	
9/26/2006	--	--	--	--	--	--	--	0.78	1.02	-47	-63	
11/21/2006	--	--	--	--	--	--	--	0.88	0.98	-43	-59	
3/26/2007	--	--	--	--	--	--	--	5.85	6.00	14	8	
6/27/2007	--	--	--	--	--	--	--	2.98	2.60	-90	-102	
3/17/2008	0.077	ND<0.44	7.0	640	--	--	--	3.06	2.86	137	120	
6/12/2008	0.15	19	13	700	--	--	--	0.98	2.27	9	-11	
6/11/2009	ND<0.050	ND<0.44	30	490	--	--	--	--	--	--	--	
12/9/2009	0.12	ND<0.44	13	510	772	7.27	17.0	0.94	--	--	23	
6/15/2010	0.15	ND<0.44	12	540	1080	7.76	22.4	0.15	--	--	17	
12/20/2010	0.074	17	22	570	1040	8.05	17.5	0.84	--	--	40	
U-8												
12/9/2009	0.19	ND<0.44	4.1	630	972	7.87	16.6	2.06	--	--	-78	
6/15/2010	0.19	0.59	16	600	2757	7.09	21.2	0.51	--	--	-32	
12/20/2010	0.13	1.1	24	520	1078	7.01	18.9	0.96	--	--	-56	
U-9												
12/9/2009	0.30	ND<0.44	ND<1.0	860	1203	6.94	13.5	1.29	--	--	-10	
6/15/2010	0.20	ND<0.44	12	630	1196	6.82	19.4	2.45	--	--	-89	
12/20/2010	0.12	ND<0.44	17	570	984.9	7.49	17.8	0.55	--	--	-41	
U-10												
6/11/2009	0.49	ND<0.44	190	970	--	--	--	--	--	--	--	
12/9/2009	0.33	ND<0.44	76	880	1009	7.04	17.9	0.94	--	--	-77	
6/15/2010	0.16	ND<0.44	8.2	700	1188	7.18	21.4	0.48	--	--	-66	
12/20/2010	0.18	ND<0.44	4.7	600	1066	7.06	18.1	0.99	--	--	-92	
U-11												
6/11/2009	--	--	--	--	--	--	--	--	--	--	--	
12/9/2009	0.26	ND<0.44	4.9	700	896	7.47	17.3	1.39	--	--	91	
6/15/2010	0.67	ND<4.4	7600	11000	5791	6.81	20.9	0.65	--	--	63	
12/20/2010	0.22	2.7	1500	2800	2203	6.69	18.0	0.82	--	--	-33	
U-12												
12/3/2008	0.14	28	59	630	--	--	--	2.85	2.71	66	26	

Table 2e
ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 4186

Date Sampled	Nitrogen				Field Conductivity ()	Field pH ()	Field Temp. ()	Post-purge Dissolved Oxygen ()	Pre-purge Dissolved Oxygen ()	Pre-purge ORP ()	Post-purge ORP ()	Comments
	Fluoride (mg/l)	Nitrate (mg/l)	Sulfate (mg/l)	TDS (mg/l)								
2/18/2009	0.086	29	61	610	1007	7.82	18.2	2.74	2.65	145	121	
6/11/2009	0.13	29	61	610	--	--	--	--	--	--	--	
12/9/2009	0.20	26	57	550	813	7.75	17.1	2.51	--	--	62	
6/15/2010	0.19	26	56	580	979.4	7.41	21.4	2.53	--	--	65	
12/20/2010	0.13	23	54	600	962.8	7.28	19.5	3.22	--	--	104	
U-13												
12/3/2008	0.16	26	65	610	--	--	--	1.70	2.21	62	58	
2/18/2009	0.20	26	69	510	1022	7.75	18.0	1.49	1.52	171	110	
6/11/2009	0.14	25	71	550	--	--	--	--	--	--	--	
12/9/2009	0.15	22	59	600	820	7.61	16.6	1.65	--	--	-52	
6/15/2010	0.091	25	54	620	996.2	7.46	20.2	1.75	--	--	37	
12/20/2010	0.10	24	55	640	914.8	7.76	17.3	2.23	--	--	179	
U-14												
12/3/2008	0.14	25	55	660	--	--	--	2.63	2.96	91	59	
2/18/2009	0.13	25	57	560	950.4	7.70	18.4	2.25	2.55	106	113	
6/11/2009	0.11	25	56	600	--	--	--	--	--	--	--	
12/9/2009	0.084	26	44	460	776	7.90	17.9	1.66	--	--	-22	
6/15/2010	0.10	25	38	400	971.6	7.53	18.9	1.67	--	--	-26	
12/20/2010	0.094	23	38	420	874.8	7.78	18.3	2.33	--	--	236	
U-15												
12/3/2008	0.13	21	52	670	--	--	--	2.21	2.55	108	118	
2/18/2009	0.12	23	54	570	962.4	7.66	17.4	1.98	1.95	109	104	
6/11/2009	0.12	22	55	560	--	--	--	--	--	--	--	
12/9/2009	0.17	18	52	560	831	7.85	15.1	1.98	--	--	-84	
6/15/2010	0.15	21	56	590	985.7	7.68	20.8	2.09	--	--	40	
12/20/2010	0.13	20	53	620	983.7	7.52	18.5	2.38	--	--	118	

ARCADIS

Attachment C

Laboratory Report and Chain-of-Custody Documentation



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Date of Report: 12/06/2012

Kathy Brandt

Arcadis

1900 Powell Street 12th Floor
Emeryville, CA 94608

Project: 4186

BC Work Order: 1222528

Invoice ID: B135499

Enclosed are the results of analyses for samples received by the laboratory on 11/20/2012. 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

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



Table of Contents

Sample Information

Chain of Custody and Cooler Receipt form.....	4
Laboratory / Client Sample Cross Reference.....	7

Sample Results

1222528-01 - U-12-W-121120	
Volatile Organic Analysis (EPA Method 8260).....	11
Gas Testing in Water.....	12
Water Analysis (General Chemistry).....	13
1222528-02 - U-13-W-121120	
Volatile Organic Analysis (EPA Method 8260).....	14
Gas Testing in Water.....	15
Water Analysis (General Chemistry).....	16
Water Analysis (Metals).....	17
1222528-03 - U-4-W-121120	
Volatile Organic Analysis (EPA Method 8260).....	19
Gas Testing in Water.....	20
Water Analysis (General Chemistry).....	21
Water Analysis (Metals).....	22
1222528-04 - U-7-W-121120	
Volatile Organic Analysis (EPA Method 8260).....	24
Gas Testing in Water.....	25
Water Analysis (General Chemistry).....	26
1222528-05 - U-5-W-121120	
Volatile Organic Analysis (EPA Method 8260).....	27
Gas Testing in Water.....	28
Water Analysis (General Chemistry).....	29
1222528-06 - U-11-W-121120	
Volatile Organic Analysis (EPA Method 8260).....	30
Gas Testing in Water.....	31
Water Analysis (General Chemistry).....	32
Water Analysis (Metals).....	33
1222528-07 - U-6-W-121120	
Volatile Organic Analysis (EPA Method 8260).....	35
Gas Testing in Water.....	36
Water Analysis (General Chemistry).....	37
1222528-08 - U-14-W-121120	
Volatile Organic Analysis (EPA Method 8260).....	38
Gas Testing in Water.....	39
Water Analysis (General Chemistry).....	40
1222528-09 - U-15-W-121120	
Volatile Organic Analysis (EPA Method 8260).....	41
Gas Testing in Water.....	42
Water Analysis (General Chemistry).....	43
Water Analysis (Metals).....	44
1222528-10 - U-8-W-121120	
Volatile Organic Analysis (EPA Method 8260).....	46
Gas Testing in Water.....	47
Water Analysis (General Chemistry).....	48
Water Analysis (Metals).....	49
1222528-11 - U-9-W-121120	
Volatile Organic Analysis (EPA Method 8260).....	51
Gas Testing in Water.....	52
Water Analysis (General Chemistry).....	53
Water Analysis (Metals).....	54



Table of Contents

1222528-12 - U-10-W-121120

Volatile Organic Analysis (EPA Method 8260).....	56
Gas Testing in Water.....	57
Water Analysis (General Chemistry).....	58
Water Analysis (Metals).....	59
Quality Control Reports	
Volatile Organic Analysis (EPA Method 8260)	
Method Blank Analysis.....	61
Laboratory Control Sample.....	62
Precision and Accuracy.....	63
Gas Testing in Water	
Method Blank Analysis.....	64
Laboratory Control Sample.....	65
Water Analysis (General Chemistry)	
Method Blank Analysis.....	66
Laboratory Control Sample.....	67
Precision and Accuracy.....	68
Water Analysis (Metals)	
Method Blank Analysis.....	70
Laboratory Control Sample.....	72
Precision and Accuracy.....	74
Notes	
Notes and Definitions.....	78

BC

Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1222528 Page 1 of 3

12-22528

CHAIN OF CUSTODY FORM																																																																																																																																							
Union Oil Company of California ■ 6101 Bollinger Canyon Road ■ San Ramon, CA 94583																																																																																																																																							
COC <u>1</u> of <u>2</u>																																																																																																																																							
Union Oil Site ID: <u>4186</u> Site Global ID: <u>T0600101777</u> Site Address: <u>1771 First St. Livermore</u> Union Oil PM: <u>Roya Kambin</u> Union Oil PM Phone No.: <u>925-790-6270</u> Charge Code: NWRTB-0 <u>351721</u> -0-LAB				Union Oil Consultant: <u>Arcadis</u> Consultant Contact: <u>Kathy Brandt</u> Consultant Phone No.: <u>510-596-9675</u> Sampling Company: TRC Sampled By (PRINT): <u>JOE D. LEWIS</u> Sampler Signature: <u>Joe D. Lewis</u> BC Laboratories, Inc. Project Manager: Molly Meyers 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911				ANALYSES REQUIRED Turnaround Time (TAT): <input checked="" type="checkbox"/> Standard 24 Hours <input type="checkbox"/> <input type="checkbox"/> 48 Hours <input type="checkbox"/> 72 Hours																																																																																																																															
<p><i>This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: center;">SAMPLE ID</th> <th rowspan="2">Sample Time</th> <th rowspan="2"># of Containers</th> <th colspan="4" style="text-align: center;">Notes / Comments</th> </tr> <tr> <th>Field Point Name</th> <th>Matrix</th> <th>DTW</th> <th>Date (yymmdd)</th> <th colspan="4"></th> </tr> </thead> <tbody> <tr> <td>U-12</td> <td>W-S-A</td> <td>-1</td> <td>12/11/20</td> <td>1202</td> <td>7</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>U-13</td> <td>W-S-A</td> <td>-2</td> <td></td> <td>1035</td> <td>9</td> <td></td> <td>X X</td> <td>X X</td> </tr> <tr> <td>U-4</td> <td>W-S-A</td> <td>-3</td> <td></td> <td>0858</td> <td>9</td> <td></td> <td>X X</td> <td>X X</td> </tr> <tr> <td>U-7</td> <td>W-S-A</td> <td>-4</td> <td></td> <td>1218</td> <td>7</td> <td></td> <td></td> <td></td> </tr> <tr> <td>U-5</td> <td>W-S-A</td> <td>-5</td> <td></td> <td>0816</td> <td>7</td> <td></td> <td></td> <td></td> </tr> <tr> <td>U-11</td> <td>W-S-A</td> <td>-6</td> <td></td> <td>1319</td> <td>9</td> <td></td> <td></td> <td>X X X</td> </tr> <tr> <td>U-6</td> <td>W-S-A</td> <td>-7</td> <td></td> <td>1232</td> <td>7</td> <td>Y</td> <td>Y</td> <td>Y</td> </tr> <tr> <td>U-14</td> <td>W-S-A</td> <td>-8</td> <td></td> <td>0847</td> <td>7</td> <td>Y</td> <td>Y</td> <td>Y</td> </tr> <tr> <td>U-15</td> <td>W-S-A</td> <td>-9</td> <td></td> <td>0934</td> <td>9</td> <td></td> <td></td> <td>X X X</td> </tr> <tr> <td>U-8</td> <td>W-S-A</td> <td>-10</td> <td></td> <td>1225</td> <td>9</td> <td></td> <td></td> <td>X X X</td> </tr> <tr> <td>U-9</td> <td>W-S-A</td> <td>-11</td> <td></td> <td>1241</td> <td>9</td> <td></td> <td></td> <td>X X X</td> </tr> <tr> <td>U-16</td> <td>W-S-A</td> <td>-12</td> <td></td> <td>1207</td> <td>9</td> <td>Y</td> <td>Y</td> <td>X X X</td> </tr> </tbody> </table>										SAMPLE ID				Sample Time	# of Containers	Notes / Comments				Field Point Name	Matrix	DTW	Date (yymmdd)					U-12	W-S-A	-1	12/11/20	1202	7	X	X	X	U-13	W-S-A	-2		1035	9		X X	X X	U-4	W-S-A	-3		0858	9		X X	X X	U-7	W-S-A	-4		1218	7				U-5	W-S-A	-5		0816	7				U-11	W-S-A	-6		1319	9			X X X	U-6	W-S-A	-7		1232	7	Y	Y	Y	U-14	W-S-A	-8		0847	7	Y	Y	Y	U-15	W-S-A	-9		0934	9			X X X	U-8	W-S-A	-10		1225	9			X X X	U-9	W-S-A	-11		1241	9			X X X	U-16	W-S-A	-12		1207	9	Y	Y	X X X
SAMPLE ID				Sample Time	# of Containers	Notes / Comments																																																																																																																																	
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U-4	W-S-A	-3		0858	9		X X	X X																																																																																																																															
U-7	W-S-A	-4		1218	7																																																																																																																																		
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U-11	W-S-A	-6		1319	9			X X X																																																																																																																															
U-6	W-S-A	-7		1232	7	Y	Y	Y																																																																																																																															
U-14	W-S-A	-8		0847	7	Y	Y	Y																																																																																																																															
U-15	W-S-A	-9		0934	9			X X X																																																																																																																															
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U-16	W-S-A	-12		1207	9	Y	Y	X X X																																																																																																																															
Relinquished By: <u>Joe D. Lewis</u> Company: <u>TRC</u> Date / Time: <u>1500</u> Received By: <u>Gary Bogen</u> Company: <u>BCLab</u> Date / Time: <u>1450</u>				Relinquished By: <u>Gary Bogen</u> Company: <u>BCLab</u> Date / Time: <u>11-20-12</u> Received By: <u>GARY BOGEN</u> Company: <u>BCLAB</u> Date / Time: <u>11-20-12 18:30</u>				Relinquished By: <u>BC LAB</u> Company: <u>BC LAB</u> Date / Time: <u>11-20-12 21:30</u> Received By: <u>BC LAB</u> Company: <u>BC LAB</u> Date / Time: <u>11-20-12 21:30</u>																																																																																																																															



Chain of Custody and Cooler Receipt Form for 1222528 Page 2 of 3

BC LABORATORIES INC.		COOLER RECEIPT FORM		Rev. No. 13	08/17/12	Page 1 of 1				
Submission #: 12-22528										
SHIPPING INFORMATION Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				SHIPPING CONTAINER Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____						
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: Custody Seals: Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>										
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.95 Container: OTpe Thermometer ID: 207 Temperature: (A) 3.3 °C / (C) 3.5 °C			Date/Time 11-20-12 Analyst Init JNW 2140					
SAMPLE CONTAINERS		SAMPLE NUMBERS								
		1	2	3	4	5	6	7	8	9
OT GENERAL MINERAL/ GENERAL PHYSICAL	C	CD	CD	C	C	CD	C			
PT PE UNPRESERVED	D	E	E	D	D	E	D			
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS		F	F			F				
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	A.3	A.3	A.3	A.3	A.3	A.3	A.3			
40ml VOA VIAL	A.3	A.3	A.3	A.3	A.3	A.3	A.3			
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL-504 Methylene	B2	B2	B2	B2	B2	B2	B2			
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Comments:										
Sample Numbering Completed By:	JNW		Date/Time: 11-20-12 2230							
A = Actual / C = Corrected										

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 1222528 Page 3 of 3

BC LABORATORIES INC.		COOLER RECEIPT FORM				Rev. No. 13	08/17/12	Page 3 of 3		
Submission #: 12-02528										
SHIPPING INFORMATION Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				SHIPPING CONTAINER Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____						
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: Custody Seals: Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>										
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.95 Container: DPE Thermometer ID: 201 Temperature: (A) 0.8 °C / (C) 1.0 °C				Date/Time 11-20-12 Analyst Init JNW 2140				
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL	C	D					C	R	D	C
PT PE UNPRESERVED	E	E					D	E	E	
QT INORGANIC CHEMICAL METALS	F	F						F	F	
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	A.3	A.3					A.3	A.3	A.3	
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL METHANE	B2	B2					B2	B2	B2	
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Comments:										
Sample Numbering Completed By:	JNW		Date/Time: 11-20-12 2230							
A = Actual / C = Corrected										



Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1222528-01	COC Number: --- Project Number: 4186 Sampling Location: --- Sampling Point: U-12-W-121120 Sampled By: TRCI	Receive Date: 11/20/2012 21:30 Sampling Date: 11/20/2012 12:02 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600101777 Location ID (FieldPoint): U-12 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1222528-02	COC Number: --- Project Number: 4186 Sampling Location: --- Sampling Point: U-13-W-121120 Sampled By: TRCI	Receive Date: 11/20/2012 21:30 Sampling Date: 11/20/2012 10:35 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101777 Location ID (FieldPoint): U-13 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1222528-03	COC Number: --- Project Number: 4186 Sampling Location: --- Sampling Point: U-4-W-121120 Sampled By: TRCI	Receive Date: 11/20/2012 21:30 Sampling Date: 11/20/2012 08:58 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101777 Location ID (FieldPoint): U-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:



Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1222528-04	COC Number: --- Project Number: 4186 Sampling Location: --- Sampling Point: U-7-W-121120 Sampled By: TRCI	Receive Date: 11/20/2012 21:30 Sampling Date: 11/20/2012 12:18 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600101777 Location ID (FieldPoint): U-7 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1222528-05	COC Number: --- Project Number: 4186 Sampling Location: --- Sampling Point: U-5-W-121120 Sampled By: TRCI	Receive Date: 11/20/2012 21:30 Sampling Date: 11/20/2012 08:16 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600101777 Location ID (FieldPoint): U-5 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1222528-06	COC Number: --- Project Number: 4186 Sampling Location: --- Sampling Point: U-11-W-121120 Sampled By: TRCI	Receive Date: 11/20/2012 21:30 Sampling Date: 11/20/2012 13:19 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101777 Location ID (FieldPoint): U-11 Matrix: W Sample QC Type (SACode): CS Cooler ID:



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Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1222528-07	COC Number: --- Project Number: 4186 Sampling Location: --- Sampling Point: U-6-W-121120 Sampled By: TRCI	Receive Date: 11/20/2012 21:30 Sampling Date: 11/20/2012 12:32 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600101777 Location ID (FieldPoint): U-6 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1222528-08	COC Number: --- Project Number: 4186 Sampling Location: --- Sampling Point: U-14-W-121120 Sampled By: TRCI	Receive Date: 11/20/2012 21:30 Sampling Date: 11/20/2012 08:47 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: T0600101777 Location ID (FieldPoint): U-14 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1222528-09	COC Number: --- Project Number: 4186 Sampling Location: --- Sampling Point: U-15-W-121120 Sampled By: TRCI	Receive Date: 11/20/2012 21:30 Sampling Date: 11/20/2012 09:34 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101777 Location ID (FieldPoint): U-15 Matrix: W Sample QC Type (SACode): CS Cooler ID:



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Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1222528-10	COC Number: --- Project Number: 4186 Sampling Location: --- Sampling Point: U-8-W-121120 Sampled By: TRCI	Receive Date: 11/20/2012 21:30 Sampling Date: 11/20/2012 12:25 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101777 Location ID (FieldPoint): U-8 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1222528-11	COC Number: --- Project Number: 4186 Sampling Location: --- Sampling Point: U-9-W-121120 Sampled By: TRCI	Receive Date: 11/20/2012 21:30 Sampling Date: 11/20/2012 12:41 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101777 Location ID (FieldPoint): U-9 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1222528-12	COC Number: --- Project Number: 4186 Sampling Location: --- Sampling Point: U-10-W-121120 Sampled By: TRCI	Receive Date: 11/20/2012 21:30 Sampling Date: 11/20/2012 12:07 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Metal Analysis: 2-Lab Filtered and Acidified Delivery Work Order: Global ID: T0600101777 Location ID (FieldPoint): U-10 Matrix: W Sample QC Type (SACode): CS Cooler ID:	



Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1222528-01	Client Sample Name:	4186, U-12-W-121120, 11/20/2012 12:02:00PM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260B	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	92.6	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	102	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	11/28/12	11/29/12 03:42	JMC	MS-V12	1	BVK1954



Arcadis
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Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1222528-01	Client Sample Name:	4186, U-12-W-121120, 11/20/2012 12:02:00PM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	ND	mg/L	0.0010	RSK-175M	ND		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC Batch ID
			Date/Time	Analyst			
1	RSK-175M	12/03/12	12/03/12 09:38	JMC	GC-V1	1	BVL0004



Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1222528-01	Client Sample Name: 4186, U-12-W-121120, 11/20/2012 12:02:00PM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO ₃	24	mg/L	0.44	EPA-300.0	ND		1
Sulfate	53	mg/L	1.0	EPA-300.0	ND		1
Iron (II) Species, Dissolved	ND	ug/L	100	SM-3500-FeD	ND		2

Run #	Method	Prep Date	Run Date/Time			Dilution	QC Batch ID
			Analyst	Instrument			
1	EPA-300.0	11/20/12	11/21/12 01:54	LD1	IC2	1	BVK1547
2	SM-3500-FeD	11/21/12	11/21/12 12:14	TDC	KONE-1	1	BVK1692



Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1222528-02	Client Sample Name:	4186, U-13-W-121120, 11/20/2012 10:35:00AM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260B	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	103	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	99.9	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	11/28/12	11/29/12 03:24	JMC	MS-V12	1	BVK1954



Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1222528-02	Client Sample Name:	4186, U-13-W-121120, 11/20/2012 10:35:00AM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	ND	mg/L	0.0010	RSK-175M	ND		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC Batch ID
			Date/Time	Analyst			
1	RSK-175M	12/03/12	12/03/12 09:35	JMC	GC-V1	1	BVL0004



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Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1222528-02	Client Sample Name:	4186, U-13-W-121120, 11/20/2012 10:35:00AM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	37	mg/L	0.10	EPA-6010B	ND		1
Dissolved Magnesium	65	mg/L	0.050	EPA-6010B	ND		1
Dissolved Sodium	57	mg/L	0.50	EPA-6010B	ND		1
Dissolved Potassium	12	mg/L	1.0	EPA-6010B	ND		1
Chloride	85	mg/L	0.50	EPA-300.0	ND		2
Fluoride	0.12	mg/L	0.050	EPA-300.0	ND		2
Nitrate as NO ₃	25	mg/L	0.44	EPA-300.0	ND		2
Sulfate	55	mg/L	1.0	EPA-300.0	ND		2
Total Dissolved Solids @ 180 C	910	mg/L	50	EPA-160.1	ND		3
Iron (II) Species, Dissolved	ND	ug/L	100	SM-3500-FeD	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	11/21/12	11/26/12 09:29	ARD	PE-OP1	1	BVK1609
2	EPA-300.0	11/20/12	11/21/12 02:06	LD1	IC2	1	BVK1547
3	EPA-160.1	11/21/12	11/21/12 08:25	NW1	MANUAL	5	BVK1550
4	SM-3500-FeD	11/21/12	11/21/12 12:15	TDC	KONE-1	1	BVK1692



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID:	1222528-02	Client Sample Name:	4186, U-13-W-121120, 11/20/2012 10:35:00AM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Arsenic	ND	ug/L	50	EPA-6010B	ND		1
Hexavalent Chromium	6.3	ug/L	2.0	EPA-7196	ND		2
Dissolved Barium	240	ug/L	10	EPA-6010B	ND		1
Dissolved Beryllium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Cadmium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Cobalt	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Copper	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Manganese	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Mercury	ND	ug/L	0.20	EPA-7470A	ND		3
Dissolved Molybdenum	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Selenium	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Silver	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Thallium	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Vanadium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10	EPA-6010B	ND		1
Total Antimony	ND	ug/L	100	EPA-6010B	ND		4
Total Arsenic	ND	ug/L	50	EPA-6010B	ND		4
Total Barium	300	ug/L	10	EPA-6010B	ND		4
Total Beryllium	ND	ug/L	10	EPA-6010B	ND		4
Total Cadmium	ND	ug/L	10	EPA-6010B	ND		4
Total Chromium	ND	ug/L	10	EPA-6010B	ND		4
Total Cobalt	ND	ug/L	50	EPA-6010B	ND		4
Total Copper	ND	ug/L	10	EPA-6010B	ND		4
Total Lead	ND	ug/L	50	EPA-6010B	ND		4
Total Mercury	ND	ug/L	0.20	EPA-7470A	ND		5
Total Molybdenum	ND	ug/L	50	EPA-6010B	ND		4
Total Nickel	ND	ug/L	10	EPA-6010B	ND		4
Total Selenium	ND	ug/L	100	EPA-6010B	ND		4
Total Silver	ND	ug/L	10	EPA-6010B	ND		4

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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID:	1222528-02	Client Sample Name:	4186, U-13-W-121120, 11/20/2012 10:35:00AM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Total Thallium	ND	ug/L	100	EPA-6010B	ND		4
Total Vanadium	ND	ug/L	10	EPA-6010B	ND		4
Total Zinc	ND	ug/L	50	EPA-6010B	ND		4

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-6010B	11/21/12	11/26/12 09:29	ARD	PE-OP1	1	BVK1609
2	EPA-7196	11/21/12	11/21/12 08:10	TDC	KONE-1	1	BVK1675
3	EPA-7470A	11/26/12	11/28/12 10:06	MEV	CETAC1	1	BVK1656
4	EPA-6010B	11/26/12	11/27/12 11:51	ARD	PE-OP1	1	BVK1677
5	EPA-7470A	11/29/12	11/29/12 13:12	MEV	CETAC1	1	BVK1941



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1222528-03	Client Sample Name: 4186, U-4-W-121120, 11/20/2012 8:58:00AM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	3.5	ug/L	0.50	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260B	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	96.8	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.4	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	11/28/12	11/29/12 03:07	JMC	MS-V12	1	BVK1954



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1222528-03	Client Sample Name: 4186, U-4-W-121120, 11/20/2012 8:58:00AM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	ND	mg/L	0.0010	RSK-175M	ND		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC Batch ID
			Date/Time	Analyst			
1	RSK-175M	12/03/12	12/03/12 09:31	JMC	GC-V1	1	BVL0004



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1222528-03	Client Sample Name:	4186, U-4-W-121120, 11/20/2012 8:58:00AM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	61	mg/L	0.10	EPA-6010B	ND		1
Dissolved Magnesium	86	mg/L	0.050	EPA-6010B	ND		1
Dissolved Sodium	33	mg/L	0.50	EPA-6010B	ND		1
Dissolved Potassium	2.2	mg/L	1.0	EPA-6010B	ND		1
Chloride	43	mg/L	0.50	EPA-300.0	ND		2
Fluoride	0.10	mg/L	0.050	EPA-300.0	ND		2
Nitrate as NO ₃	2.0	mg/L	0.44	EPA-300.0	ND		2
Sulfate	32	mg/L	1.0	EPA-300.0	ND		2
Total Dissolved Solids @ 180 C	610	mg/L	33	EPA-160.1	ND		3
Iron (II) Species, Dissolved	ND	ug/L	100	SM-3500-FeD	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	11/21/12	11/26/12 09:31	ARD	PE-OP1	1	BVK1609
2	EPA-300.0	11/20/12	11/21/12 03:10	LD1	IC2	1	BVK1548
3	EPA-160.1	11/21/12	11/21/12 08:25	NW1	MANUAL	3.333	BVK1550
4	SM-3500-FeD	11/21/12	11/21/12 12:15	TDC	KONE-1	1	BVK1692



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID:	1222528-03	Client Sample Name:	4186, U-4-W-121120, 11/20/2012 8:58:00AM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Arsenic	ND	ug/L	50	EPA-6010B	ND		1
Hexavalent Chromium	ND	ug/L	2.0	EPA-7196	ND		2
Dissolved Barium	450	ug/L	10	EPA-6010B	ND		1
Dissolved Beryllium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Cadmium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Cobalt	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Copper	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Manganese	110	ug/L	10	EPA-6010B	ND		1
Dissolved Mercury	ND	ug/L	0.20	EPA-7470A	ND		3
Dissolved Molybdenum	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Selenium	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Silver	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Thallium	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Vanadium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10	EPA-6010B	ND		1
Total Antimony	ND	ug/L	100	EPA-6010B	ND		4
Total Arsenic	180	ug/L	50	EPA-6010B	ND		4
Total Barium	7600	ug/L	10	EPA-6010B	ND		4
Total Beryllium	12	ug/L	10	EPA-6010B	ND		4
Total Cadmium	ND	ug/L	10	EPA-6010B	ND		4
Total Chromium	3100	ug/L	10	EPA-6010B	ND		4
Total Cobalt	1100	ug/L	50	EPA-6010B	ND		4
Total Copper	1500	ug/L	10	EPA-6010B	ND		4
Total Lead	330	ug/L	50	EPA-6010B	ND		4
Total Mercury	ND	ug/L	0.20	EPA-7470A	ND		5
Total Molybdenum	ND	ug/L	50	EPA-6010B	ND		4
Total Nickel	11000	ug/L	10	EPA-6010B	ND		4
Total Selenium	ND	ug/L	100	EPA-6010B	ND		4
Total Silver	ND	ug/L	10	EPA-6010B	ND		4

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1900 Powell Street 12th Floor
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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID:	1222528-03	Client Sample Name:	4186, U-4-W-121120, 11/20/2012 8:58:00AM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Total Thallium	ND	ug/L	100	EPA-6010B	ND		4
Total Vanadium	1000	ug/L	10	EPA-6010B	ND		4
Total Zinc	2000	ug/L	50	EPA-6010B	ND		4

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-6010B	11/21/12	11/26/12 09:31	ARD	PE-OP1	1	BVK1609
2	EPA-7196	11/20/12	11/20/12 23:10	TDC	KONE-1	1	BVK1658
3	EPA-7470A	11/26/12	11/28/12 10:12	MEV	CETAC1	1	BVK1656
4	EPA-6010B	11/26/12	11/27/12 12:04	ARD	PE-OP1	1	BVK1677
5	EPA-7470A	11/29/12	11/29/12 13:42	MEV	CETAC1	1	BVK1941



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1222528-04	Client Sample Name: 4186, U-7-W-121120, 11/20/2012 12:18:00PM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	0.78	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	0.50	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	10	ug/L	0.50	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260B	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	1000	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	102	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	94.6	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	111	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	11/28/12	11/29/12 02:49	JMC	MS-V12	1	BVK1954



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1222528-04	Client Sample Name: 4186, U-7-W-121120, 11/20/2012 12:18:00PM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	0.79	mg/L	0.0050	RSK-175M	ND	A01	1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC Batch ID
			Date/Time	Analyst			
1	RSK-175M	12/03/12	12/03/12 09:27	JMC	GC-V1	5	BVL0004



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1222528-04	Client Sample Name: 4186, U-7-W-121120, 11/20/2012 12:18:00PM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO ₃	ND	mg/L	0.44	EPA-300.0	ND		1
Sulfate	1.4	mg/L	1.0	EPA-300.0	ND		1
Iron (II) Species, Dissolved	140	ug/L	100	SM-3500-FeD	ND		2

Run #	Method	Prep Date	Run		Instrument	Dilution	QC Batch ID
			Date/Time	Analyst			
1	EPA-300.0	11/20/12	11/21/12 04:00	LD1	IC2	1	BVK1548
2	SM-3500-FeD	11/21/12	11/21/12 12:15	TDC	KONE-1	1	BVK1692



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1900 Powell Street 12th Floor
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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1222528-05	Client Sample Name: 4186, U-5-W-121120, 11/20/2012 8:16:00AM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	43	ug/L	0.50	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
t-Butyl alcohol	27	ug/L	10	EPA-8260B	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	102	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	91.0	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	92.8	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	11/28/12	11/29/12 02:31	JMC	MS-V12	1	BVK1954



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1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1222528-05	Client Sample Name: 4186, U-5-W-121120, 11/20/2012 8:16:00AM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	0.0051	mg/L	0.0010	RSK-175M	ND		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC Batch ID
			Date/Time	Analyst			
1	RSK-175M	12/03/12	12/03/12 09:23	JMC	GC-V1	1	BVL0004



Arcadis
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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1222528-05	Client Sample Name: 4186, U-5-W-121120, 11/20/2012 8:16:00AM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO ₃	1.5	mg/L	0.44	EPA-300.0	ND		1
Sulfate	23	mg/L	1.0	EPA-300.0	ND		1
Iron (II) Species, Dissolved	ND	ug/L	100	SM-3500-FeD	ND		2

Run #	Method	Prep Date	Run			Dilution	QC Batch ID
			Date/Time	Analyst	Instrument		
1	EPA-300.0	11/20/12	11/21/12 04:13	LD1	IC2	1	BVK1548
2	SM-3500-FeD	11/21/12	11/21/12 12:15	TDC	KONE-1	1	BVK1692



Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1222528-06	Client Sample Name: 4186, U-11-W-121120, 11/20/2012 1:19:00PM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	24	ug/L	0.50	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
t-Butyl alcohol	4500	ug/L	10	EPA-8260B	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	340	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.5	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	99.0	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	11/28/12	11/29/12 02:14	JMC	MS-V12	1	BVK1954



Arcadis
1900 Powell Street 12th Floor
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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1222528-06	Client Sample Name:	4186, U-11-W-121120, 11/20/2012 1:19:00PM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	2.4	mg/L	0.010	RSK-175M	ND	A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	12/03/12	12/03/12 09:05	JMC	GC-V1	10	BVK1841



Arcadis
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Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1222528-06	Client Sample Name:	4186, U-11-W-121120, 11/20/2012 1:19:00PM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	74	mg/L	0.10	EPA-6010B	ND		1
Dissolved Magnesium	180	mg/L	0.050	EPA-6010B	ND		1
Dissolved Sodium	57	mg/L	0.50	EPA-6010B	ND		1
Dissolved Potassium	1.8	mg/L	1.0	EPA-6010B	ND		1
Chloride	110	mg/L	0.50	EPA-300.0	ND		2
Fluoride	0.22	mg/L	0.050	EPA-300.0	ND		2
Nitrate as NO ₃	ND	mg/L	0.44	EPA-300.0	ND		2
Sulfate	350	mg/L	1.0	EPA-300.0	ND		2
Total Dissolved Solids @ 180 C	1200	mg/L	50	EPA-160.1	ND		3
Iron (II) Species, Dissolved	190	ug/L	100	SM-3500-FeD	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	11/21/12	11/26/12 09:33	ARD	PE-OP1	1	BVK1609
2	EPA-300.0	11/20/12	11/21/12 07:14	LD1	IC2	1	BVK1548
3	EPA-160.1	11/21/12	11/21/12 08:25	NW1	MANUAL	5	BVK1550
4	SM-3500-FeD	11/21/12	11/21/12 12:15	TDC	KONE-1	1	BVK1692



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID:	1222528-06	Client Sample Name:	4186, U-11-W-121120, 11/20/2012 1:19:00PM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Arsenic	ND	ug/L	50	EPA-6010B	ND		1
Hexavalent Chromium	ND	ug/L	2.0	EPA-7196	ND		2
Dissolved Barium	95	ug/L	10	EPA-6010B	ND		1
Dissolved Beryllium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Cadmium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Cobalt	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Copper	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Manganese	3500	ug/L	10	EPA-6010B	ND		1
Dissolved Mercury	ND	ug/L	0.20	EPA-7470A	ND		3
Dissolved Molybdenum	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Selenium	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Silver	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Thallium	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Vanadium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10	EPA-6010B	ND		1
Total Antimony	ND	ug/L	100	EPA-6010B	ND		4
Total Arsenic	ND	ug/L	50	EPA-6010B	ND		4
Total Barium	1000	ug/L	10	EPA-6010B	ND		4
Total Beryllium	ND	ug/L	10	EPA-6010B	ND		4
Total Cadmium	ND	ug/L	10	EPA-6010B	ND		4
Total Chromium	170	ug/L	10	EPA-6010B	ND		4
Total Cobalt	ND	ug/L	50	EPA-6010B	ND		4
Total Copper	100	ug/L	10	EPA-6010B	ND		4
Total Lead	ND	ug/L	50	EPA-6010B	ND		4
Total Mercury	ND	ug/L	0.20	EPA-7470A	ND		5
Total Molybdenum	ND	ug/L	50	EPA-6010B	ND		4
Total Nickel	540	ug/L	10	EPA-6010B	ND		4
Total Selenium	ND	ug/L	100	EPA-6010B	ND		4
Total Silver	ND	ug/L	10	EPA-6010B	ND		4

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.

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Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID:	1222528-06	Client Sample Name:	4186, U-11-W-121120, 11/20/2012 1:19:00PM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Total Thallium	ND	ug/L	100	EPA-6010B	ND		4
Total Vanadium	84	ug/L	10	EPA-6010B	ND		4
Total Zinc	160	ug/L	50	EPA-6010B	ND		4

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-6010B	11/21/12	11/26/12 09:33	ARD	PE-OP1	1	BVK1609
2	EPA-7196	11/21/12	11/21/12 07:46	TDC	KONE-1	1	BVK1675
3	EPA-7470A	11/26/12	11/28/12 10:14	MEV	CETAC1	1	BVK1656
4	EPA-6010B	11/26/12	11/27/12 12:05	ARD	PE-OP1	1	BVK1677
5	EPA-7470A	11/29/12	11/29/12 13:44	MEV	CETAC1	1	BVK1941



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1222528-07	Client Sample Name: 4186, U-6-W-121120, 11/20/2012 12:32:00PM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	3.6	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	0.68	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	1.2	ug/L	0.50	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260B	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	1400	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	92.9	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	98.7	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	111	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	11/28/12	11/29/12 01:56	JMC	MS-V12	1	BVK1954



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1222528-07	Client Sample Name: 4186, U-6-W-121120, 11/20/2012 12:32:00PM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	1.1	mg/L	0.0050	RSK-175M	ND	A01	1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC Batch ID
			Date/Time	Analyst			
1	RSK-175M	12/03/12	12/03/12 08:56	JMC	GC-V1	5	BVK1841



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1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1222528-07	Client Sample Name: 4186, U-6-W-121120, 11/20/2012 12:32:00PM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO ₃	ND	mg/L	0.44	EPA-300.0	ND		1
Sulfate	31	mg/L	1.0	EPA-300.0	ND		1
Iron (II) Species, Dissolved	270	ug/L	100	SM-3500-FeD	ND		2

Run #	Method	Prep Date	Run			Dilution	QC Batch ID
			Date/Time	Analyst	Instrument		
1	EPA-300.0	11/20/12	11/21/12 07:27	LD1	IC2	1	BVK1548
2	SM-3500-FeD	11/21/12	11/21/12 12:15	TDC	KONE-1	1	BVK1692



Arcadis
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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1222528-08	Client Sample Name: 4186, U-14-W-121120, 11/20/2012 8:47:00AM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
t-Butyl alcohol	23	ug/L	10	EPA-8260B	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.2	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	96.4	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	11/28/12	11/29/12 01:38	JMC	MS-V12	1	BVK1954



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1900 Powell Street 12th Floor
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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1222528-08	Client Sample Name: 4186, U-14-W-121120, 11/20/2012 8:47:00AM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	0.016	mg/L	0.0010	RSK-175M	ND		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC Batch ID
			Date/Time	Analyst			
1	RSK-175M	12/03/12	12/03/12 11:07	JMC	GC-V1	1	BVK1841



Arcadis
1900 Powell Street 12th Floor
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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1222528-08	Client Sample Name: 4186, U-14-W-121120, 11/20/2012 8:47:00AM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO ₃	10	mg/L	0.44	EPA-300.0	ND		1
Sulfate	17	mg/L	1.0	EPA-300.0	ND		1
Iron (II) Species, Dissolved	ND	ug/L	100	SM-3500-FeD	ND		2

Run #	Method	Prep Date	Run			QC	
			Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-300.0	11/20/12	11/21/12 05:16	LD1	IC2	1	BVK1548
2	SM-3500-FeD	11/21/12	11/21/12 12:20	TDC	KONE-1	1	BVK1692



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1222528-09	Client Sample Name:	4186, U-15-W-121120, 11/20/2012 9:34:00AM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260B	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260B	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	100	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	93.6	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.1	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	11/28/12	11/29/12 01:21	JMC	MS-V12	1	BVK1954



Arcadis
1900 Powell Street 12th Floor
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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1222528-09	Client Sample Name: 4186, U-15-W-121120, 11/20/2012 9:34:00AM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	0.0033	mg/L	0.0010	RSK-175M	ND		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC Batch ID
			Date/Time	Analyst			
1	RSK-175M	12/03/12	12/03/12 08:35	JMC	GC-V1	1	BVK1841



Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1222528-09	Client Sample Name:	4186, U-15-W-121120, 11/20/2012 9:34:00AM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	42	mg/L	0.10	EPA-6010B	ND		1
Dissolved Magnesium	62	mg/L	0.050	EPA-6010B	ND		1
Dissolved Sodium	53	mg/L	0.50	EPA-6010B	ND		1
Dissolved Potassium	9.4	mg/L	1.0	EPA-6010B	ND		1
Chloride	87	mg/L	0.50	EPA-300.0	ND		2
Fluoride	0.13	mg/L	0.050	EPA-300.0	ND		2
Nitrate as NO ₃	25	mg/L	0.44	EPA-300.0	ND		2
Sulfate	53	mg/L	1.0	EPA-300.0	ND		2
Total Dissolved Solids @ 180 C	540	mg/L	33	EPA-160.1	ND		3
Iron (II) Species, Dissolved	ND	ug/L	100	SM-3500-FeD	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	11/21/12	11/26/12 09:35	ARD	PE-OP1	1	BVK1609
2	EPA-300.0	11/20/12	11/21/12 05:28	LD1	IC2	1	BVK1548
3	EPA-160.1	11/21/12	11/21/12 08:25	NW1	MANUAL	3.333	BVK1550
4	SM-3500-FeD	11/21/12	11/21/12 12:20	TDC	KONE-1	1	BVK1692



Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID:	1222528-09	Client Sample Name:	4186, U-15-W-121120, 11/20/2012 9:34:00AM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Arsenic	ND	ug/L	50	EPA-6010B	ND		1
Hexavalent Chromium	6.3	ug/L	2.0	EPA-7196	ND		2
Dissolved Barium	290	ug/L	10	EPA-6010B	ND		1
Dissolved Beryllium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Cadmium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Cobalt	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Copper	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Manganese	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Mercury	ND	ug/L	0.20	EPA-7470A	ND		3
Dissolved Molybdenum	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Selenium	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Silver	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Thallium	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Vanadium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10	EPA-6010B	ND		1
Total Antimony	ND	ug/L	100	EPA-6010B	ND		4
Total Arsenic	ND	ug/L	50	EPA-6010B	ND		4
Total Barium	350	ug/L	10	EPA-6010B	ND		4
Total Beryllium	ND	ug/L	10	EPA-6010B	ND		4
Total Cadmium	ND	ug/L	10	EPA-6010B	ND		4
Total Chromium	ND	ug/L	10	EPA-6010B	ND		4
Total Cobalt	ND	ug/L	50	EPA-6010B	ND		4
Total Copper	ND	ug/L	10	EPA-6010B	ND		4
Total Lead	ND	ug/L	50	EPA-6010B	ND		4
Total Mercury	ND	ug/L	0.20	EPA-7470A	ND		5
Total Molybdenum	ND	ug/L	50	EPA-6010B	ND		4
Total Nickel	ND	ug/L	10	EPA-6010B	ND		4
Total Selenium	ND	ug/L	100	EPA-6010B	ND		4
Total Silver	ND	ug/L	10	EPA-6010B	ND		4

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Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID:	1222528-09	Client Sample Name:	4186, U-15-W-121120, 11/20/2012 9:34:00AM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Total Thallium	ND	ug/L	100	EPA-6010B	ND		4
Total Vanadium	ND	ug/L	10	EPA-6010B	ND		4
Total Zinc	ND	ug/L	50	EPA-6010B	ND		4

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-6010B	11/21/12	11/26/12 09:35	ARD	PE-OP1	1	BVK1609
2	EPA-7196	11/21/12	11/21/12 08:10	TDC	KONE-1	1	BVK1675
3	EPA-7470A	11/26/12	11/28/12 10:17	MEV	CETAC1	1	BVK1656
4	EPA-6010B	11/26/12	11/27/12 12:12	ARD	PE-OP1	1	BVK1677
5	EPA-7470A	11/29/12	11/29/12 13:55	MEV	CETAC1	1	BVK1942



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1222528-10	Client Sample Name: 4186, U-8-W-121120, 11/20/2012 12:25:00PM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	6.6	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	6.1	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Toluene	0.50	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	6.8	ug/L	1.0	EPA-8260B	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260B	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	790	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	99.3	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	106	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	11/28/12	11/29/12 01:03	JMC	MS-V12	1	BVK1954



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1222528-10	Client Sample Name: 4186, U-8-W-121120, 11/20/2012 12:25:00PM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	2.7	mg/L	0.012	RSK-175M	ND	A01	1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC Batch ID
			Date/Time	Analyst			
1	RSK-175M	12/03/12	12/03/12 08:31	JMC	GC-V1	12.500	BVK1841



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1222528-10	Client Sample Name:	4186, U-8-W-121120, 11/20/2012 12:25:00PM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	38	mg/L	0.10	EPA-6010B	ND		1
Dissolved Magnesium	66	mg/L	0.050	EPA-6010B	ND		1
Dissolved Sodium	51	mg/L	0.50	EPA-6010B	ND		1
Dissolved Potassium	1.5	mg/L	1.0	EPA-6010B	ND		1
Chloride	85	mg/L	0.50	EPA-300.0	ND		2
Fluoride	0.11	mg/L	0.050	EPA-300.0	ND		2
Nitrate as NO ₃	0.63	mg/L	0.44	EPA-300.0	ND		2
Sulfate	19	mg/L	1.0	EPA-300.0	ND		2
Total Dissolved Solids @ 180 C	510	mg/L	33	EPA-160.1	ND		3
Iron (II) Species, Dissolved	ND	ug/L	100	SM-3500-FeD	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	11/21/12	11/26/12 09:38	ARD	PE-OP1	1	BVK1609
2	EPA-300.0	11/20/12	11/21/12 05:41	LD1	IC2	1	BVK1548
3	EPA-160.1	11/21/12	11/21/12 08:25	NW1	MANUAL	3.333	BVK1550
4	SM-3500-FeD	11/21/12	11/21/12 12:20	TDC	KONE-1	1	BVK1692



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID:	1222528-10	Client Sample Name:	4186, U-8-W-121120, 11/20/2012 12:25:00PM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Arsenic	ND	ug/L	50	EPA-6010B	ND		1
Hexavalent Chromium	ND	ug/L	2.0	EPA-7196	ND		2
Dissolved Barium	410	ug/L	10	EPA-6010B	ND		1
Dissolved Beryllium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Cadmium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Cobalt	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Copper	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Manganese	1400	ug/L	10	EPA-6010B	ND		1
Dissolved Mercury	ND	ug/L	0.20	EPA-7470A	ND		3
Dissolved Molybdenum	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Selenium	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Silver	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Thallium	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Vanadium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10	EPA-6010B	ND		1
Total Antimony	ND	ug/L	100	EPA-6010B	ND		4
Total Arsenic	70	ug/L	50	EPA-6010B	ND		4
Total Barium	1400	ug/L	10	EPA-6010B	ND		4
Total Beryllium	ND	ug/L	10	EPA-6010B	ND		4
Total Cadmium	ND	ug/L	10	EPA-6010B	ND		4
Total Chromium	400	ug/L	10	EPA-6010B	ND		4
Total Cobalt	140	ug/L	50	EPA-6010B	ND		4
Total Copper	220	ug/L	10	EPA-6010B	ND		4
Total Lead	85	ug/L	50	EPA-6010B	ND		4
Total Mercury	ND	ug/L	0.20	EPA-7470A	ND		5
Total Molybdenum	ND	ug/L	50	EPA-6010B	ND		4
Total Nickel	1300	ug/L	10	EPA-6010B	ND		4
Total Selenium	ND	ug/L	100	EPA-6010B	ND		4
Total Silver	ND	ug/L	10	EPA-6010B	ND		4

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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID:	1222528-10	Client Sample Name:	4186, U-8-W-121120, 11/20/2012 12:25:00PM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Total Thallium	ND	ug/L	100	EPA-6010B	ND		4
Total Vanadium	190	ug/L	10	EPA-6010B	ND		4
Total Zinc	330	ug/L	50	EPA-6010B	ND		4

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-6010B	11/21/12	11/26/12 09:38	ARD	PE-OP1	1	BVK1609
2	EPA-7196	11/21/12	11/21/12 07:58	TDC	KONE-1	1	BVK1675
3	EPA-7470A	11/26/12	11/28/12 10:19	MEV	CETAC1	1	BVK1656
4	EPA-6010B	11/26/12	11/27/12 12:14	ARD	PE-OP1	1	BVK1677
5	EPA-7470A	11/29/12	11/29/12 14:06	MEV	CETAC1	1	BVK1942



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1222528-11	Client Sample Name: 4186, U-9-W-121120, 11/20/2012 12:41:00PM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	12	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene	4.9	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Toluene	2.2	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes	2.6	ug/L	1.0	EPA-8260B	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260B	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Ethanol	ND	ug/L	250	EPA-8260B	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	2100	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.8	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	123	%	80 - 120 (LCL - UCL)	EPA-8260B	S09		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	11/28/12	11/29/12 00:46	JMC	MS-V12	1	BVK1954



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1222528-11	Client Sample Name: 4186, U-9-W-121120, 11/20/2012 12:41:00PM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	3.0	mg/L	0.010	RSK-175M	ND	A01	1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC Batch ID
			Date/Time	Analyst			
1	RSK-175M	12/03/12	12/03/12 08:18	JMC	GC-V1	10	BVK1841



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1222528-11	Client Sample Name:	4186, U-9-W-121120, 11/20/2012 12:41:00PM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	41	mg/L	0.10	EPA-6010B	ND		1
Dissolved Magnesium	77	mg/L	0.050	EPA-6010B	ND		1
Dissolved Sodium	52	mg/L	0.50	EPA-6010B	ND		1
Dissolved Potassium	1.2	mg/L	1.0	EPA-6010B	ND		1
Chloride	74	mg/L	0.50	EPA-300.0	ND		2
Fluoride	0.13	mg/L	0.050	EPA-300.0	ND		2
Nitrate as NO ₃	ND	mg/L	0.44	EPA-300.0	ND		2
Sulfate	ND	mg/L	1.0	EPA-300.0	ND		2
Total Dissolved Solids @ 180 C	550	mg/L	33	EPA-160.1	ND		3
Iron (II) Species, Dissolved	130	ug/L	100	SM-3500-FeD	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	11/21/12	11/26/12 09:46	ARD	PE-OP1	1	BVK1609
2	EPA-300.0	11/20/12	11/21/12 05:54	LD1	IC2	1	BVK1548
3	EPA-160.1	11/21/12	11/21/12 08:25	NW1	MANUAL	3.333	BVK1550
4	SM-3500-FeD	11/21/12	11/21/12 12:20	TDC	KONE-1	1	BVK1696



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID:	1222528-11	Client Sample Name:	4186, U-9-W-121120, 11/20/2012 12:41:00PM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Arsenic	ND	ug/L	50	EPA-6010B	ND		1
Hexavalent Chromium	ND	ug/L	2.0	EPA-7196	ND		2
Dissolved Barium	370	ug/L	10	EPA-6010B	ND		1
Dissolved Beryllium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Cadmium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Cobalt	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Copper	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Manganese	2300	ug/L	10	EPA-6010B	ND		1
Dissolved Mercury	ND	ug/L	0.20	EPA-7470A	ND		3
Dissolved Molybdenum	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Selenium	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Silver	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Thallium	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Vanadium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10	EPA-6010B	ND		1
Total Antimony	ND	ug/L	100	EPA-6010B	ND		4
Total Arsenic	ND	ug/L	50	EPA-6010B	ND		4
Total Barium	1700	ug/L	10	EPA-6010B	ND		4
Total Beryllium	ND	ug/L	10	EPA-6010B	ND		4
Total Cadmium	ND	ug/L	10	EPA-6010B	ND		4
Total Chromium	490	ug/L	10	EPA-6010B	ND		4
Total Cobalt	170	ug/L	50	EPA-6010B	ND		4
Total Copper	270	ug/L	10	EPA-6010B	ND		4
Total Lead	86	ug/L	50	EPA-6010B	ND		4
Total Mercury	ND	ug/L	0.20	EPA-7470A	ND		5
Total Molybdenum	ND	ug/L	50	EPA-6010B	ND		4
Total Nickel	1700	ug/L	10	EPA-6010B	ND		4
Total Selenium	ND	ug/L	100	EPA-6010B	ND		4
Total Silver	ND	ug/L	10	EPA-6010B	ND		4

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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID:	1222528-11	Client Sample Name:	4186, U-9-W-121120, 11/20/2012 12:41:00PM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Total Thallium	ND	ug/L	100	EPA-6010B	ND		4
Total Vanadium	210	ug/L	10	EPA-6010B	ND		4
Total Zinc	410	ug/L	50	EPA-6010B	ND		4

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-6010B	11/21/12	11/26/12 09:46	ARD	PE-OP1	1	BVK1609
2	EPA-7196	11/21/12	11/21/12 07:58	TDC	KONE-1	1	BVK1675
3	EPA-7470A	11/26/12	11/28/12 10:21	MEV	CETAC1	1	BVK1656
4	EPA-6010B	11/26/12	11/27/12 12:16	ARD	PE-OP1	1	BVK1677
5	EPA-7470A	11/29/12	11/29/12 14:08	MEV	CETAC1	1	BVK1942



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1222528-12	Client Sample Name: 4186, U-10-W-121120, 11/20/2012 12:07:00PM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	330	ug/L	2.5	EPA-8260B	ND	A01	1
1,2-Dibromoethane	ND	ug/L	2.5	EPA-8260B	ND	A01	1
1,2-Dichloroethane	ND	ug/L	2.5	EPA-8260B	ND	A01	1
Ethylbenzene	370	ug/L	2.5	EPA-8260B	ND	A01	1
Methyl t-butyl ether	170	ug/L	2.5	EPA-8260B	ND	A01	1
Toluene	7.5	ug/L	2.5	EPA-8260B	ND	A01	1
Total Xylenes	92	ug/L	5.0	EPA-8260B	ND	A01	1
t-Amyl Methyl ether	ND	ug/L	2.5	EPA-8260B	ND	A01	1
t-Butyl alcohol	3000	ug/L	50	EPA-8260B	ND	A01	1
Diisopropyl ether	ND	ug/L	2.5	EPA-8260B	ND	A01	1
Ethanol	ND	ug/L	1200	EPA-8260B	ND	A01	1
Ethyl t-butyl ether	ND	ug/L	2.5	EPA-8260B	ND	A01	1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	4000	ug/L	250	Luft-GC/MS	ND	A01	1
1,2-Dichloroethane-d4 (Surrogate)	106	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	85.9	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.6	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	11/28/12	11/29/12 00:28	JMC	MS-V12	5	BVK1954



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID:	1222528-12	Client Sample Name:	4186, U-10-W-121120, 11/20/2012 12:07:00PM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	6.3	mg/L	0.020	RSK-175M	ND	A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	12/03/12	12/03/12 08:08	JMC	GC-V1	20	BVK1841



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID:	1222528-12	Client Sample Name:	4186, U-10-W-121120, 11/20/2012 12:07:00PM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	49	mg/L	0.10	EPA-6010B	ND		1
Dissolved Magnesium	100	mg/L	0.050	EPA-6010B	ND		1
Dissolved Sodium	53	mg/L	0.50	EPA-6010B	ND		1
Dissolved Potassium	3.0	mg/L	1.0	EPA-6010B	ND		1
Chloride	55	mg/L	0.50	EPA-300.0	ND		2
Fluoride	0.16	mg/L	0.050	EPA-300.0	ND		2
Nitrate as NO ₃	ND	mg/L	0.44	EPA-300.0	ND		2
Sulfate	ND	mg/L	1.0	EPA-300.0	ND		2
Total Dissolved Solids @ 180 C	660	mg/L	50	EPA-160.1	ND		3
Iron (II) Species, Dissolved	ND	ug/L	100	SM-3500-FeD	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	11/21/12	11/26/12 09:48	ARD	PE-OP1	1	BVK1609
2	EPA-300.0	11/20/12	11/21/12 06:06	LD1	IC2	1	BVK1548
3	EPA-160.1	11/21/12	11/21/12 08:25	NW1	MANUAL	5	BVK1550
4	SM-3500-FeD	11/21/12	11/21/12 12:20	TDC	KONE-1	1	BVK1696



Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID:	1222528-12	Client Sample Name:	4186, U-10-W-121120, 11/20/2012 12:07:00PM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Arsenic	ND	ug/L	50	EPA-6010B	ND		1
Hexavalent Chromium	ND	ug/L	2.0	EPA-7196	ND		2
Dissolved Barium	490	ug/L	10	EPA-6010B	ND		1
Dissolved Beryllium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Cadmium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Chromium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Cobalt	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Copper	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Lead	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Manganese	1900	ug/L	10	EPA-6010B	ND		1
Dissolved Mercury	ND	ug/L	0.20	EPA-7470A	ND		3
Dissolved Molybdenum	ND	ug/L	50	EPA-6010B	ND		1
Dissolved Nickel	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Selenium	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Silver	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Thallium	ND	ug/L	100	EPA-6010B	ND		1
Dissolved Vanadium	ND	ug/L	10	EPA-6010B	ND		1
Dissolved Zinc	ND	ug/L	10	EPA-6010B	ND		1
Total Antimony	ND	ug/L	100	EPA-6010B	ND		4
Total Arsenic	ND	ug/L	50	EPA-6010B	ND		4
Total Barium	1200	ug/L	10	EPA-6010B	ND		4
Total Beryllium	ND	ug/L	10	EPA-6010B	ND		4
Total Cadmium	ND	ug/L	10	EPA-6010B	ND		4
Total Chromium	340	ug/L	10	EPA-6010B	ND		4
Total Cobalt	88	ug/L	50	EPA-6010B	ND		4
Total Copper	150	ug/L	10	EPA-6010B	ND		4
Total Lead	50	ug/L	50	EPA-6010B	ND		4
Total Mercury	ND	ug/L	0.20	EPA-7470A	ND		5
Total Molybdenum	ND	ug/L	50	EPA-6010B	ND		4
Total Nickel	1300	ug/L	10	EPA-6010B	ND		4
Total Selenium	ND	ug/L	100	EPA-6010B	ND		4
Total Silver	ND	ug/L	10	EPA-6010B	ND		4

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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID:	1222528-12	Client Sample Name:	4186, U-10-W-121120, 11/20/2012 12:07:00PM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Total Thallium	ND	ug/L	100	EPA-6010B	ND		4
Total Vanadium	120	ug/L	10	EPA-6010B	ND		4
Total Zinc	220	ug/L	50	EPA-6010B	ND		4

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-6010B	11/21/12	11/26/12 09:48	ARD	PE-OP1	1	BVK1609
2	EPA-7196	11/21/12	11/21/12 07:58	TDC	KONE-1	1	BVK1675
3	EPA-7470A	11/26/12	11/28/12 10:23	MEV	CETAC1	1	BVK1656
4	EPA-6010B	11/26/12	11/27/12 12:18	ARD	PE-OP1	1	BVK1677
5	EPA-7470A	11/29/12	11/29/12 14:10	MEV	CETAC1	1	BVK1942



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Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVK1954						
Benzene	BVK1954-BLK1	ND	ug/L	0.50		
1,2-Dibromoethane	BVK1954-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane	BVK1954-BLK1	ND	ug/L	0.50		
Ethylbenzene	BVK1954-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BVK1954-BLK1	ND	ug/L	0.50		
Toluene	BVK1954-BLK1	ND	ug/L	0.50		
Total Xylenes	BVK1954-BLK1	ND	ug/L	1.0		
t-Amyl Methyl ether	BVK1954-BLK1	ND	ug/L	0.50		
t-Butyl alcohol	BVK1954-BLK1	ND	ug/L	10		
Diisopropyl ether	BVK1954-BLK1	ND	ug/L	0.50		
Ethanol	BVK1954-BLK1	ND	ug/L	250		
Ethyl t-butyl ether	BVK1954-BLK1	ND	ug/L	0.50		
Total Purgeable Petroleum Hydrocarbons (C6-l)	BVK1954-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	BVK1954-BLK1	106	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BVK1954-BLK1	98.2	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BVK1954-BLK1	99.8	%	80 - 120 (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	Control Limits		Lab Quals
							RPD	Percent Recovery	
QC Batch ID: BVK1954									
Benzene	BVK1954-BS1	LCS	26.680	25.000	ug/L	107		70 - 130	
Toluene	BVK1954-BS1	LCS	24.890	25.000	ug/L	99.6		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BVK1954-BS1	LCS	9.8200	10.000	ug/L	98.2		75 - 125	
Toluene-d8 (Surrogate)	BVK1954-BS1	LCS	10.050	10.000	ug/L	100		80 - 120	
4-Bromofluorobenzene (Surrogate)	BVK1954-BS1	LCS	10.570	10.000	ug/L	106		80 - 120	



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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	Control Limits		
									RPD	Percent Recovery	Lab Quals
QC Batch ID: BVK1954		Used client sample: N									
Benzene	MS	1222552-01	ND	25.470	25.000	ug/L		102		70 - 130	
	MSD	1222552-01	ND	27.980	25.000	ug/L	9.4	112	20	70 - 130	
Toluene	MS	1222552-01	ND	24.220	25.000	ug/L		96.9		70 - 130	
	MSD	1222552-01	ND	24.560	25.000	ug/L	1.4	98.2	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1222552-01	ND	9.5800	10.000	ug/L		95.8		75 - 125	
	MSD	1222552-01	ND	10.430	10.000	ug/L	8.5	104		75 - 125	
Toluene-d8 (Surrogate)	MS	1222552-01	ND	10.120	10.000	ug/L		101		80 - 120	
	MSD	1222552-01	ND	9.6900	10.000	ug/L	4.3	96.9		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1222552-01	ND	9.7700	10.000	ug/L		97.7		80 - 120	
	MSD	1222552-01	ND	10.070	10.000	ug/L	3.0	101		80 - 120	



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Gas Testing in Water

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVK1841						
Methane	BVK1841-BLK1	ND	mg/L	0.0010		
QC Batch ID: BVL0004						
Methane	BVL0004-BLK1	ND	mg/L	0.0010		



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Gas Testing in Water

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
QC Batch ID: BVK1841									
Methane	BVK1841-BS1	LCS	0.0097001	0.010843	mg/L	89.5		80 - 120	
	BVK1841-BSD1	LCSD	0.0092588	0.010843	mg/L	85.4	4.7	80 - 120	20
QC Batch ID: BVL0004									
Methane	BVL0004-BS1	LCS	0.0092335	0.010843	mg/L	85.2		80 - 120	
	BVL0004-BSD1	LCSD	0.0093667	0.010843	mg/L	86.4	1.4	80 - 120	20



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Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVK1547						
Chloride	BVK1547-BLK1	ND	mg/L	0.50		
Fluoride	BVK1547-BLK1	ND	mg/L	0.050		
Nitrate as NO ₃	BVK1547-BLK1	ND	mg/L	0.44		
Sulfate	BVK1547-BLK1	ND	mg/L	1.0		
QC Batch ID: BVK1548						
Chloride	BVK1548-BLK1	ND	mg/L	0.50		
Fluoride	BVK1548-BLK1	ND	mg/L	0.050		
Nitrate as NO ₃	BVK1548-BLK1	ND	mg/L	0.44		
Sulfate	BVK1548-BLK1	ND	mg/L	1.0		
QC Batch ID: BVK1550						
Total Dissolved Solids @ 180 C	BVK1550-BLK1	ND	mg/L	6.7		
QC Batch ID: BVK1609						
Dissolved Calcium	BVK1609-BLK1	ND	mg/L	0.10		
Dissolved Magnesium	BVK1609-BLK1	ND	mg/L	0.050		
Dissolved Sodium	BVK1609-BLK1	ND	mg/L	0.50		
Dissolved Potassium	BVK1609-BLK1	ND	mg/L	1.0		
QC Batch ID: BVK1692						
Iron (II) Species, Dissolved	BVK1692-BLK1	ND	ug/L	100		
QC Batch ID: BVK1696						
Iron (II) Species, Dissolved	BVK1696-BLK1	ND	ug/L	100		



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Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
QC Batch ID: BVK1547									
Chloride	BVK1547-BS1	LCS	51.060	50.000	mg/L	102		90 - 110	
Fluoride	BVK1547-BS1	LCS	1.0230	1.0000	mg/L	102		90 - 110	
Nitrate as NO ₃	BVK1547-BS1	LCS	22.515	22.134	mg/L	102		90 - 110	
Sulfate	BVK1547-BS1	LCS	102.85	100.00	mg/L	103		90 - 110	
QC Batch ID: BVK1548									
Chloride	BVK1548-BS1	LCS	51.148	50.000	mg/L	102		90 - 110	
Fluoride	BVK1548-BS1	LCS	0.91000	1.0000	mg/L	91.0		90 - 110	
Nitrate as NO ₃	BVK1548-BS1	LCS	22.608	22.134	mg/L	102		90 - 110	
Sulfate	BVK1548-BS1	LCS	102.79	100.00	mg/L	103		90 - 110	
QC Batch ID: BVK1550									
Total Dissolved Solids @ 180 C	BVK1550-BS1	LCS	555.00	586.00	mg/L	94.7		90 - 110	
QC Batch ID: BVK1609									
Dissolved Calcium	BVK1609-BS1	LCS	9.3796	10.000	mg/L	93.8		85 - 115	
Dissolved Magnesium	BVK1609-BS1	LCS	9.3825	10.000	mg/L	93.8		85 - 115	
Dissolved Sodium	BVK1609-BS1	LCS	9.9189	10.000	mg/L	99.2		85 - 115	
Dissolved Potassium	BVK1609-BS1	LCS	9.4378	10.000	mg/L	94.4		85 - 115	
QC Batch ID: BVK1692									
Iron (II) Species, Dissolved	BVK1692-BS1	LCS	2473.3	2500.0	ug/L	98.9		90 - 110	
QC Batch ID: BVK1696									
Iron (II) Species, Dissolved	BVK1696-BS1	LCS	2489.0	2500.0	ug/L	99.6		90 - 110	



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Reported: 12/06/2012 14:02
Project: 4186
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Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
QC Batch ID: BVK1547		Used client sample: N								
Chloride	DUP	1222518-01	79.700	79.656		mg/L	0.1		10	
	MS	1222518-01	79.700	132.90	50.505	mg/L		105		80 - 120
	MSD	1222518-01	79.700	133.28	50.505	mg/L	0.3	106	10	80 - 120
Fluoride	DUP	1222518-01	0.26500	0.26000		mg/L	1.9		10	
	MS	1222518-01	0.26500	1.2455	1.0101	mg/L		97.1		80 - 120
	MSD	1222518-01	0.26500	1.2475	1.0101	mg/L	0.2	97.3	10	80 - 120
Nitrate as NO ₃	DUP	1222518-01	44.086	44.109		mg/L	0.1		10	
	MS	1222518-01	44.086	67.243	22.358	mg/L		104		80 - 120
	MSD	1222518-01	44.086	67.498	22.358	mg/L	0.4	105	10	80 - 120
Sulfate	DUP	1222518-01	117.63	117.60		mg/L	0.0		10	
	MS	1222518-01	117.63	229.59	101.01	mg/L		111		80 - 120
	MSD	1222518-01	117.63	230.08	101.01	mg/L	0.2	111	10	80 - 120
QC Batch ID: BVK1548		Used client sample: Y - Description: U-4-W-121120, 11/20/2012 08:58								
Chloride	DUP	1222528-03	42.709	42.534		mg/L	0.4		10	
	MS	1222528-03	42.709	97.682	50.505	mg/L		109		80 - 120
	MSD	1222528-03	42.709	97.586	50.505	mg/L	0.1	109	10	80 - 120
Fluoride	DUP	1222528-03	0.10100	0.11100		mg/L	9.4		10	
	MS	1222528-03	0.10100	1.2475	1.0101	mg/L		114		80 - 120
	MSD	1222528-03	0.10100	1.2444	1.0101	mg/L	0.2	113	10	80 - 120
Nitrate as NO ₃	DUP	1222528-03	2.0230	2.0673		mg/L	2.2		10	
	MS	1222528-03	2.0230	25.734	22.358	mg/L		106		80 - 120
	MSD	1222528-03	2.0230	25.582	22.358	mg/L	0.6	105	10	80 - 120
Sulfate	DUP	1222528-03	32.132	32.288		mg/L	0.5		10	
	MS	1222528-03	32.132	142.05	101.01	mg/L		109		80 - 120
	MSD	1222528-03	32.132	141.81	101.01	mg/L	0.2	109	10	80 - 120
QC Batch ID: BVK1550		Used client sample: Y - Description: U-13-W-121120, 11/20/2012 10:35								
Total Dissolved Solids @ 180 C	DUP	1222528-02	910.00	915.00		mg/L	0.5		10	
QC Batch ID: BVK1609		Used client sample: N								
Dissolved Calcium	DUP	1222382-01	64.403	65.662		mg/L	1.9		20	
	MS	1222382-01	64.403	75.498	10.204	mg/L		109		75 - 125
	MSD	1222382-01	64.403	76.308	10.204	mg/L	1.1	117	20	75 - 125
Dissolved Magnesium	DUP	1222382-01	16.171	16.360		mg/L	1.2		20	
	MS	1222382-01	16.171	26.279	10.204	mg/L		99.1		75 - 125
	MSD	1222382-01	16.171	26.473	10.204	mg/L	0.7	101	20	75 - 125
Dissolved Sodium	DUP	1222382-01	86.004	87.293		mg/L	1.5		20	
	MS	1222382-01	86.004	97.037	10.204	mg/L		108		75 - 125
	MSD	1222382-01	86.004	98.022	10.204	mg/L	1.0	118	20	75 - 125

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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
QC Batch ID: BVK1609		Used client sample: N								
Dissolved Potassium	DUP	1222382-01	2.9034	2.9199		mg/L	0.6		20	
	MS	1222382-01	2.9034	12.749	10.204	mg/L		96.5		75 - 125
	MSD	1222382-01	2.9034	12.867	10.204	mg/L	0.9	97.6	20	75 - 125
QC Batch ID: BVK1692		Used client sample: Y - Description: U-12-W-121120, 11/20/2012 12:02								
Iron (II) Species, Dissolved	DUP	1222528-01	ND	ND		ug/L			10	
QC Batch ID: BVK1696		Used client sample: Y - Description: U-9-W-121120, 11/20/2012 12:41								
Iron (II) Species, Dissolved	DUP	1222528-11	127.47	126.01		ug/L	1.2		10	



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Project Manager: Kathy Brandt

Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVK1609						
Dissolved Antimony	BVK1609-BLK1	ND	ug/L	100		
Dissolved Arsenic	BVK1609-BLK1	ND	ug/L	50		
Dissolved Barium	BVK1609-BLK1	ND	ug/L	10		
Dissolved Beryllium	BVK1609-BLK1	ND	ug/L	10		
Dissolved Cadmium	BVK1609-BLK1	ND	ug/L	10		
Dissolved Chromium	BVK1609-BLK1	ND	ug/L	10		
Dissolved Cobalt	BVK1609-BLK1	ND	ug/L	50		
Dissolved Copper	BVK1609-BLK1	ND	ug/L	10		
Dissolved Lead	BVK1609-BLK1	ND	ug/L	50		
Dissolved Manganese	BVK1609-BLK1	ND	ug/L	10		
Dissolved Molybdenum	BVK1609-BLK1	ND	ug/L	50		
Dissolved Nickel	BVK1609-BLK1	ND	ug/L	10		
Dissolved Selenium	BVK1609-BLK1	ND	ug/L	100		
Dissolved Silver	BVK1609-BLK1	ND	ug/L	10		
Dissolved Thallium	BVK1609-BLK1	ND	ug/L	100		
Dissolved Vanadium	BVK1609-BLK1	ND	ug/L	10		
Dissolved Zinc	BVK1609-BLK1	ND	ug/L	10		
QC Batch ID: BVK1656						
Dissolved Mercury	BVK1656-BLK1	ND	ug/L	0.20		
QC Batch ID: BVK1658						
Hexavalent Chromium	BVK1658-BLK1	ND	ug/L	2.0		
QC Batch ID: BVK1675						
Hexavalent Chromium	BVK1675-BLK1	ND	ug/L	2.0		
QC Batch ID: BVK1677						
Total Antimony	BVK1677-BLK1	ND	ug/L	100		
Total Arsenic	BVK1677-BLK1	ND	ug/L	50		
Total Barium	BVK1677-BLK1	ND	ug/L	10		
Total Beryllium	BVK1677-BLK1	ND	ug/L	10		
Total Cadmium	BVK1677-BLK1	ND	ug/L	10		
Total Chromium	BVK1677-BLK1	ND	ug/L	10		
Total Cobalt	BVK1677-BLK1	ND	ug/L	50		
Total Copper	BVK1677-BLK1	ND	ug/L	10		

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Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVK1677						
Total Lead	BVK1677-BLK1	ND	ug/L	50		
Total Molybdenum	BVK1677-BLK1	ND	ug/L	50		
Total Nickel	BVK1677-BLK1	ND	ug/L	10		
Total Selenium	BVK1677-BLK1	ND	ug/L	100		
Total Silver	BVK1677-BLK1	ND	ug/L	10		
Total Thallium	BVK1677-BLK1	ND	ug/L	100		
Total Vanadium	BVK1677-BLK1	ND	ug/L	10		
Total Zinc	BVK1677-BLK1	ND	ug/L	50		
QC Batch ID: BVK1941						
Total Mercury	BVK1941-BLK1	ND	ug/L	0.20		
QC Batch ID: BVK1942						
Total Mercury	BVK1942-BLK1	ND	ug/L	0.20		



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
QC Batch ID: BVK1609									
Dissolved Antimony	BVK1609-BS1	LCS	351.76	400.00	ug/L	87.9		85 - 115	
Dissolved Arsenic	BVK1609-BS1	LCS	181.61	200.00	ug/L	90.8		85 - 115	
Dissolved Barium	BVK1609-BS1	LCS	375.75	400.00	ug/L	93.9		85 - 115	
Dissolved Beryllium	BVK1609-BS1	LCS	183.75	200.00	ug/L	91.9		85 - 115	
Dissolved Cadmium	BVK1609-BS1	LCS	184.11	200.00	ug/L	92.1		85 - 115	
Dissolved Chromium	BVK1609-BS1	LCS	182.66	200.00	ug/L	91.3		85 - 115	
Dissolved Cobalt	BVK1609-BS1	LCS	177.23	200.00	ug/L	88.6		85 - 115	
Dissolved Copper	BVK1609-BS1	LCS	357.11	400.00	ug/L	89.3		85 - 115	
Dissolved Lead	BVK1609-BS1	LCS	357.08	400.00	ug/L	89.3		85 - 115	
Dissolved Manganese	BVK1609-BS1	LCS	466.59	500.00	ug/L	93.3		85 - 115	
Dissolved Molybdenum	BVK1609-BS1	LCS	187.45	200.00	ug/L	93.7		85 - 115	
Dissolved Nickel	BVK1609-BS1	LCS	346.97	400.00	ug/L	86.7		85 - 115	
Dissolved Selenium	BVK1609-BS1	LCS	170.91	200.00	ug/L	85.5		85 - 115	
Dissolved Silver	BVK1609-BS1	LCS	88.316	100.00	ug/L	88.3		85 - 115	
Dissolved Thallium	BVK1609-BS1	LCS	376.98	400.00	ug/L	94.2		85 - 115	
Dissolved Vanadium	BVK1609-BS1	LCS	175.54	200.00	ug/L	87.8		85 - 115	
Dissolved Zinc	BVK1609-BS1	LCS	466.39	500.00	ug/L	93.3		85 - 115	
QC Batch ID: BVK1656									
Dissolved Mercury	BVK1656-BS1	LCS	1.0575	1.0000	ug/L	106		85 - 115	
QC Batch ID: BVK1658									
Hexavalent Chromium	BVK1658-BS1	LCS	49.894	50.000	ug/L	99.8		85 - 115	
QC Batch ID: BVK1675									
Hexavalent Chromium	BVK1675-BS1	LCS	50.412	50.000	ug/L	101		85 - 115	
QC Batch ID: BVK1677									
Total Antimony	BVK1677-BS1	LCS	419.41	400.00	ug/L	105		85 - 115	
Total Arsenic	BVK1677-BS1	LCS	201.18	200.00	ug/L	101		85 - 115	
Total Barium	BVK1677-BS1	LCS	422.94	400.00	ug/L	106		85 - 115	
Total Beryllium	BVK1677-BS1	LCS	209.94	200.00	ug/L	105		85 - 115	
Total Cadmium	BVK1677-BS1	LCS	206.53	200.00	ug/L	103		85 - 115	
Total Chromium	BVK1677-BS1	LCS	210.25	200.00	ug/L	105		85 - 115	
Total Cobalt	BVK1677-BS1	LCS	212.51	200.00	ug/L	106		85 - 115	
Total Copper	BVK1677-BS1	LCS	396.77	400.00	ug/L	99.2		85 - 115	
Total Lead	BVK1677-BS1	LCS	425.20	400.00	ug/L	106		85 - 115	

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1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
QC Batch ID: BVK1677									
Total Molybdenum	BVK1677-BS1	LCS	210.43	200.00	ug/L	105		85 - 115	
Total Nickel	BVK1677-BS1	LCS	430.73	400.00	ug/L	108		85 - 115	
Total Selenium	BVK1677-BS1	LCS	207.57	200.00	ug/L	104		85 - 115	
Total Silver	BVK1677-BS1	LCS	103.23	100.00	ug/L	103		85 - 115	
Total Thallium	BVK1677-BS1	LCS	442.10	400.00	ug/L	111		85 - 115	
Total Vanadium	BVK1677-BS1	LCS	209.76	200.00	ug/L	105		85 - 115	
Total Zinc	BVK1677-BS1	LCS	533.64	500.00	ug/L	107		85 - 115	
QC Batch ID: BVK1941									
Total Mercury	BVK1941-BS1	LCS	1.0600	1.0000	ug/L	106		85 - 115	
QC Batch ID: BVK1942									
Total Mercury	BVK1942-BS1	LCS	1.1200	1.0000	ug/L	112		85 - 115	



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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits			
								Percent Recovery	RPD	Percent Recovery	Lab Quals
QC Batch ID: BVK1609		Used client sample: N									
Dissolved Antimony	DUP	1222382-01	10.757	ND		ug/L			20		
	MS	1222382-01	10.757	320.04	408.16	ug/L		75.8		75 - 125	
	MSD	1222382-01	10.757	355.23	408.16	ug/L	10.4	84.4	20	75 - 125	
Dissolved Arsenic	DUP	1222382-01	ND	ND		ug/L			20		
	MS	1222382-01	ND	197.51	204.08	ug/L		96.8		75 - 125	
	MSD	1222382-01	ND	201.09	204.08	ug/L	1.8	98.5	20	75 - 125	
Dissolved Barium	DUP	1222382-01	80.774	80.672		ug/L	0.1		20		
	MS	1222382-01	80.774	463.52	408.16	ug/L		93.8		75 - 125	
	MSD	1222382-01	80.774	466.93	408.16	ug/L	0.7	94.6	20	75 - 125	
Dissolved Beryllium	DUP	1222382-01	ND	ND		ug/L			20		
	MS	1222382-01	ND	191.16	204.08	ug/L		93.7		75 - 125	
	MSD	1222382-01	ND	194.56	204.08	ug/L	1.8	95.3	20	75 - 125	
Dissolved Cadmium	DUP	1222382-01	2.3189	ND		ug/L			20		
	MS	1222382-01	2.3189	195.73	204.08	ug/L		94.8		75 - 125	
	MSD	1222382-01	2.3189	195.80	204.08	ug/L	0.0	94.8	20	75 - 125	
Dissolved Chromium	DUP	1222382-01	1.4510	ND		ug/L			20		
	MS	1222382-01	1.4510	195.72	204.08	ug/L		95.2		75 - 125	
	MSD	1222382-01	1.4510	196.92	204.08	ug/L	0.6	95.8	20	75 - 125	
Dissolved Cobalt	DUP	1222382-01	ND	ND		ug/L			20		
	MS	1222382-01	ND	190.86	204.08	ug/L		93.5		75 - 125	
	MSD	1222382-01	ND	191.31	204.08	ug/L	0.2	93.7	20	75 - 125	
Dissolved Copper	DUP	1222382-01	ND	ND		ug/L			20		
	MS	1222382-01	ND	379.11	408.16	ug/L		92.9		75 - 125	
	MSD	1222382-01	ND	383.04	408.16	ug/L	1.0	93.8	20	75 - 125	
Dissolved Lead	DUP	1222382-01	6.0623	ND		ug/L			20		
	MS	1222382-01	6.0623	387.65	408.16	ug/L		93.5		75 - 125	
	MSD	1222382-01	6.0623	389.78	408.16	ug/L	0.5	94.0	20	75 - 125	
Dissolved Manganese	DUP	1222382-01	9.4676	ND		ug/L			20		A02
	MS	1222382-01	9.4676	490.07	510.20	ug/L		94.2		75 - 125	
	MSD	1222382-01	9.4676	490.60	510.20	ug/L	0.1	94.3	20	75 - 125	
Dissolved Molybdenum	DUP	1222382-01	5.9399	ND		ug/L			20		
	MS	1222382-01	5.9399	199.58	204.08	ug/L		94.9		75 - 125	
	MSD	1222382-01	5.9399	204.69	204.08	ug/L	2.5	97.4	20	75 - 125	
Dissolved Nickel	DUP	1222382-01	ND	ND		ug/L			20		
	MS	1222382-01	ND	370.01	408.16	ug/L		90.7		75 - 125	
	MSD	1222382-01	ND	374.22	408.16	ug/L	1.1	91.7	20	75 - 125	
Dissolved Selenium	DUP	1222382-01	ND	ND		ug/L			20		
	MS	1222382-01	ND	195.94	204.08	ug/L		96.0		75 - 125	
	MSD	1222382-01	ND	212.02	204.08	ug/L	7.9	104	20	75 - 125	

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Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
QC Batch ID: BVK1609		Used client sample: N								
Dissolved Silver	DUP	1222382-01	2.9423	ND		ug/L		20		A02
	MS	1222382-01	2.9423	90.367	102.04	ug/L		85.7		75 - 125
	MSD	1222382-01	2.9423	93.207	102.04	ug/L	3.1	88.5	20	75 - 125
Dissolved Thallium	DUP	1222382-01	ND	ND		ug/L		20		
	MS	1222382-01	ND	403.54	408.16	ug/L		98.9		75 - 125
	MSD	1222382-01	ND	399.84	408.16	ug/L	0.9	98.0	20	75 - 125
Dissolved Vanadium	DUP	1222382-01	29.021	25.605		ug/L	12.5	20		
	MS	1222382-01	29.021	211.54	204.08	ug/L		89.4		75 - 125
	MSD	1222382-01	29.021	219.20	204.08	ug/L	3.6	93.2	20	75 - 125
Dissolved Zinc	DUP	1222382-01	ND	ND		ug/L		20		
	MS	1222382-01	ND	496.54	510.20	ug/L		97.3		75 - 125
	MSD	1222382-01	ND	499.55	510.20	ug/L	0.6	97.9	20	75 - 125
QC Batch ID: BVK1656		Used client sample: N								
Dissolved Mercury	DUP	1222393-01	ND	ND		ug/L		20		
	MS	1222393-01	ND	1.0200	1.0000	ug/L		102		70 - 130
	MSD	1222393-01	ND	1.0300	1.0000	ug/L	1.0	103	20	70 - 130
QC Batch ID: BVK1658		Used client sample: Y - Description: U-4-W-121120, 11/20/2012 08:58								
Hexavalent Chromium	DUP	1222528-03	0.94900	ND		ug/L		10		
	MS	1222528-03	0.94900	52.268	52.632	ug/L		97.5		85 - 115
	MSD	1222528-03	0.94900	52.326	52.632	ug/L	0.1	97.6	10	85 - 115
QC Batch ID: BVK1675		Used client sample: Y - Description: U-8-W-121120, 11/20/2012 12:25								
Hexavalent Chromium	DUP	1222528-10	1.1060	ND		ug/L		10		
	MS	1222528-10	1.1060	50.897	52.632	ug/L		94.6		85 - 115
	MSD	1222528-10	1.1060	50.917	52.632	ug/L	0.0	94.6	10	85 - 115
QC Batch ID: BVK1677		Used client sample: Y - Description: U-13-W-121120, 11/20/2012 10:35								
Total Antimony	DUP	1222528-02	ND	ND		ug/L		20		
	MS	1222528-02	ND	421.93	400.00	ug/L		105		75 - 125
	MSD	1222528-02	ND	415.48	400.00	ug/L	1.5	104	20	75 - 125
Total Arsenic	DUP	1222528-02	ND	ND		ug/L		20		
	MS	1222528-02	ND	205.78	200.00	ug/L		103		75 - 125
	MSD	1222528-02	ND	188.66	200.00	ug/L	8.7	94.3	20	75 - 125
Total Barium	DUP	1222528-02	303.02	307.48		ug/L	1.5	20		
	MS	1222528-02	303.02	722.11	400.00	ug/L		105		75 - 125
	MSD	1222528-02	303.02	713.62	400.00	ug/L	1.2	103	20	75 - 125
Total Beryllium	DUP	1222528-02	ND	ND		ug/L		20		
	MS	1222528-02	ND	210.45	200.00	ug/L		105		75 - 125
	MSD	1222528-02	ND	208.63	200.00	ug/L	0.9	104	20	75 - 125

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Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
QC Batch ID: BVK1677		Used client sample: Y - Description: U-13-W-121120, 11/20/2012 10:35								
Total Cadmium	DUP	1222528-02	ND	ND		ug/L			20	
	MS	1222528-02	ND	204.72	200.00	ug/L		102		75 - 125
	MSD	1222528-02	ND	202.20	200.00	ug/L	1.2	101	20	75 - 125
Total Chromium	DUP	1222528-02	8.2281	ND		ug/L			20	
	MS	1222528-02	8.2281	213.45	200.00	ug/L		103		75 - 125
	MSD	1222528-02	8.2281	211.53	200.00	ug/L	0.9	102	20	75 - 125
Total Cobalt	DUP	1222528-02	ND	ND		ug/L			20	
	MS	1222528-02	ND	203.54	200.00	ug/L		102		75 - 125
	MSD	1222528-02	ND	201.19	200.00	ug/L	1.2	101	20	75 - 125
Total Copper	DUP	1222528-02	ND	ND		ug/L			20	
	MS	1222528-02	ND	392.37	400.00	ug/L		98.1		75 - 125
	MSD	1222528-02	ND	392.75	400.00	ug/L	0.1	98.2	20	75 - 125
Total Lead	DUP	1222528-02	ND	ND		ug/L			20	
	MS	1222528-02	ND	413.85	400.00	ug/L		103		75 - 125
	MSD	1222528-02	ND	407.19	400.00	ug/L	1.6	102	20	75 - 125
Total Molybdenum	DUP	1222528-02	ND	ND		ug/L			20	
	MS	1222528-02	ND	209.13	200.00	ug/L		105		75 - 125
	MSD	1222528-02	ND	206.60	200.00	ug/L	1.2	103	20	75 - 125
Total Nickel	DUP	1222528-02	2.0377	ND		ug/L			20	
	MS	1222528-02	2.0377	416.89	400.00	ug/L		104		75 - 125
	MSD	1222528-02	2.0377	409.01	400.00	ug/L	1.9	102	20	75 - 125
Total Selenium	DUP	1222528-02	ND	ND		ug/L			20	
	MS	1222528-02	ND	215.30	200.00	ug/L		108		75 - 125
	MSD	1222528-02	ND	223.46	200.00	ug/L	3.7	112	20	75 - 125
Total Silver	DUP	1222528-02	ND	ND		ug/L			20	
	MS	1222528-02	ND	103.66	100.00	ug/L		104		75 - 125
	MSD	1222528-02	ND	102.11	100.00	ug/L	1.5	102	20	75 - 125
Total Thallium	DUP	1222528-02	ND	ND		ug/L			20	
	MS	1222528-02	ND	418.50	400.00	ug/L		105		75 - 125
	MSD	1222528-02	ND	412.36	400.00	ug/L	1.5	103	20	75 - 125
Total Vanadium	DUP	1222528-02	1.7616	ND		ug/L			20	
	MS	1222528-02	1.7616	210.50	200.00	ug/L		104		75 - 125
	MSD	1222528-02	1.7616	206.05	200.00	ug/L	2.1	102	20	75 - 125
Total Zinc	DUP	1222528-02	17.046	ND		ug/L			20	
	MS	1222528-02	17.046	527.68	500.00	ug/L		102		75 - 125
	MSD	1222528-02	17.046	525.54	500.00	ug/L	0.4	102	20	75 - 125
QC Batch ID: BVK1941		Used client sample: Y - Description: U-13-W-121120, 11/20/2012 10:35								

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Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
QC Batch ID: BVK1941		Used client sample: Y - Description: U-13-W-121120, 11/20/2012 10:35									
Total Mercury	DUP	1222528-02	ND	ND		ug/L			20		
	MS	1222528-02	ND	1.0025	1.0000	ug/L		100		70 - 130	
	MSD	1222528-02	ND	1.1325	1.0000	ug/L	12.2	113	20	70 - 130	
QC Batch ID: BVK1942		Used client sample: Y - Description: U-15-W-121120, 11/20/2012 09:34									
Total Mercury	DUP	1222528-09	0.035000	ND		ug/L			20		
	MS	1222528-09	0.035000	1.1275	1.0000	ug/L		109		70 - 130	
	MSD	1222528-09	0.035000	1.1450	1.0000	ug/L	1.5	111	20	70 - 130	



Arcadis
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Emeryville, CA 94608

Reported: 12/06/2012 14:02
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

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.
A02	The difference between duplicate readings is less than the PQL.
S09	The surrogate recovery on the sample for this compound was not within the control limits.

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<u>Facility Name:</u>	UNOCAL #4186
<u>File Name:</u>	EDD_BCLabs_1222528_EDF1.zip
<u>Organization Name:</u>	ARCADIS
<u>Username:</u>	ARCADIS76
<u>IP Address:</u>	216.207.98.101
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UPLOADING A GEO_WELL FILE**SUCCESS**

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Your file has been successfully submitted!**

Submittal Type:	GEO_WELL
Report Title:	GEO WELL
Facility Global ID:	T0600101777
Facility Name:	UNOCAL #4186
File Name:	GEO_WELL.zip
Organization Name:	ARCADIS
Username:	ARCADIS76
IP Address:	216.207.98.101
Submittal Date/Time:	1/25/2013 11:49:06 AM
Confirmation Number:	8161222338

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER ESI

UPLOADING A GEO_REPORT FILE

SUCCESS

Your GEO_REPORT file has been successfully submitted!

<u>Submittal Type:</u>	GEO_REPORT
<u>Report Title:</u>	351721 2SA12 GMR
<u>Report Type:</u>	Monitoring Report - Semi-Annually
<u>Report Date:</u>	1/24/2013
<u>Facility Global ID:</u>	T0600101777
<u>Facility Name:</u>	UNOCAL #4186
<u>File Name:</u>	351721 2SA12 final.pdf
<u>Organization Name:</u>	ARCADIS
<u>Username:</u>	ARCADIS76
<u>IP Address:</u>	216.207.98.101
<u>Submittal Date/Time:</u>	1/25/2013 12:03:53 PM
<u>Confirmation Number:</u>	1644230663

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