Roya C. Kambin
Project Manager
Marketing Business Unit

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

August 10, 2012

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

RECEIVED

2:49 pm, Aug 14, 2012

Alameda County
Environmental Health

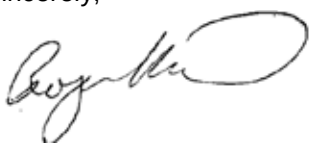
RE: First Semi-annual 2012 Groundwater Monitoring Report
1771 First Street, Livermore, California
Fuel Leak Case No.: RO0000436

Dear Mr. Nowell,

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
First Semi-annual 2012 Groundwater Monitoring Report Submittal

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

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

Subject:
First Semi-annual 2012 Groundwater Monitoring Report Submittal

ENVIRONMENT

Date:
August 10, 2012

Contact:
Katherine Brandt

Phone:
510.596.9675

Email:
Katherine.Brandt@arcadis-us.com

Our ref:
B0047942.2012

Dear Mr. Nowell:

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

Facility No.	**Case No.**	**Location**
4186	RO0000436	1771 First Street Livermore, California

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

Sincerely,

ARCADIS

Katherine Brandt
Certified Project Manager

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

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

UNION OIL OF CALIFORNIA
SEMIANNUAL MONITORING REPORT
FIRST AND SECOND QUARTER 2012
August 10, 2012

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 (First and Second Quarter – 2012) :

1. TRC Solutions (TRC) conducted groundwater monitoring and sampling on June 25 and 26, 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). Thirteen (13) groundwater monitoring wells were sampling during this monitoring event (U-2, 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 NO_3, sulfate, dissolved ferrous iron, and methane.

   Additionally, the samples collected from groundwater monitoring wells U-1, U-2, 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**. Groundwater contour and concentration maps for TPH-g, benzene, and MTBE in the shallow zone are presented on **Figures 3** through **6**, in the intermediate zone 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 (Third and Fourth Quarter – 2012):

1. Perform groundwater monitoring and related reporting during first quarter 2012.

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
Water Wells or Surface Waters within a 2,000' Radius and Their Respective Directions:	Two municipal supply wells located approximately 1,500 and 1,800 feet northwest of the site and one

UNION OIL OF CALIFORNIA
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FIRST AND SECOND QUARTER 2012
August 10, 2012

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

			domestic well located approximately 1,900 feet southwest of the site.		
Groundwater Use Designation:			Storage (drinking water supply in emergency situations), Irrigation		
Current Remediation Techniques:			None		
Permits for Discharge (No.):			None		
Approximate Depth to Groundwater:			31.80 (U-2) – 40.82 (U-5) feet below top of casing		
			Measured X Estimated		
Approximate Groundwater Elevation:			437.70 (U-5) – 447.79 (U-3) feet relative to mean sea level		
			Measured X Estimated		
Groundwater Gradient:	Shallow Zone:	0.01 ft/ft	(Magnitude)	North-northeast	(Direction)
	Intermediate Zone:	0.03 ft/ft	(Magnitude)	Southwest	(Direction)
		0.05 ft/ft	(Magnitude)	Northwest	(Direction)
	Deep Zone:	0.01 ft/ft	(Magnitude)	Northwest	(Direction)

DISCUSSION:

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

Shallow Zone

Due to insufficient water in wells U-1 and U-3, only one groundwater sample was collected from the shallow zone (U-2). TPH-g, BTEX, MTBE, TBA, TAME, ETBE, DIPE, EDB, EDC, and Ethanol were not detected above the laboratory reporting limits in this well.

Nitrate as NO_3 (21milligrams per liter [mg/L]), sulfate (54 mg/L), methane (0.0010 mg/L), dissolved calcium (26 mg/L), dissolved magnesium (68 mg/L), dissolved sodium (53 mg/L), dissolved potassium (2.1 mg/L), chloride (27 mg/L), fluoride (0.084 mg/L), and total dissolved solids (540 mg/L) were detected in the groundwater sample collected from U-2.

Dissolved barium (230 micrograms per liter [µg/L]), total barium (480 µg/L), total chromium (75 µg/L), total copper (38 µg/L), total nickel (180 µg/L), total vanadium (36 µg/L), and total zinc (81 µg/L) were also detected in the groundwater sample collected from U-2.

All other analytes were not detected above their respective laboratory reporting limit in the groundwater sample collected from U-2 in the shallow zone.

Intermediate Zone

The maximum dissolved concentration of TPH-g (2,100 µg/L) was detected in the sample collected from U-9. The maximum dissolved concentrations of BTEX (230 µg/L, 5.7 µg/L, 230 µg/L, and 67 µg/L, respectively), and MTBE (130 µg/L) were detected in the sample collected from U-10. The maximum concentration of TBA (5,000 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 at NO_3 (4.8 mg/L) was detected in the sample collected from U-4. The maximum concentration of dissolved sodium (67 mg/L) was detected in the sample collected from U-9. The maximum concentrations of methane (19 mg/L), dissolved potassium (3.3 mg/L), and fluoride (0.13 mg/L) were detected in the sample collected from U-10. The maximum concentrations of sulfate (320 mg/L), dissolved ferrous iron (270 mg/L), dissolved calcium (72 mg/L), dissolved magnesium (170 mg/L), chloride (120 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 dissolved barium (470 µg/L), total barium (3,300 µg/L), total chromium (1,100 µg/L), total cobalt (350 µg/L), total copper (510 µg/L), total lead (110 µg/L), total nickel (3,500 µg/L), total vanadium (380 µg/L), and total zinc (680 µg/L) were detected in the sample collected from U-4. The maximum concentration of total arsenic (76 µg/L) was detected in the sample collected from U-8. The maximum concentration of total mercury (0.68 µg/L) as detected in the sample collected from U-9. The maximum concentration of dissolved manganese (3,100 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.

Deep Zone

The maximum concentration of TBA (10 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 in this zone.

The maximum concentration of nitrate as NO_3 (25 mg/L), sulfate (55 mg/L), dissolved calcium (39 mg/L), dissolved magnesium (71 mg/L), chloride (81 mg/L), and fluoride (0.096 mg/L) were detected in the samples collected from U-13. The maximum concentrations of dissolved sodium (79 mg/L), dissolved potassium (47 mg/L), and total dissolved solids (620 mg/L) were detected in the samples collected from U-15.

In addition, the maximum concentrations of dissolved barium (240 µg/L) and total barium (300 µg/L) were detected in the sample collected from U-13. The maximum concentrations of hexavalent chromium (22 µg/L), dissolved chromium (25 µg/L), total chromium (23 µg/L), and total nickel (10 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-151 in the deep zone.

CONCLUSIONS AND RECOMMENDATIONS:

Dissolved hydrocarbon constituent concentrations have remained relatively consistent with previous quarters. ARCADIS recommends continued groundwater monitoring.

UNION OIL OF CALIFORNIA
SEMIANNUAL MONITORING REPORT
FIRST AND SECOND QUARTER 2012
August 10, 2012

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

ATTACHMENTS:

Figure 1: Site Location Map
Figure 2: Site Plan
Figure 3: Groundwater Contour Map – Shallow Zone
Figure 4: TPH-g Concentration Map – Shallow Zone
Figure 5: Benzene Concentration Map – Shallow Zone
Figure 6: MTBE Concentration Map – Shallow Zone
Figure 7: Groundwater Contour Map – Intermediate Zone
Figure 8: TPH-g Concentration Map – Intermediate Zone
Figure 9: Benzene Concentration Map – Intermediate Zone
Figure 10: MTBE Concentration Map – Intermediate Zone
Figure 11: Groundwater Contour Map – Deep Zone
Figure 12: TPH-g Concentration Map – Deep Zone
Figure 13: Benzene Concentration Map – Deep Zone
Figure 14: 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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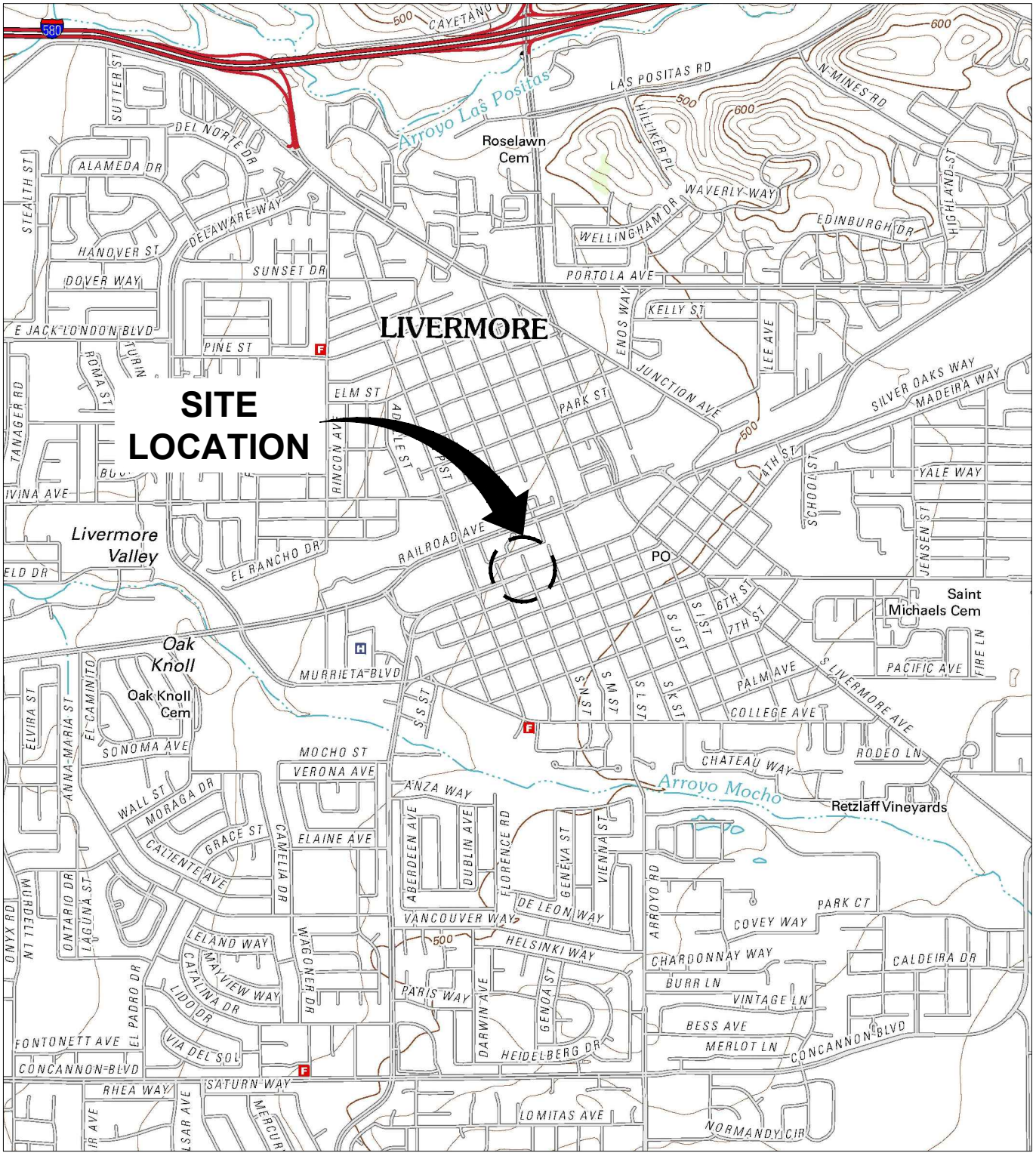
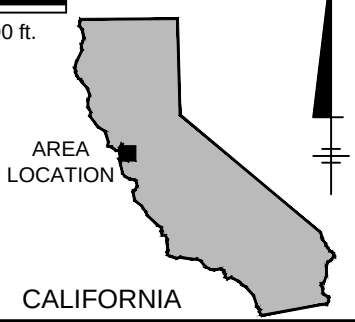
Figures



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

0 2000' 4000'

Approximate Scale: 1 in. = 2000 ft.



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

SITE LOCATION MAP

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FIGURE 1

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS
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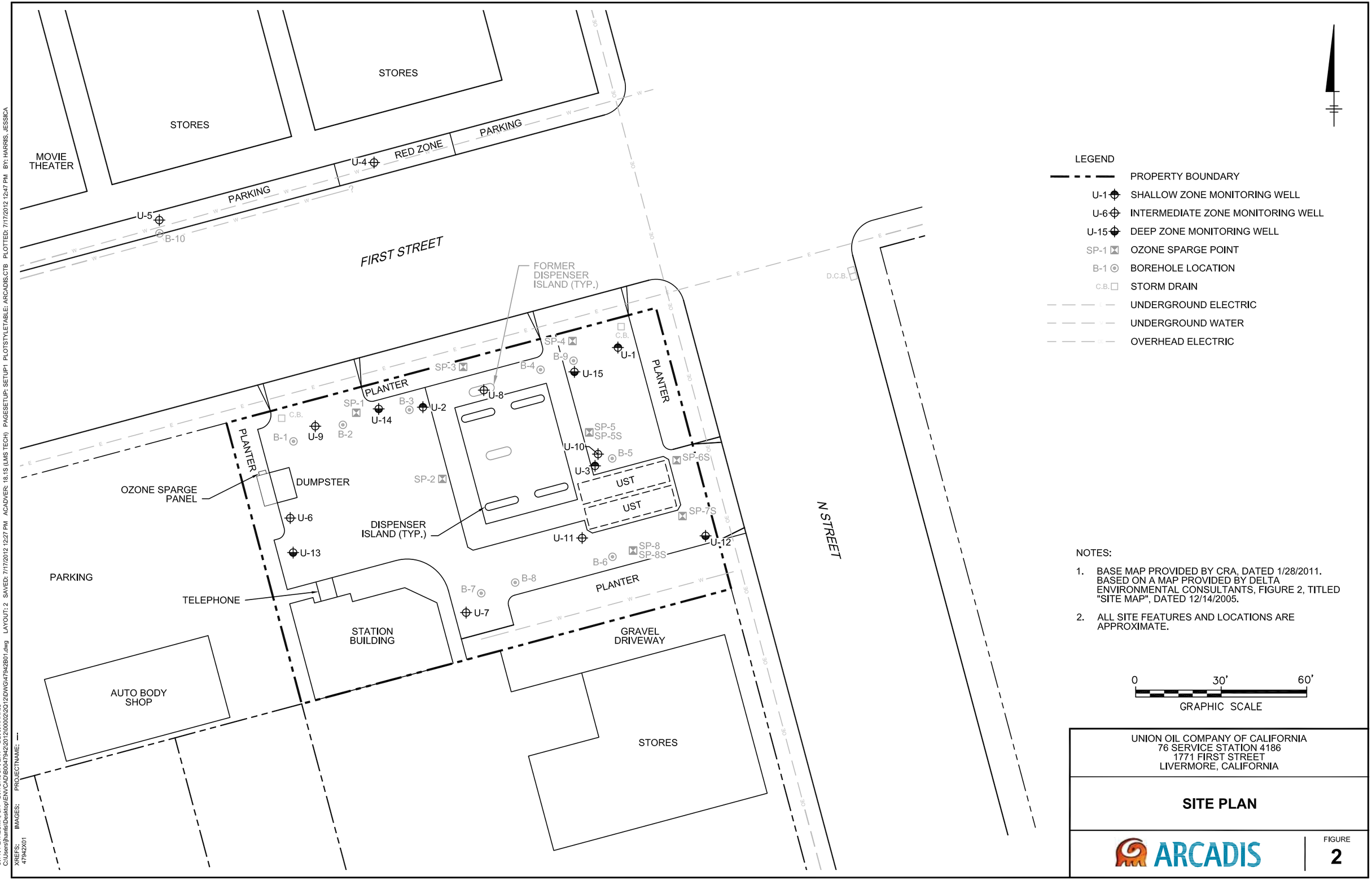

NOTES:

1. BASE MAP PROVIDED BY CRA, DATED 1/28/2011. BASED ON A MAP PROVIDED BY DELTA ENVIRONMENTAL CONSULTANTS, FIGURE 2, TITLED "SITE MAP", DATED 12/14/2005.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.

0 30' 60'

GRAPHIC SCALE

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

SITE PLAN

ARCADIS

FIGURE 2

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS
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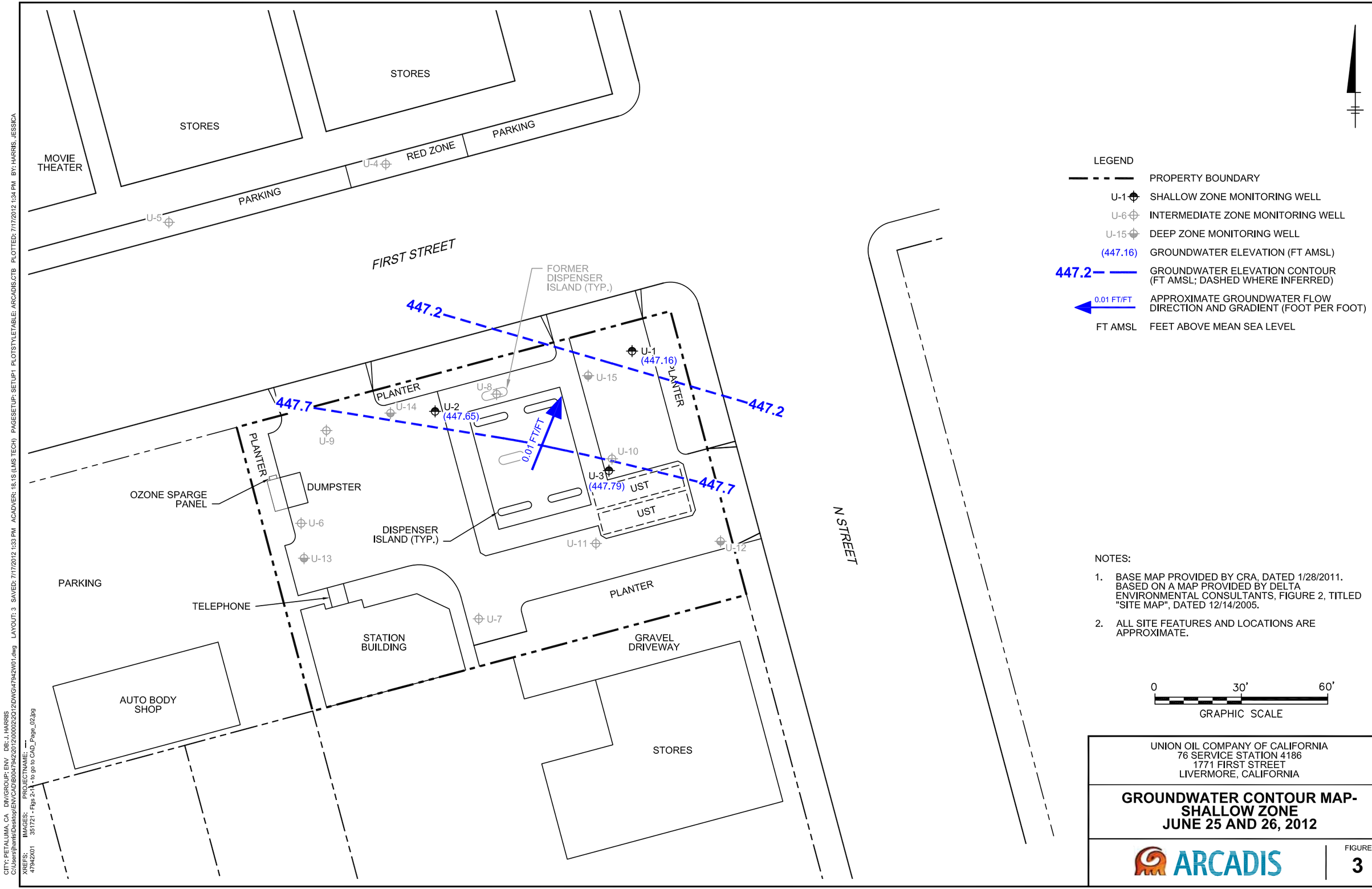

LEGEND

	PROPERTY BOUNDARY
U-1	SHALLOW ZONE MONITORING WELL
U-6	INTERMEDIATE ZONE MONITORING WELL
U-15	DEEP ZONE MONITORING WELL
(447.16)	GROUNDWATER ELEVATION (FT AMSL)
447.2	GROUNDWATER ELEVATION CONTOUR (FT AMSL; DASHED WHERE INFERRED)
0.01 FT/FT	APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT (FOOT PER FOOT)
FT AMSL	FEET ABOVE MEAN SEA LEVEL

NOTES:

1. BASE MAP PROVIDED BY CRA, DATED 1/28/2011. BASED ON A MAP PROVIDED BY DELTA ENVIRONMENTAL CONSULTANTS, FIGURE 2, TITLED "SITE MAP", DATED 12/14/2005.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.

0 30' 60'

GRAPHIC SCALE

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

GROUNDWATER CONTOUR MAP- SHALLOW ZONE JUNE 25 AND 26, 2012

ARCADIS

FIGURE 3

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS
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479942X01 351721 - Figs 2-11 - to go to CAD_Page_02.jpg

LEGEND

	PROPERTY BOUNDARY
U-1	SHALLOW ZONE MONITORING WELL
U-6	INTERMEDIATE ZONE MONITORING WELL
U-15	DEEP ZONE MONITORING WELL
[TPH-g]	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (C4-C12) CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
<	DENOTES LESS THAN THE LABORATORY REPORTING LIMIT
[NS]	NOT SAMPLED

NOTES:

1. BASE MAP PROVIDED BY CRA, DATED 1/28/2011. BASED ON A MAP PROVIDED BY DELTA ENVIRONMENTAL CONSULTANTS, FIGURE 2, TITLED "SITE MAP", DATED 12/14/2005.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.

0 30' 60'

GRAPHIC SCALE

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

TPH-g CONCENTRATION MAP- SHALLOW ZONE JUNE 25 AND 26, 2012

ARCADIS

FIGURE 4

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS
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IMAGES: 479422X01

LEGEND

- PROPERTY BOUNDARY
- U-1 SHALLOW ZONE MONITORING WELL
- U-6 INTERMEDIATE ZONE MONITORING WELL
- U-15 DEEP ZONE MONITORING WELL
- [BENZ] BENZENE CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- < DENOTES LESS THAN THE LABORATORY REPORTING LIMIT
- [NS] NOT SAMPLED

NOTES:

1. BASE MAP PROVIDED BY CRA, DATED 1/28/2011. BASED ON A MAP PROVIDED BY DELTA ENVIRONMENTAL CONSULTANTS, FIGURE 2, TITLED "SITE MAP", DATED 12/14/2005.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.

0 30' 60'

GRAPHIC SCALE

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

BENZENE CONCENTRATION MAP-SHALLOW ZONE JUNE 25 AND 26, 2012

ARCADIS

FIGURE 5

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS
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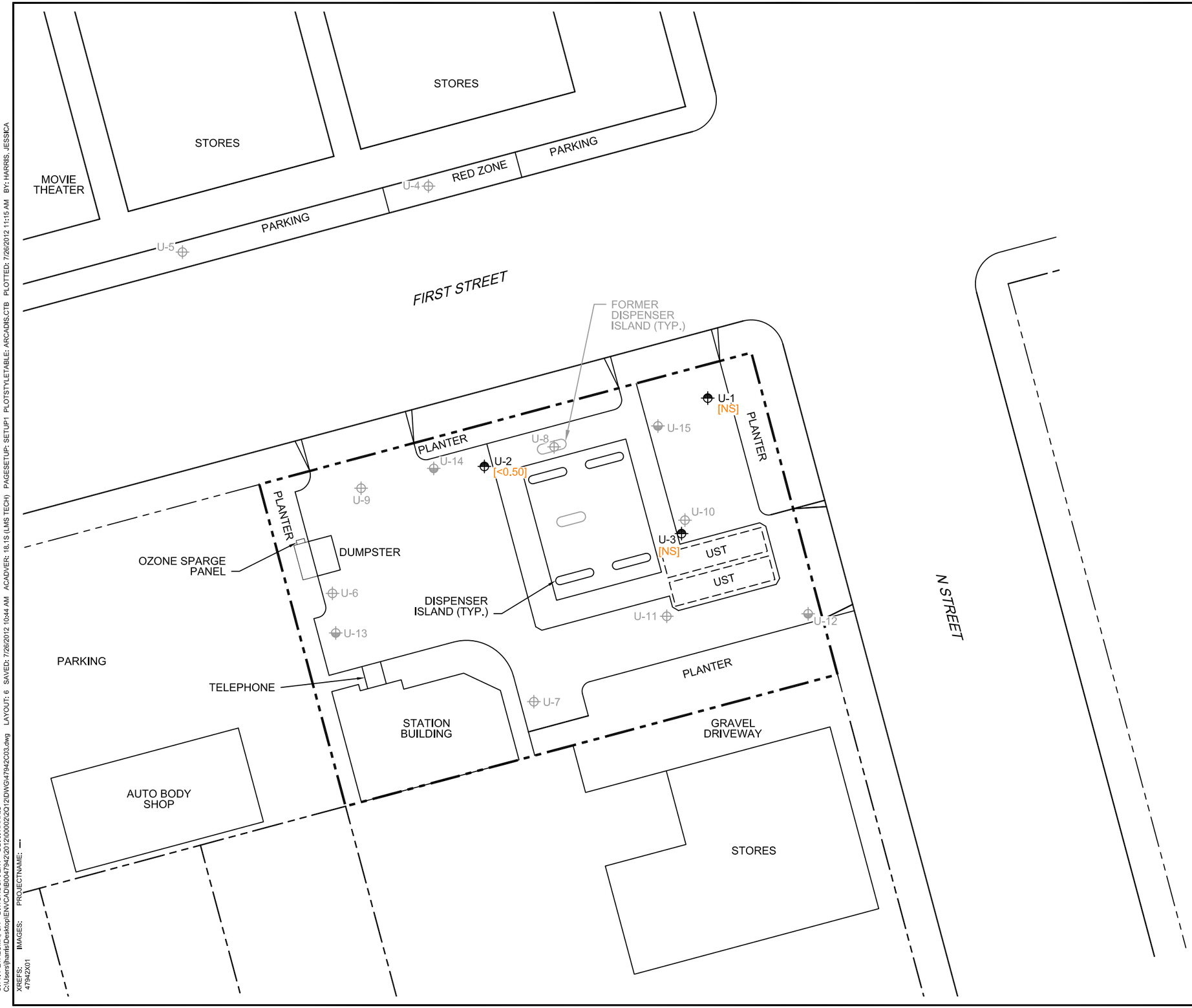

LEGEND

- PROPERTY BOUNDARY
- U-1 SHALLOW ZONE MONITORING WELL
- U-6 INTERMEDIATE ZONE MONITORING WELL
- U-15 DEEP ZONE MONITORING WELL
- [MTBE] METHYL TERTIARY BUTYL ETHER CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- < DENOTES LESS THAN THE LABORATORY REPORTING LIMIT
- [NS] NOT SAMPLED

NOTES:

1. BASE MAP PROVIDED BY CRA, DATED 1/28/2011. BASED ON A MAP PROVIDED BY DELTA ENVIRONMENTAL CONSULTANTS, FIGURE 2, TITLED "SITE MAP", DATED 12/14/2005.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.

0 30' 60'

GRAPHIC SCALE

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

MTBE CONCENTRATION MAP- SHALLOW ZONE JUNE 25 AND 26, 2012

ARCADIS

FIGURE 6

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS
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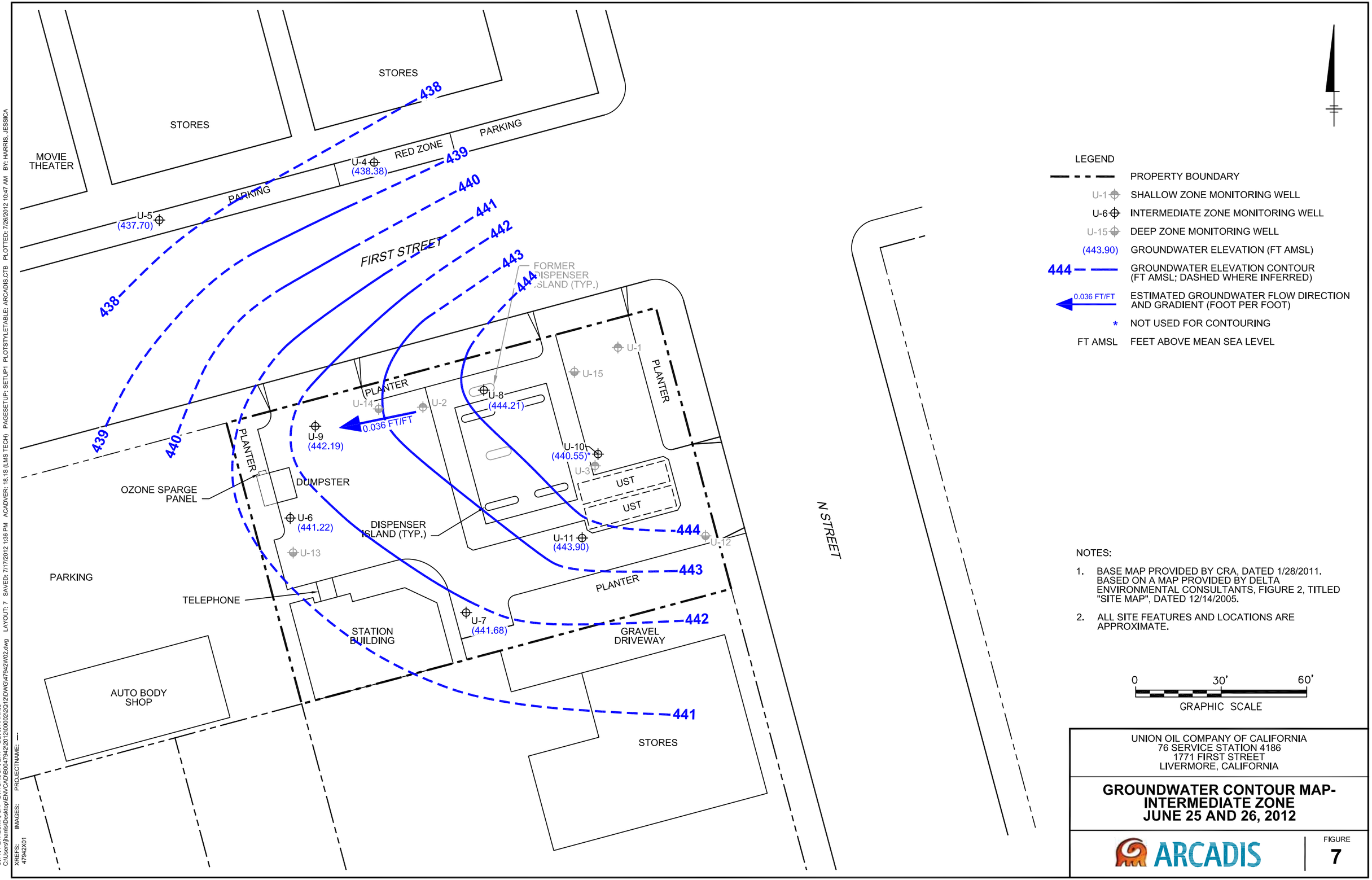

LEGEND

	PROPERTY BOUNDARY
U-1	SHALLOW ZONE MONITORING WELL
U-6	INTERMEDIATE ZONE MONITORING WELL
U-15	DEEP ZONE MONITORING WELL
(443.90)	GROUNDWATER ELEVATION (FT AMSL)
444	GROUNDWATER ELEVATION CONTOUR (FT AMSL; DASHED WHERE INFERRED)
0.036 FT/FT	ESTIMATED GROUNDWATER FLOW DIRECTION AND GRADIENT (FOOT PER FOOT)
*	NOT USED FOR CONTOURING
FT AMSL	FEET ABOVE MEAN SEA LEVEL

NOTES:

1. BASE MAP PROVIDED BY CRA, DATED 1/28/2011. BASED ON A MAP PROVIDED BY DELTA ENVIRONMENTAL CONSULTANTS, FIGURE 2, TITLED "SITE MAP", DATED 12/14/2005.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.

0 30' 60'

GRAPHIC SCALE

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

GROUNDWATER CONTOUR MAP- INTERMEDIATE ZONE JUNE 25 AND 26, 2012

ARCADIS

FIGURE 7

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS
C:\Users\jharris\Desktop\ENVCAD\B0047942\2012\000002\2Q12DWG\47942W02.dwg LAYOUT: 7 SAVED: 7/17/2012 1:36 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: SETUP1 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 7/26/2012 10:47 AM BY: HARRIS, JESSICA
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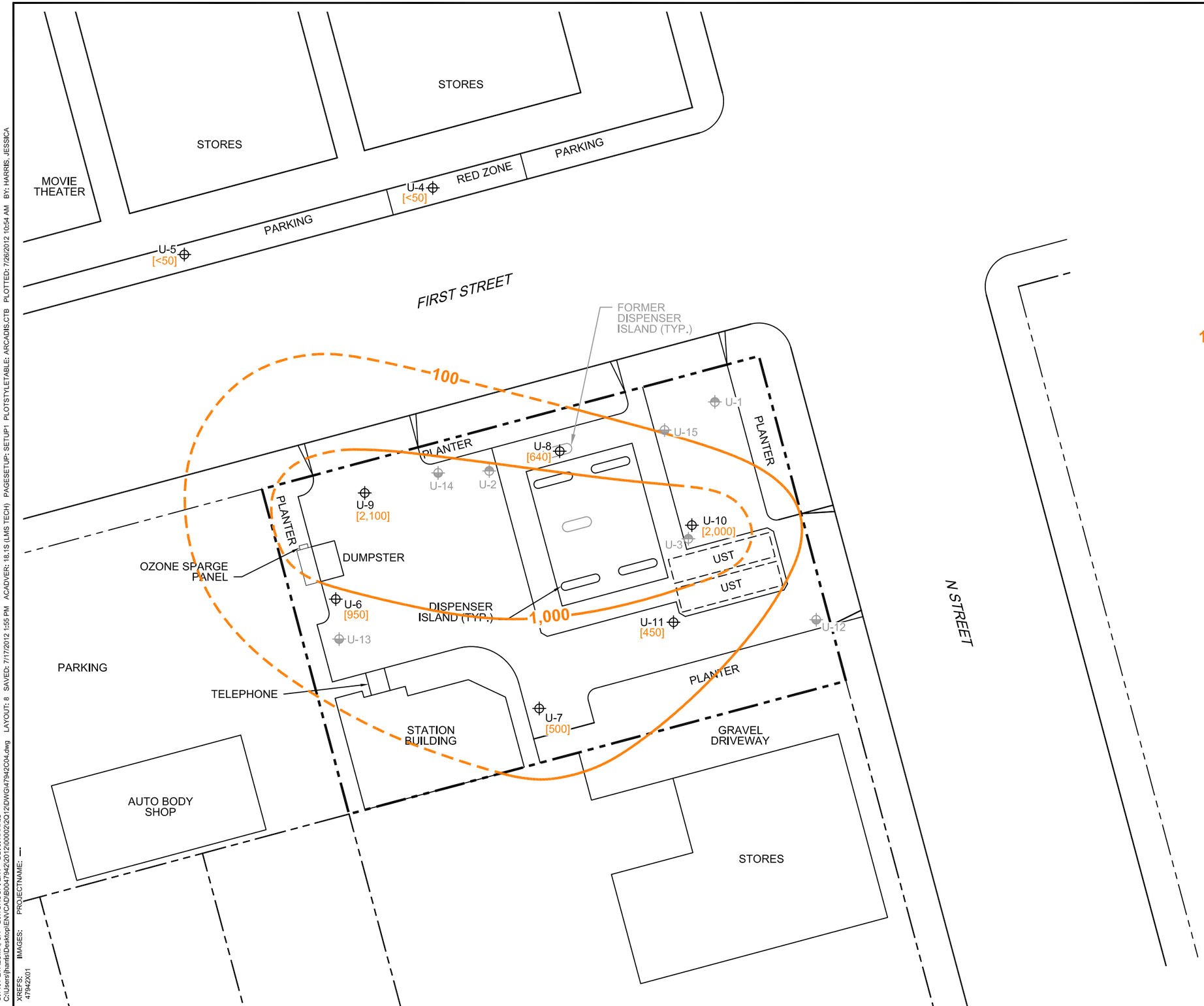

LEGEND

- PROPERTY BOUNDARY
- U-1 SHALLOW ZONE MONITORING WELL
- U-6 INTERMEDIATE ZONE MONITORING WELL
- U-15 DEEP ZONE MONITORING WELL
- [TPH-g] TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (C4-C12) CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- 1,000 TPH-g ISOCONCENTRATION CONTOUR (µg/L; DASHED WHERE INFERRED)
- < DENOTES LESS THAN THE LABORATORY REPORTING LIMIT

NOTES:

1. BASE MAP PROVIDED BY CRA, DATED 1/28/2011. BASED ON A MAP PROVIDED BY DELTA ENVIRONMENTAL CONSULTANTS, FIGURE 2, TITLED "SITE MAP", DATED 12/14/2005.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.

0 30' 60'

GRAPHIC SCALE

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

TPH-g CONCENTRATION MAP-INTERMEDIATE ZONE JUNE 25 AND 26, 2012

ARCADIS

FIGURE 8

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS
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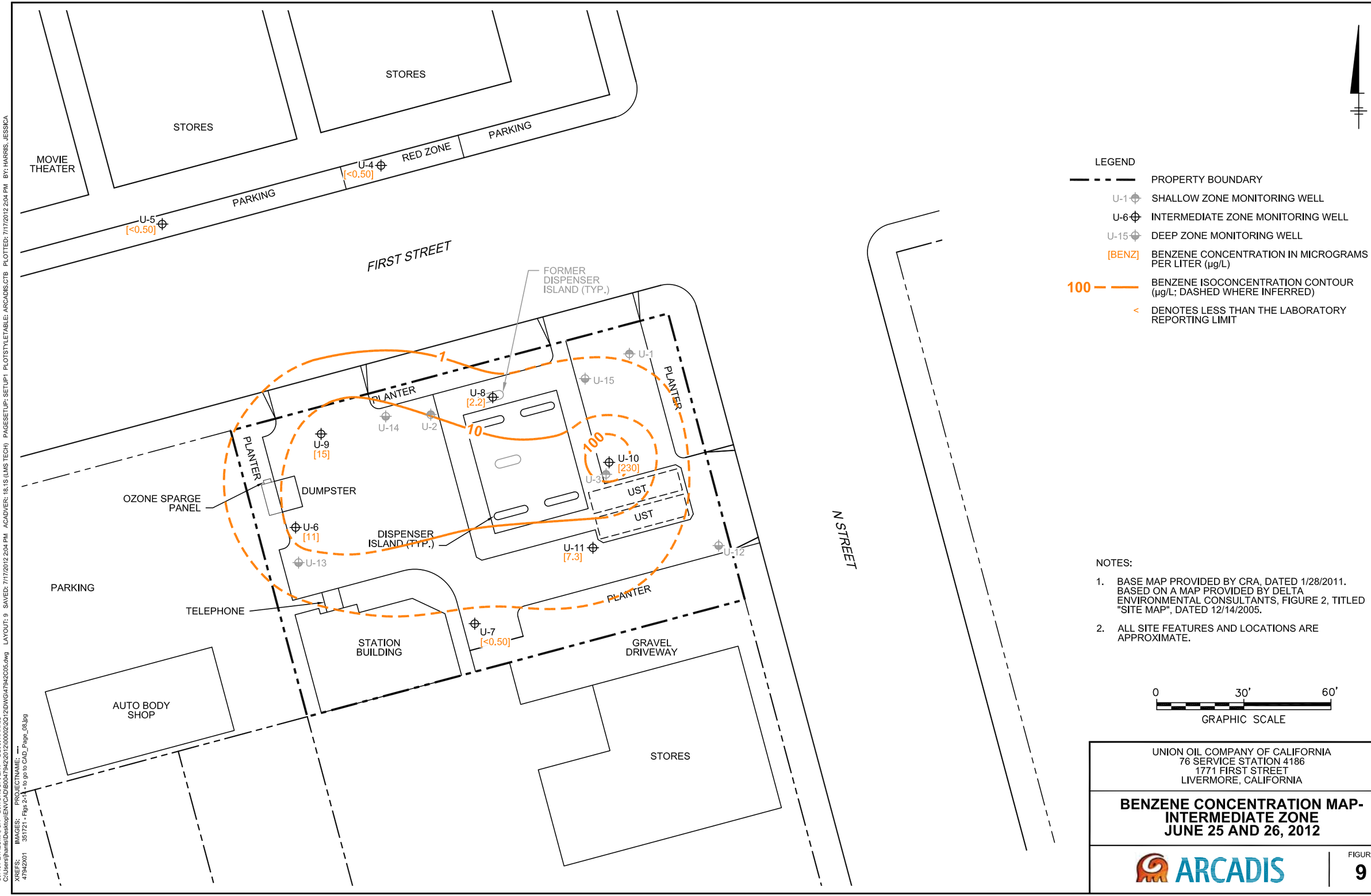

LEGEND

- PROPERTY BOUNDARY
- U-1 SHALLOW ZONE MONITORING WELL
- U-6 INTERMEDIATE ZONE MONITORING WELL
- U-15 DEEP ZONE MONITORING WELL
- [BENZ] BENZENE CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- 100 BENZENE ISOCONCENTRATION CONTOUR (µg/L; DASHED WHERE INFERRED)
- < DENOTES LESS THAN THE LABORATORY REPORTING LIMIT

NOTES:

1. BASE MAP PROVIDED BY CRA, DATED 1/28/2011. BASED ON A MAP PROVIDED BY DELTA ENVIRONMENTAL CONSULTANTS, FIGURE 2, TITLED "SITE MAP", DATED 12/14/2005.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.

0 30' 60'

GRAPHIC SCALE

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

BENZENE CONCENTRATION MAP-INTERMEDIATE ZONE JUNE 25 AND 26, 2012

ARCADIS

FIGURE 9

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS
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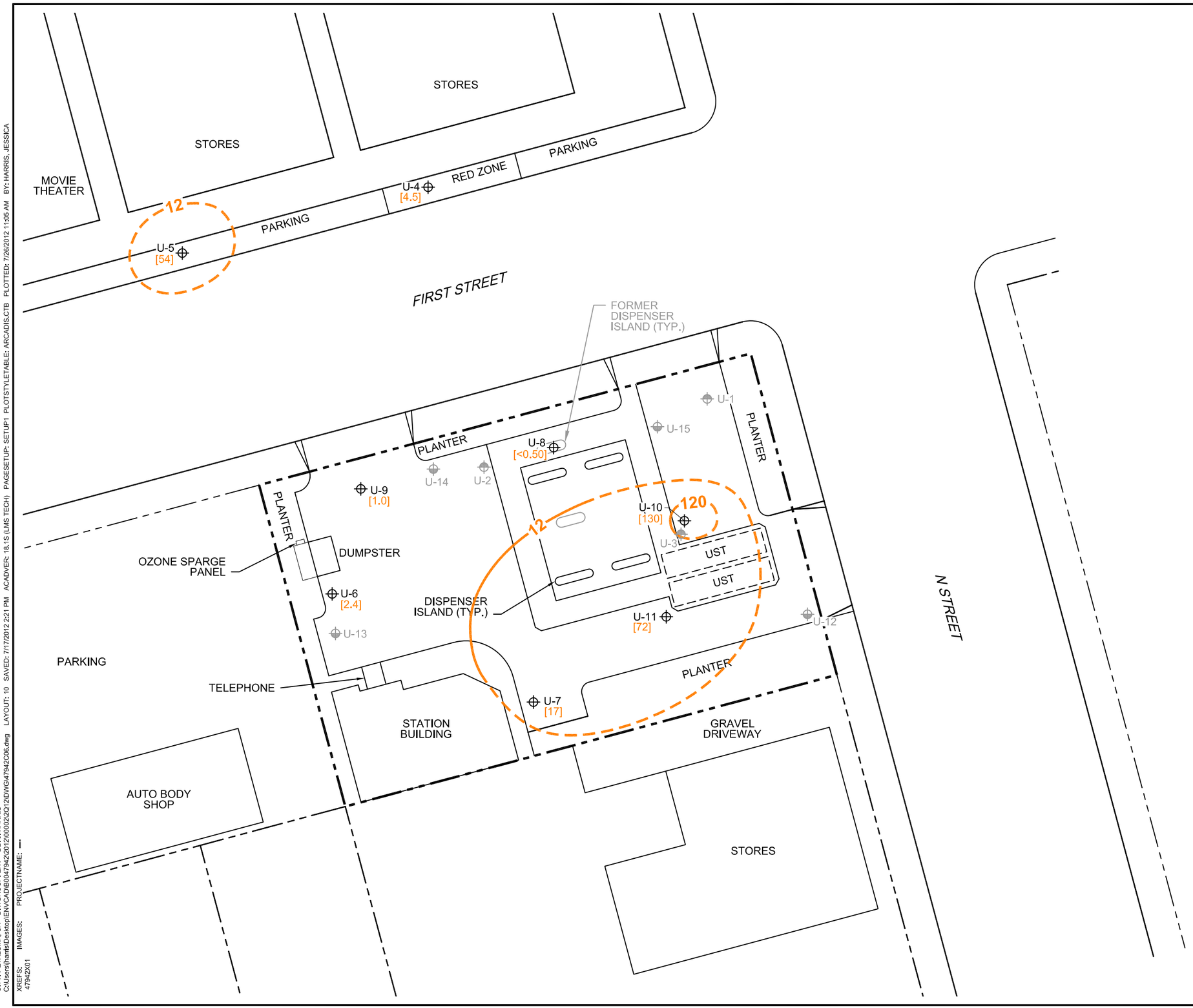
XREFS: 47942X01
IMAGES: PROJECTNAME: ---
351721 - Figs 2-11 - to go to CAD_Page_08.jpg



LEGEND

- PROPERTY BOUNDARY
- U-1 SHALLOW ZONE MONITORING WELL
- U-6 INTERMEDIATE ZONE MONITORING WELL
- U-15 DEEP ZONE MONITORING WELL
- [MTBE] METHYL TERTIARY BUTYL ETHER CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- 12 MTBE ISOCONCENTRATION CONTOUR (µg/L; DASHED WHERE INFERRED)
- < DENOTES LESS THAN THE LABORATORY REPORTING LIMIT

NOTES:

1. BASE MAP PROVIDED BY CRA, DATED 1/28/2011. BASED ON A MAP PROVIDED BY DELTA ENVIRONMENTAL CONSULTANTS, FIGURE 2, TITLED "SITE MAP", DATED 12/14/2005.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.

0 30' 60'

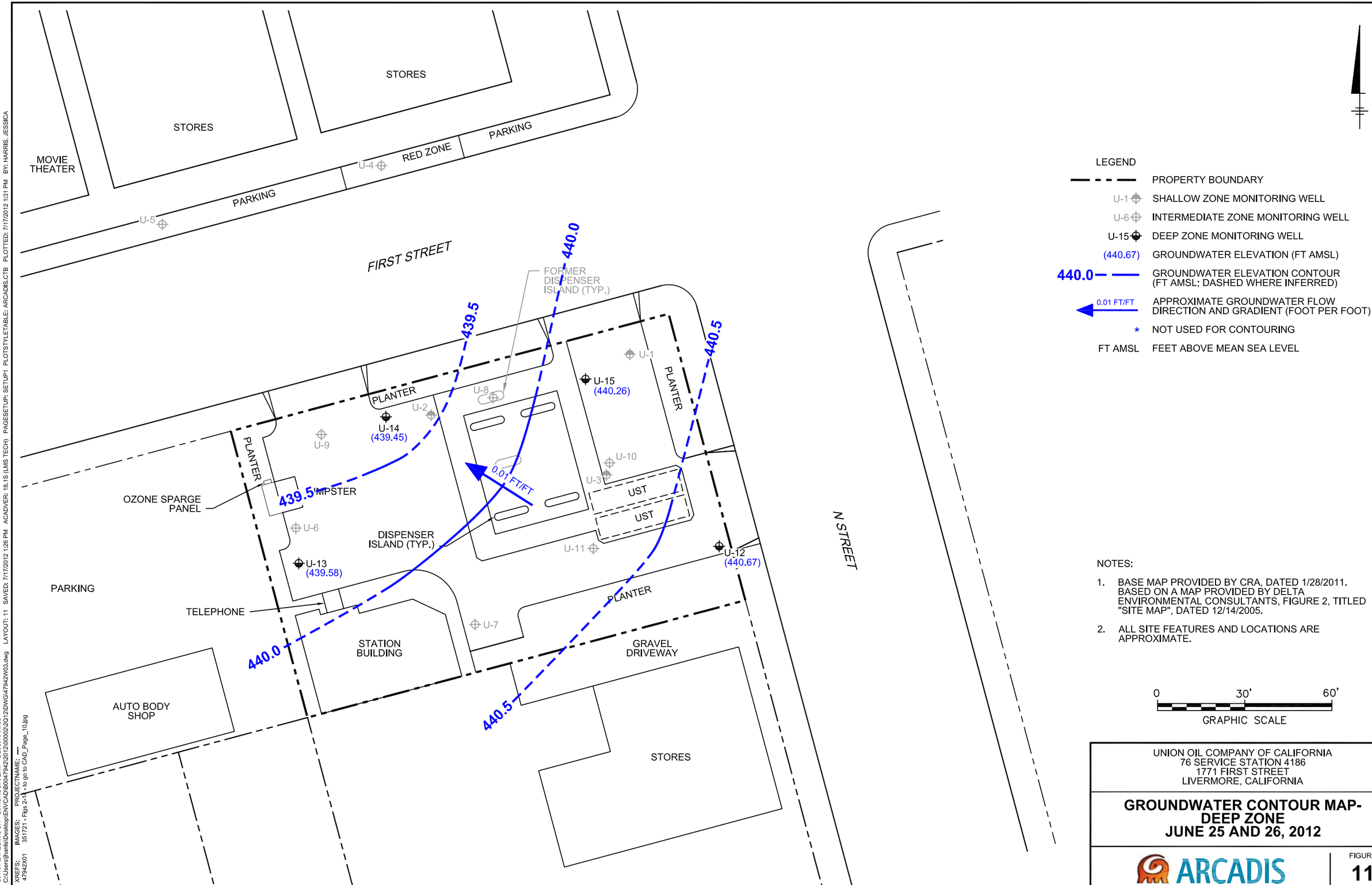
GRAPHIC SCALE

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

MTBE CONCENTRATION MAP- INTERMEDIATE ZONE JUNE 25 AND 26, 2012

ARCADIS

FIGURE 10



LEGEND

	PROPERTY BOUNDARY
U-1	SHALLOW ZONE MONITORING WELL
U-6	INTERMEDIATE ZONE MONITORING WELL
U-15	DEEP ZONE MONITORING WELL
(440.67)	GROUNDWATER ELEVATION (FT AMSL)
440.0	GROUNDWATER ELEVATION CONTOUR (FT AMSL; DASHED WHERE INFERRED)
0.01 FT/FT	APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT (FOOT PER FOOT)
*	NOT USED FOR CONTOURING
FT AMSL	FEET ABOVE MEAN SEA LEVEL

NOTES:

1. BASE MAP PROVIDED BY CRA, DATED 1/28/2011. BASED ON A MAP PROVIDED BY DELTA ENVIRONMENTAL CONSULTANTS, FIGURE 2, TITLED "SITE MAP", DATED 12/14/2005.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.

0 30' 60'

GRAPHIC SCALE

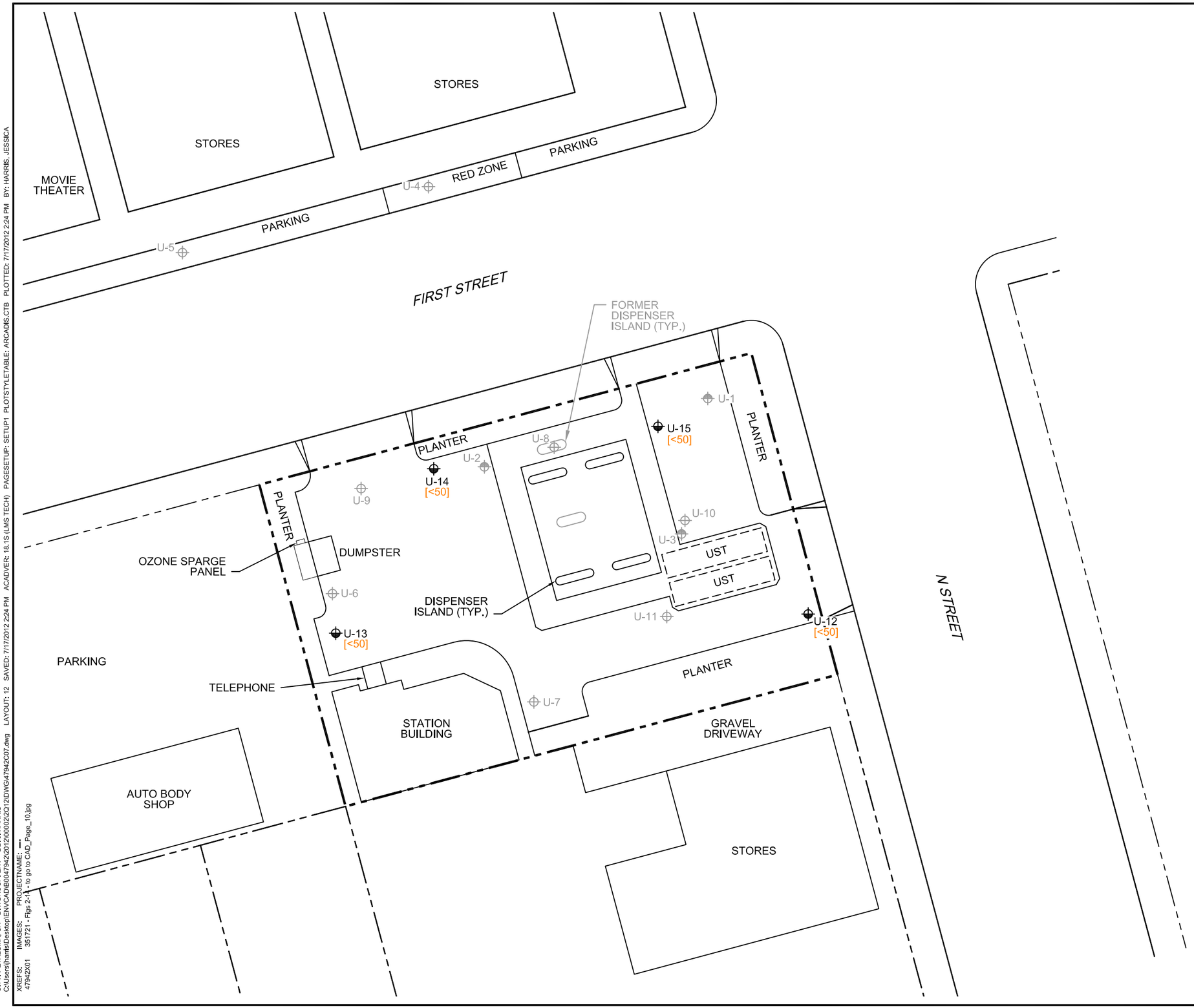
UNION OIL COMPANY OF CALIFORNIA
76 SERVICE STATION 4186
1771 FIRST STREET
LIVERMORE, CALIFORNIA

GROUNDWATER CONTOUR MAP- DEEP ZONE JUNE 25 AND 26, 2012

ARCADIS

FIGURE 11

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS
C:\Users\jharris\Desktop\ENVCAD\B00479420\2012\00002\2Q12\DWG\47942W03.dwg LAYOUT: 11 SAVED: 7/17/2012 1:26 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: SETUP1 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 7/17/2012 1:31 PM BY: HARRIS, JESSICA
XREFS: 47942X01
IMAGES: PROJECTNAME: ---
351721 - Figs 2-11 - to go to CAD_Page_10.jpg



LEGEND

- PROPERTY BOUNDARY
- U-1 SHALLOW ZONE MONITORING WELL
- U-6 INTERMEDIATE ZONE MONITORING WELL
- U-15 DEEP ZONE MONITORING WELL
- [TPH-g] TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (C4-C12) CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- < DENOTES LESS THAN THE LABORATORY REPORTING LIMIT

NOTES:

1. BASE MAP PROVIDED BY CRA, DATED 1/28/2011. BASED ON A MAP PROVIDED BY DELTA ENVIRONMENTAL CONSULTANTS, FIGURE 2, TITLED "SITE MAP", DATED 12/14/2005.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.

0 30' 60'

GRAPHIC SCALE

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

TPH-g CONCENTRATION MAP- DEEP ZONE JUNE 25 AND 26, 2012

ARCADIS

FIGURE 12

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS
C:\Users\jharris\Desktop\ENVCAD\B0047942\2012\000002\Q12\DWG\47942C07.dwg LAYOUT: 12 SAVED: 7/17/2012 2:24 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: SETUP1 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 7/17/2012 2:24 PM BY: HARRIS, JESSICA
XREFS: IMAGES: PROJECTNAME: ---
47942X01 351721 - Figs 2-11 - to go to CAD_Page_10.jpg

LEGEND

- PROPERTY BOUNDARY
- U-1 SHALLOW ZONE MONITORING WELL
- U-6 INTERMEDIATE ZONE MONITORING WELL
- U-15 DEEP ZONE MONITORING WELL
- [BENZ] BENZENE CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- < DENOTES LESS THAN THE LABORATORY REPORTING LIMIT

NOTES:

1. BASE MAP PROVIDED BY CRA, DATED 1/28/2011. BASED ON A MAP PROVIDED BY DELTA ENVIRONMENTAL CONSULTANTS, FIGURE 2, TITLED "SITE MAP", DATED 12/14/2005.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.

0 30' 60'

GRAPHIC SCALE

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

BENZENE CONCENTRATION MAP-DEEP ZONE JUNE 25 AND 26, 2012

ARCADIS

FIGURE 13

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS
C:\Users\jharris\Desktop\ENVCAD\B00479420\2012\00002\Q12\DWG\479420C08.dwg LAYOUT: 13 SAVED: 7/17/2012 2:24 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: SETUP1 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 7/17/2012 2:26 PM BY: HARRIS, JESSICA
XREFS: IMAGES: PROJECTNAME: ---
479420X01 351721 - Figs 2-14 - to go to CAD_Page_10.jpg

LEGEND

- PROPERTY BOUNDARY
- U-1 SHALLOW ZONE MONITORING WELL
- U-6 INTERMEDIATE ZONE MONITORING WELL
- U-15 DEEP ZONE MONITORING WELL
- [MTBE] METHYL TERTIARY BUTYL ETHER CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- < DENOTES LESS THAN THE LABORATORY REPORTING LIMIT

NOTES:

1. BASE MAP PROVIDED BY CRA, DATED 1/28/2011. BASED ON A MAP PROVIDED BY DELTA ENVIRONMENTAL CONSULTANTS, FIGURE 2, TITLED "SITE MAP", DATED 12/14/2005.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.

0 30' 60'

GRAPHIC SCALE

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

**MTBE CONCENTRATION MAP-
DEEP ZONE
JUNE 25 AND 26, 2012**

ARCADIS

FIGURE
14

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS
C:\Users\jharris\Desktop\ENVCAD\B0047942\2012\000002\Q12\DWG\47942C09.dwg LAYOUT: 14 SAVED: 7/17/2012 2:26 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: SETUP1 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 7/17/2012 2:28 PM BY: HARRIS, JESSICA
XREFS: IMAGES: PROJECTNAME: ---
47942X01 351721 - Figs 2-14 - to go to CAD_Page_10.jpg

ARCADIS

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 (feet bTOC)	LPH Thickness (feet)	GW Elevation (feet MSL)	TPH-G 8260B	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	TAME	ETBE	DIPE	EDB	EDC	Ethanol	Comments
Shallow																			
U-1[a]	6/25/2012	480.29	33.13	--	447.16	--	--	--	--	--	--	--	--	--	--	--	--	--	
U-2	6/26/2012	479.45	31.80	--	447.65	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
U-3[a]	6/25/2012	480.48	32.69	--	447.79	--	--	--	--	--	--	--	--	--	--	--	--	--	
Intermediate																			
U-4	6/26/2012	478.95	40.57	--	438.38	<50	<0.50	<0.50	<0.50	<1.0	**4.5**	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
U-5	6/26/2012	478.52	40.82	--	437.70	<50	<0.50	<0.50	<0.50	<1.0	**54**	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
U-6	6/26/2012	480.40	39.18	--	441.22	**950**	**11**	**0.76**	**7.7**	**1.6**	**2.4**	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
U-7	6/26/2012	480.78	39.10	--	441.68	**500**	<0.50	<0.50	<0.50	<1.0	**17**	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
U-8	6/26/2012	480.43	36.22	--	444.21	**640**	**2.2**	<0.50	**1.5**	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
U-9	6/26/2012	479.39	37.20	--	442.19	**2,100**	**15**	**2.8**	**52**	**5.0**	**1.0**	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
U-10	6/26/2012	480.51	39.96	--	440.55	**2,000**	**230**	**5.7**	**230**	**67**	**130**	**2,300**	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	A01
U-11	6/26/2012	480.34	36.44	--	443.90	**450**	**7.3**	<0.50	<0.50	<0.50	**72**	**5,000**	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
Deep																			
U-12	6/25/2012	480.75	40.08	--	440.67	<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	6/25/2012	480.31	40.73	--	439.58	<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	6/25/2012	479.38	39.93	--	439.45	<50	<0.50	<0.50	<0.50	<1.0	<0.50	**10**	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
U-15	6/25/2012	479.99	39.73	--	440.26	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	

Notes

Analytical results given in micrograms per liter (µg/l) unless otherwise noted
-- = Not applicable
a = Insufficient water, no sample collected
Bold = detected above the laboratory reporting limit

Standard Abbreviations

<	not detected at or above laboratory detection limit
µg/l	micrograms per liter (approx. equivalent to parts per billion, ppb)
TOC	top of casing (surveyed reference elevation)
MSL	relative to mean sea level
DTW	depth to water
bTOC	below top of casing
LPH	liquid-phase hydrocarbons
GW	groundwater
TPH-G	total petroleum hydrocarbons as gasoline
MTBE	methyl tertiary butyl ether
TBA	tertiary butyl alcohol
TAME	tertiary amyl methyl ether
ETBE	ethyl tertiary butyl ether
DIPE	di-isopropyl ether
EDB	1,2-dibromoethane
EDC	1,2-dichloroethane (same as ethylene dichloride)
8260B	USEPA Method 8260B for TPH-g/BTEX/MTBE/Oxygenates
A01	PQL's and MDL's were raised due to sample dilution.

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 NO3 (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)
Shallow Zone															
U-1[a]	6/25/2012	--	**1.14**	**112**	--	--	--	--	--	--	--	--	--	--	--
U-2	6/26/2012	**936.7**	**3.88**	**108**	**21**	**54**	<100	**0.0010**	**46**	**68**	**53**	**2.1**	**27**	**0.084**	**540**
U-3[a]	6/25/2012	--	**1.09**	**-60**	--	--	--	--	--	--	--	--	--	--	--
Intermediate Zone															
U-4	6/26/2012	**1,083**	**1.46**	**149**	**4.8**	**31**	<100	**0.0013**	**65**	**94**	**33**	**2.1**	**41**	**0.12**	**640**
U-5	6/26/2012	**983.5**	**0.86**	**146**	**1.5**	**22**	<100	**0.0027**	--	--	--	--	--	--	--
U-6	6/26/2012	**1,608**	**0.61**	**-93**	<0.44	**50**	**210**	**1.5**	--	--	--	--	--	--	--
U-7	6/26/2012	**1,092**	**0.77**	**-102**	<0.44	**3.3**	<100	**1.0**	--	--	--	--	--	--	--
U-8	6/26/2012	**920.9**	**0.60**	**-86**	<0.44	**31**	<100	**0.0038**	**37**	**64**	**47**	**1.4**	**54**	**0.10**	**470**
U-9	6/26/2012	**1,106**	**0.79**	**-100**	<0.44	**33**	**190**	**12**	**39**	**72**	**67**	**1.3**	**94**	**0.11**	**570**
U-10	6/26/2012	**1,130**	**0.70**	**-105**	<0.44	<1.0	<100	**19**	**51**	**100**	**50**	**3.3**	**36**	**0.13**	**690**
U-11	6/26/2012	**1,773**	**0.81**	**-95**	<0.44	**320**	**270**	**6.0**	**72**	**170**	**60**	**1.6**	**120**	**0.10**	**1,200**
Deep Zone															
U-12	6/25/2012	**953.2**	**3.08**	**128**	**23**	**52**	<100	<0.0010	--	--	--	--	--	--	--
U-13	6/25/2012	**960.4**	**1.71**	**111**	**25**	**55**	<100	<0.0010	**39**	**71**	**56**	**13**	**81**	**0.096**	**600**
U-14	6/25/2012	**936.4**	**2.32**	**89**	**5.7**	**9.4**	<100	**0.014**	--	--	--	--	--	--	--
U-15	6/25/2012	**947.2**	**2.82**	**95**	**23**	**50**	<100	**0.0054**	**10**	**65**	**79**	**47**	**80**	**0.077**	**620**

Notes
Analytical results given in micrograms per liter (µg/l) unless otherwise noted
-- = Not applicable
a = Insufficient water, no sample collected
Bold = detected above the laboratory reporting limit

Standard Abbreviations

<	not detected at or above laboratory detection limit
µS/cm	microSiemens per centimeter
mg/l	milligrams per liter (approx. equivalent to parts per million, ppm)
µg/l	micrograms per liter (approx. equivalent to parts per billion, ppb)
mV	millivolts
EC	electrical conductivity
DO	dissolved oxygen
ORP	oxidation reduction potential
120.1	EPA Method 120.1 for EC
SM-4500OG	SM-4500OG for DO
ASTM-D1498	ASTM-D1498 for ORP
300.0	USEPA Method 300.0 for sulfate and nitrate as NO3
350FE+B	USEPA 350FE+B for Dissolved ferrous iron
160.1	USEPA Method 160.1 for total dissolved solids
6010	USEPA Method 6010 for hexavalent chromium

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

Well ID	Date Sampled	Dissolved Antimony (µg/L)	Dissolved Arsenic (µg/L)	Hexavalent Chromium (µg/L)	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)	Missolved 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]	6/25/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-2	6/26/2012	<100	<50	<2.0	**240**	<10	<10	<10	<50	<10	<50	<10	<0.20	<50	<10	<100	<10	<100	<10	<10
U-3[a]	6/25/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		Deep Zone																		
U-4	6/26/2012	<100	<50	<2.0	**470**	<10	<10	<10	<50	<10	<50	**220**	<0.20	<50	<10	<100	<10	<100	<10	<10
U-5	6/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-6	6/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-7	6/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-8	6/26/2012	<100	<50	<2.0	**410**	<10	<10	<10	<50	<10	<50	**1,300**	<0.20	<50	<10	<100	<10	<100	<10	<10
U-9	6/26/2012	<100	<50	<2.0	**430**	<10	<10	<10	<50	<10	<50	**1,800**	<0.20	<50	<10	<100	<10	<100	<10	<10
U-10	6/26/2012	<100	<50	<2.0	**440**	<10	<10	<10	<50	<10	<50	**2,000**	<0.20	<50	<10	<100	<10	<100	<10	<10
U-11	6/26/2012	<100	<50	<2.0	**58**	<10	<10	<10	<50	<10	<50	**3,100**	<0.20	<50	<10	<100	<10	<100	<10	<10
		Intermediate Zone																		
U-12	6/25/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-13	6/25/2012	<100	<50	**5.7**	**240**	<10	<10	<10	<50	<10	<50	<10	<0.20	<50	<10	<100	<10	<100	<10	<10
U-14	6/25/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-15	6/25/2012	<100	<50	**22**	**67**	<10	<10	**25**	<50	<10	<50	<10	<0.20	<50	<10	<100	<10	<100	<10	<10

Notes
Analytical results given in micrograms per liter (µg/l) unless otherwise noted
-- = Not applicable
a = Insufficient water, no sample collected
Bold = detected above the laboratory reporting limit

Standard Abbreviations

<	not detected at or above laboratory detection limit
µS/cm	microSiemens per centimeter
mg/l	milligrams per liter (approx. equivalent to parts per million, ppm)
µg/l	micrograms per liter (approx. equivalent to parts per billion, ppb)
mV	millivolts
EC	electrical conductivity
DO	dissolved oxygen
ORP	oxidation reduction potential
120.1	EPA Method 120.1 for EC
SM-4500OG	SM-4500OG for DO
ASTM-D1498	ASTM-D1498 for ORP
300.0	USEPA Method 300.0 for sulfate and nitrate as NO3
350FE+B	USEPA 350FE+B for Dissolved ferrous iron
160.1	USEPA Method 160.1 for total dissolved solids
6010	USEPA Method 6010 for hexavalent chromium

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]	6/25/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-2	6/26/2012	<100	<50	**480**	<10	<10	**75**	<50	**38**	<50	<0.20	<50	**180**	<100	<10	<100	**36**	**81**
U-3[a]	6/25/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		Intermediate Zone																
U-4	6/26/2012	<100	**76**	**3,300**	<10	<10	**1,100**	**350**	**510**	**110**	<0.20	<50	**3,500**	<100	<10	<100	**380**	**680**
U-5	6/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-6	6/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-7	6/26/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-8	6/26/2012	<100	**76**	**1,500**	<10	<10	**420**	**140**	**220**	**72**	<0.20	<50	**1,300**	<100	<10	<100	**170**	**310**
U-9	6/26/2012	<100	<50	**1,200**	<10	<10	**290**	**72**	**150**	<50	**0.68**	<50	**840**	<100	<10	<100	**120**	**210**
U-10	6/26/2012	<100	<50	**1,000**	<10	<10	**250**	**57**	**120**	<50	**0.64**	<50	**870**	<100	<10	<100	**98**	**170**
U-11	6/26/2012	<100	<50	**1,100**	<10	<10	**230**	**61**	**120**	<50	**0.62**	<50	**760**	<100	<10	<100	**110**	**160**
		Deep Zone																
U-12	6/25/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-13	6/25/2012	<100	<50	**300**	<10	<10	<10	<50	<10	<50	<0.20	<50	<10	<100	<10	<100	<10	<50
U-14	6/25/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-15	6/25/2012	<100	<50	**100**	<10	<10	**23**	<50	<10	<50	<0.20	<50	**10**	<100	<10	<100	<10	<50

Notes
Analytical results given in micrograms per liter (µg/l) unless otherwise noted
-- = Not applicable
a = Insufficient water, no sample collected
Bold = detected above the laboratory reporting limit

Standard Abbreviations

<	not detected at or above laboratory detection limit
µS/cm	microSiemens per centimeter
mg/l	milligrams per liter (approx. equivalent to parts per million, ppm)
µg/l	micrograms per liter (approx. equivalent to parts per billion, ppb)
mV	millivolts
EC	electrical conductivity
DO	dissolved oxygen
ORP	oxidation reduction potential
120.1	EPA Method 120.1 for EC
SM-4500OG	SM-4500OG for DO
ASTM-D1498	ASTM-D1498 for ORP
300.0	USEPA Method 300.0 for sulfate and nitrate as NO3
350FE+B	USEPA 350FE+B for Dissolved ferrous iron
160.1	USEPA Method 160.1 for total dissolved solids
6010	USEPA Method 6010 for hexavalent chromium

ARCADIS

Attachment A

Field Data Sheets and General Procedures

123 Technology Drive West
Irvine, CA 92618

949.727.9336 PHONE
949.727.7399 FAX

www.TRCsolutions.com

DATE: July 2, 2012

TO: Katherine Brandt
Arcadis
1900 Powell Street, 12th Floor
Emeryville, California 94608

SITE: Unocal Site 4186
Facility 351721
1771 First Street, Livermore, CA

RE: Transmittal of Groundwater Monitoring Data

Dear Ms. Brandt,

Please find attached the field data sheets, chain of custody (COC) forms, and technical services request (TSR) form for the monitoring event that was completed on June 25m, 2012. Field measurements and collection of samples submitted to the laboratory were completed in general accordance with our usual groundwater monitoring protocol which is also attached for your reference.

Please call me at 949-727-7345 if you have questions.

Sincerely,

TRC

Christina Carrillo
Groundwater Program Coordinator

GENERAL FIELD PROCEDURES

Groundwater Gauging and Sampling Assignments

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

Fluid Level Measurements (Gauging)

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

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

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

Purging and Groundwater Parameter Measurement

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

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

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

Groundwater Sample Collection

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

GENERAL FIELD PROCEDURES

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

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

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

Sequence of Gauging, Purging and Sampling

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

Decontamination

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

Purge Water Disposal

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

Exceptions

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

FIELD MONITORING DATA SHEET

Technician: A. Vickers Job #/Task #: 189791.0035.1721 Date: 6/25/12

Site # 4186 Project Manager AF Page 1 of 1

Well #	TOC	Time Gauged	Total Depth	Depth to Water	Depth to Product	Product Thickness (feet)	Time Sampled	Misc. Well Notes
U-13	✓	0558	73.01	40.73	—	—	0926	4"
U-14	✓	0604	71.62	39.93	—	—	1026	4"
U-2	✓	0609	33.11	31.80	—	—	0802	2" sampled 6/26
U-15	✓	0616	71.52	39.73	—	—	1124	4"
U-1	✓	0621	33.92	33.13	—	—	N/S	2"
U-12	✓	0626	74.20	40.08	—	—	0843	4"
U-4	✓	0637	44.84	40.57	—	—	0556	2" sampled 6/26
U-5	✓	0644	46.98	40.82	—	—	0623	2"
U-7	✓	0700	44.40	39.10	—	—	1007	2"
U-3	✓	0705	33.63	32.69	—	—	N/S	2"
U-11	✓	0711	44.78	36.44	—	—	1019	2" sampled 6/26
U-9	✓	0717	44.83	37.20	—	—	0939	2"
U-6	✓	0723	41.43	39.18	—	—	0926	2"
U-8	✓	0730	44.76	36.22	—	—	1058	2"
U-10	✓	0735	47.02	39.96	—	—	1038	2"
							*	Note: There are two sample times for well U-2. Ferrous Iron, Nitrate, Sulfate samples were collected later due to well going dry. Second sample time is 1111 (6/26/12)

FIELD DATA COMPLETE QA/QC COC WELL BOX CONDITION SHEETS

MANIFEST DRUM INVENTORY TRAFFIC CONTROL

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Vickers

Site: 4186 Project No.: 189791.0035.1721 Date: 6/25/12

Well No. U-13 Purge Method: Sub

Depth to Water (feet): 40.73 Depth to Product (feet): —

Total Depth (feet) 73.01 LPH & Water Recovered (gallons): —

Water Column (feet): 32.28 Casing Diameter (Inches): 4

80% Recharge Depth(feet): 47.19 1 Well Volume (gallons): 22

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge							1.96	108	14
0901			22	~~6N~~ 976.8	21.2	7.61	1.80	112	16
			44	963.4	21.1	7.56	1.65	112	16
	0920		66	960.4	21.0	7.51	1.71	111	11

Static at Time Sampled	Total Gallons Purged	Sample Time
41.23	66	0926

Comments: Pump depth - 46ft.

Well No. U-14 Purge Method: Sub

Depth to Water (feet): 39.93 Depth to Product (feet): —

Total Depth (feet) 71.62 LPH & Water Recovered (gallons): —

Water Column (feet): 31.69 Casing Diameter (Inches): 4

80% Recharge Depth(feet): 46.27 1 Well Volume (gallons): 22

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge							2.63	32	19
0955			22	878.2	21.4	7.81	2.55	99	38
			44	926.7	21.4	7.57	2.47	99	17
	1016		66	936.4	21.2	7.49	2.32	89	10

Static at Time Sampled	Total Gallons Purged	Sample Time
40.24	66	1026

Comments:

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Vidmus

Site: 4186 Project No.: 18791.0035.1721 Date: 6/25/12

Well No. U-1 Purge Method: HB

Depth to Water (feet): 33.13 Depth to Product (feet): —

Total Depth (feet) 33.92 LPH & Water Recovered (gallons): —

Water Column (feet): 0.79 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 33.29 1 Well Volume (gallons): 0.25

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge							~~3.6~~ N	112	Er2
			0.25				1.14		
			0.5						
			0.75						

Static at Time Sampled	Total Gallons Purged	Sample Time
33.88	—	N/S

Comments: Well went dry while collecting pre-purge readings. Insufficient water, no sample taken. Static measured 6/26/12

Well No. U-12 Purge Method: Sub

Depth to Water (feet): 40.08 Depth to Product (feet): —

Total Depth (feet) 74.20 LPH & Water Recovered (gallons): —

Water Column (feet): 34.12 Casing Diameter (Inches): 4

80% Recharge Depth(feet): 46.90 1 Well Volume (gallons): 24

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge							3.69	140	13
0812			24	959.7	20.7	7.28	3.68	131	17
			48	951.5	20.8	7.41	3.24	128	10
	0836		72	953.2	20.6	7.43	3.08	128	10

Static at Time Sampled	Total Gallons Purged	Sample Time
40.22	72	0843

Comments: Pump depth - 45ft.

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Vidmers

Site: 4186 Project No.: 189791.0035.1721 Date: 6/25/12

Well No. U-2 Purge Method: HB

Depth to Water (feet): 31.80 Depth to Product (feet): —

Total Depth (feet) 33.11 LPH & Water Recovered (gallons): —

Water Column (feet): 1.31 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 32.06 1 Well Volume (gallons): 0.25

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge							3.45	104	750
1038	1045		0.25	936.7	20.4	7.36	3.88	108	1100
			0.5						
			0.75						

Static at Time Sampled	Total Gallons Purged	Sample Time
31.80	0.25	0802

Comments: Dry at 0.25 gals. Did not recover in 45 minutes. Sampled 6/26/12. Well went dry while sampling, unable to collect all necessary bottles. See non-completion.

Well No. U-15 Purge Method: Sub

Depth to Water (feet): 39.73 Depth to Product (feet): —

Total Depth (feet) 71.52 LPH & Water Recovered (gallons): —

Water Column (feet): 31.79 Casing Diameter (Inches): 4

80% Recharge Depth(feet): 46.09 1 Well Volume (gallons): 22

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge							3.51	44	10
1056			22	950.3	21.6	7.87	2.77	89	11
			44	946.8	21.9	7.68	2.74	94	21
	1118		66	947.2	22.0	7.59	2.82	95	13

Static at Time Sampled	Total Gallons Purged	Sample Time
40.11	66	1124

Comments:

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Vidvers

Site: 4186 Project No.: 18979.0035.1721 Date: 6/25/12

Well No. U-3 Purge Method: HB

Depth to Water (feet): 32.69 Depth to Product (feet): —

Total Depth (feet) 33.63 LPH & Water Recovered (gallons): —

Water Column (feet): 0.94 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 32.88 1 Well Volume (gallons): 0.25

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge							1.09	-60	500
			0.25						
			0.50						
			0.75						

Static at Time Sampled	Total Gallons Purged	Sample Time
33.50	—	N/S

Comments: Well went dry while collecting pre-purge readings. Did not recover. Insufficient water, no sample taken. Static measured 6/26/12

Well No. U-6 Purge Method: HB

Depth to Water (feet): 39.18 Depth to Product (feet): —

Total Depth (feet) 41.43 LPH & Water Recovered (gallons): —

Water Column (feet): 2.25 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 39.63 1 Well Volume (gallons): 0.5

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge							0.94	-90	210
1212			0.5	1592	21.9	6.93	0.83	-90	Er 2
			1	1602	21.1	6.93	0.63	-92	Er 2
	1221		1.5	1608	21.0	6.92	0.61	-93	Er 2

Static at Time Sampled	Total Gallons Purged	Sample Time
39.36	1.5	0926

Comments: Dry at 1.5 gals. Sampled 6/26/12

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Viders

Site: 4186 Project No.: 189791.0035.1721 Date: 6/26/12

Well No. U-9 Purge Method: Sub

Depth to Water (feet): 37.20 Depth to Product (feet): —

Total Depth (feet) 44.83 LPH & Water Recovered (gallons): —

Water Column (feet): 7.63 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 38.73 1 Well Volume (gallons): 2

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge							2.81	-71	650
0728			2	1074	17.6	6.87	1.12	-91	420
			4	1102	18.3	6.81	0.92	-92	860
	0737		6	1106	18.6	6.79	0.79	-100	Ev2

Static at Time Sampled	Total Gallons Purged	Sample Time
38.36	6	0939

Comments: Dry at 6 gals.

Well No. U-8 Purge Method: Sub

Depth to Water (feet): 36.22 Depth to Product (feet): —

Total Depth (feet) 44.76 LPH & Water Recovered (gallons): —

Water Column (feet): 8.54 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 37.93 1 Well Volume (gallons): 2

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge							0.81	-83	444
0746			2	961.7	19.9	6.80	0.71	-81	960
			4	887.4	19.9	6.84	0.64	-84	Ev2
	0752		6	920.9	20.2	6.82	0.60	-86	Ev2

Static at Time Sampled	Total Gallons Purged	Sample Time
36.41	6	1058

Comments: Dry at 6 gals.

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Vickers

Site: 4186 Project No.: 189710035.1721 Date: 6/26/12

Well No. V-10 Purge Method: Sub

Depth to Water (feet): 39.96 Depth to Product (feet): —

Total Depth (feet) 47.02 LPH & Water Recovered (gallons): —

Water Column (feet): 7.06 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 41.37 1 Well Volume (gallons): 2

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge							0.92	-85	105
0828			2	1119	18.3	6.99	0.78	-95	495
			4	1131	20.2	6.96	0.76	-101	686
	0834		6	1130	20.5	6.94	0.70	-105	Er2

Static at Time Sampled	Total Gallons Purged	Sample Time
40.46	6	1038

Comments: Pump depth - 46ft.

Well No. Purge Method:

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

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

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

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

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

Static at Time Sampled	Total Gallons Purged	Sample Time

Comments:

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Vickers

Site: 4186 Project No.: 18971.0035.1721 Date: 6/26/12

Well No. V-4 Purge Method: HB

Depth to Water (feet): 40.57 Depth to Product (feet): —

Total Depth (feet) 44.84 LPH & Water Recovered (gallons): —

Water Column (feet): 4.27 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 41.42 1 Well Volume (gallons): 1

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge							1.56	156	750
0534			1	1066	19.8	6.87	1.31	152	Er 2
			2	1064	19.9	6.96	1.41	150	Er 2
	0544		3	1083	19.8	6.99	1.46	149	Er 2

Static at Time Sampled	Total Gallons Purged	Sample Time
41.42	3	0556

Comments:

Well No. V-5 Purge Method: HB

Depth to Water (feet): 40.82 Depth to Product (feet): —

Total Depth (feet) 46.98 LPH & Water Recovered (gallons): —

Water Column (feet): 6.16 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 42.05 1 Well Volume (gallons): 1

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge							1.45	144	37
0608			1	982.9	19.6	7.08	1.20	146	950
			2	983.7	19.9	7.05	0.93	146	Er 2
	0616		3	983.5	20.0	7.05	0.86	146	Er 2

Static at Time Sampled	Total Gallons Purged	Sample Time
41.73	3	0623

Comments:

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: A. Vidivers

Site: 418 Project No.: 189791.0035.1721 Date: 6/26/12

Well No. V-7 Purge Method: HB

Depth to Water (feet): 39.10 Depth to Product (feet): —

Total Depth (feet) 44.40 LPH & Water Recovered (gallons): —

Water Column (feet): 5.30 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 40.16 1 Well Volume (gallons): 1

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge							1.31	-92	18
0644			1	1092	18.9	7.00	1.02	-100	650
			2	1089	19.5	6.95	0.88	-102	Er 2
	0654		3	1092	19.5	6.95	0.77	-102	Er 2

Static at Time Sampled	Total Gallons Purged	Sample Time
40.91	3	1007

Comments: Dry at 3 gals. Did not recover in 2 hours.

Well No. V-11 Purge Method: HB

Depth to Water (feet): 36.44 Depth to Product (feet): —

Total Depth (feet) 44.78 LPH & Water Recovered (gallons): —

Water Column (feet): 8.34 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 38.11 1 Well Volume (gallons): 2

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity
Pre-Purge							1.12	-94	45
0659	0707		2	1773	19.4	6.72	0.81	-95	Er 2
			4						
			6						

Static at Time Sampled	Total Gallons Purged	Sample Time
36.90	2	1019

Comments: Dry at 2 gals. Did not recover in 45 minutes.

TRC

STATEMENT OF NON-COMPLETION OF JOB

DATE OF EVENT: 6/25-6/26 SITE ID: 4186

TECH: A. Widners CALLED SUPERVISOR: (YES) / NO

CALLED PM: (YES) / NO NAME OF PM: T. Johnson

WELL ID: U-3, U-1

Wells went dry while collecting pre-purge readings. Did not recover in 2 hours. (6-25-12). Returned to site the next day, neither well recharged. Insufficient water. No samples were collected.

WELL ID: U-2

Well went dry while sampling. Returned to well before leaving the site to collect samples for Nitrate, Sulfate, Dissolved Ferrous Iron. ((@ 1111 6/26). Only able to fill 1/2 of 1 qt. unpreserved plastic.

WELL ID:

TRC

WELL BOX CONDITION REPORT

SITE NO. 4186

ADDRESS 1771 First st. Livermore, CA

DATE 6/25/12

PERFOMED BY: A. Vidvans

PAGE 1 OF 1

Well Name	Current Well Box Size	# of Ears	# of Stripped Ears	# of Broken Ears	# of Broken Bolts	# of Missing Bolts	Seal Damaged	Missing Lid	Broken Lid	Well Box is Exposed	Well Box is Below Grade	Unable to Access	Unable to Locate	Foundation Damaged	Paved Over	Street Well	Saw Cut Needed	System Well	USA Marked Well	Comments
V-13	12"	2																		OK
V-14	12"	2																		ok
V-2	8"	2																		ok
V-15	12"	2																		ok
V-1	12"	2																		ok
V-12	12"	2																		ok
V-4	12"	2														X				ok
V-5	12"	2														X				ok
V-7	8"	2																		ok
V-3	8"	2																		ok
V-11	12"	2																		ok
V-9	12"	2																		ok
V-6	8"	2		1																
V-8	12"	2																		ok
V-10	12"	2																		ok

TRC

CHAIN OF CUSTODY FORM

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

COC 1 of 1

Union Oil Site ID: 4196	Union Oil Consultant: Arcadis
Site Global ID: T0600101777	Consultant Contact: Kathy Brandt
Site Address: 1771 ~~N Livermore St.~~ First St. Livermore CA	Consultant Phone No.: 510 596 9675
	Sampling Company: TRC
Union Oil PM: Roya Kambin	Sampled By (PRINT): Andrew Vidovic
Union Oil PM Phone No.: 925 790 6270	
Charge Code: NWRTB- 0 351721 -0- LAB	Sampler Signature: [signature]
This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.	**BC Laboratories, Inc.** **Project Manager: Molly Meyers** 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911

ANALYSES REQUIRED

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

Special Instructions

SAMPLE ID

Field Point Name	Matrix	DTW	Date (yymmdd)	Sample Time	# of Containers	~~TPH - Diesel by EPA 8015~~ Total CAM 17 Metals	TPH - G by GC/MS	BTEX/MTBE/OXYS by EPA 8260B	Ethanol by EPA 8260B, EDB/EDC 8260B	EPA 8260B Full List with OXYS	Sulfate, Nitrate, Methane by EPA ...	Dissolved Ferrous Iron by 3500FE-B	Hexavalent Chromium by ..., TDS	Dissolved CAM 17 Metals	Chloride, Fluoride	Dissolved Metals (Ca, Na, Mg, K, Mn)	Notes / Comments
U-12	W-S-A		120625	0943	7		X	X	X		X	X					
U-13	W-S-A		↓	0926	9	X	↓	↓	↓		↓	↓	X	X	X	X	
U-14	W-S-A		↓	1026	7		↓	↓	↓		↓	↓					
U-15	W-S-A		↓	1124	9	X	↓	↓	↓		↓	↓	X	X	X	X	
	W-S-A																
	W-S-A																
	W-S-A																
	W-S-A																
	W-S-A																
	W-S-A																
	W-S-A																
	W-S-A																

Relinquished By	Company	Date / Time:	Relinquished By	Company	Date / Time :	Relinquished By	Company	Date / Time:
[signature]	TRC	6/25/12 1100						
Received By	**Company**	**Date / Time:**	**Received By**	**Company**	**Date / Time :**	**Received By**	**Company**	**Date / Time:**
[signature]	BC Lab	6/25/12 1100						

CHAIN OF CUSTODY FORM

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

COC _____ of _____

Union Oil Site ID: 4156	Union Oil Consultant: Arcadis
Site Global ID: T0600101777	Consultant Contact: Kathy Sheehy
Site Address: 1771 First St. Livermore CA	Consultant Phone No.: 510 596 9675
	Sampling Company: TRC
Union Oil PM: Sara Hamilton	Sampled By (PRINT): Joshua Waters
Union Oil PM Phone No.: 925 791 5276	
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. **Project Manager: Molly Meyers** 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911

SAMPLE ID						ANALYSES REQUIRED											
Field Point Name	Matrix	DTW	Date (yymmdd)	Sample Time	# of Containers	TPH - Diesel by EPA 8015	TPH - G by GC/MS	BTEX/MTBE/OXYS by EPA 8260B	Ethanol by EPA 8260B	EPA 8260B Full List with OXYS	Cobalt, Nickel, Vanadium by EPA 6010B	Perchlorate by EPA 6850	Dissolved CAM 17 Metals	Cobalt, Fluoride	Dissolved Metals (Ca, Na, Mg, K, Mn)	Turnaround Time (TAT): Standard ☒ 24 Hours ☐ 48 Hours ☐ 72 Hours ☐ Special Instructions	Notes / Comments
U-2	W-S-A		120626	0852	7	X	X	X	X			X	X	X	X	X	
U-2	W-S-A			1111	1						X						
U-4	W-S-A			0956	9	X	X	X	X		X	X	X	X	X	X	
U-5	W-S-A			1013	7		X	X	X		X	X					
U-6	W-S-A			0920	7		X	X	X		X	X					
U-7	W-S-A			1007	7		X	X	X		X	X					
U-8	W-S-A			1056	9	X	X	X	X		X	X	X	X	X	X	
U-9	W-S-A			0939	9	X	X	X	X		X	X	X	X	X	X	
U-10	W-S-A			1038	9	X	X	X	X		X	X	X	X	X	X	
U-11	W-S-A		↓	1019	9	X	X	X	X		X	X	X	X	X	X	
	W-S-A																
	W-S-A																

Relinquished By	Company	Date / Time:
	TRC	120626 1111
Received By	Company	Date / Time:
Joshua Waters	TRC	120626 1111

Relinquished By	Company	Date / Time :
Received By	Company	Date / Time :

Relinquished By	Company	Date / Time:
Received By	Company	Date / Time:

TRC SOLUTIONS

TECHNICAL SERVICES REQUEST FORM

21-May-12

Site ID:	4186	**Project No.:**	189791.0035.1721 / 00TA01
Address	1771 First Street	**Client:**	Roya Kambin
City:	Livermore	**Contact #:**	925-790-6270
Cross Street:	South N St.	**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:	☑	Semi Q2/Q4	
Purge/Sampling:	☑	Semi Q2/Q4	
No Purge/Sample	☐		

RELATED ACTIVITIES		**Note**
Drums:	☑	
Other Activities:	☐	
Traffic Control:	☑	City of Livermore

permit needed

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

21-May-12

Site ID:	4186	**Project No.:**	189791.0035.1721 / 00TA01
Address	1771 First Street	**Client:**	Roya Kambin
City:	Livermore	**Contact #:**	925-790-6270
Cross Street:	South N St.	**PM:**	Kathy Brandt Arcadis
		PM Contact #:	510-596-9675

LAB INFORMATION:

Global ID: T0600101777

Lab WO: 351721

Lab Used: BC Labs

Lab Notes: Lab Analyses for all wells:
TPH-G by GC/MS, 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]

~~No Sulf., Nitrate, Fer. Iron for U-2~~

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

21-May-12

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

			Gauging				Sampling				Field Measurements			
Well IDs	Benz.	MTBE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Pre-Purge	Post-Purge	Type	Comments
U-2	0	0	☐	☑	☐	☑	☐	☑	☐	☑	☑	☑	D.O., ORP, Turbidity	2" casing
U-15	0	0	☐	☑	☐	☑	☐	☑	☐	☑	☑	☑	D.O., ORP, Turbidity	
U-14	0	0	☐	☑	☐	☑	☐	☑	☐	☑	☑	☑	D.O., ORP, Turbidity	
U-13	0	0	☐	☑	☐	☑	☐	☑	☐	☑	☑	☑	D.O., ORP, Turbidity	
U-12	0	0	☐	☑	☐	☑	☐	☑	☐	☑	☑	☑	D.O., ORP, Turbidity	
U-1	0	0	☐	☑	☐	☑	☐	☑	☐	☑	☑	☑	D.O., ORP, Turbidity	2" casing
U-4	0	6	☐	☑	☐	☑	☐	☑	☐	☑	☑	☑	D.O., ORP, Turbidity	2" casing
U-5	0	40	☐	☑	☐	☑	☐	☑	☐	☑	☑	☑	D.O., ORP, Turbidity	2" casing
U-7	4.6	33	☐	☑	☐	☑	☐	☑	☐	☑	☑	☑	D.O., ORP, Turbidity	2" casing
U-3	4.9	39	☐	☑	☐	☑	☐	☑	☐	☑	☑	☑	D.O., ORP, Turbidity	2" casing
U-11	8.3	3600	☐	☑	☐	☑	☐	☑	☐	☑	☑	☑	D.O., ORP, Turbidity	
U-9	11	65	☐	☑	☐	☑	☐	☑	☐	☑	☑	☑	D.O., ORP, Turbidity	
U-6	22	8.3	☐	☑	☐	☑	☐	☑	☐	☑	☑	☑	D.O., ORP, Turbidity	2" casing
U-8	27	1.3	☐	☑	☐	☑	☐	☑	☐	☑	☑	☑	D.O., ORP, Turbidity	
U-10	420	350	☐	☑	☐	☑	☐	☑	☐	☑	☑	☑	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)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
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) (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													
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) (µg/l)	Lead (dissolved) ()	Lead (total) (µg/l)	Magnesium (dissolved) (mg/l)	Manganese (dissolved) (µg/l)	Mercury (total) (µg/l)	Mercury (dissolved) (µg/l)	Molyb-denum (total) (µg/l)	Molyb-denum (dissolved) (µg/l)	Nickel (total) (µg/l)	Nickel (dissolved) (µg/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) (µg/l)	Selenium (dissolved) (µg/l)	Silver (total) (µg/l)	Silver (dissolved) (µg/l)	Sodium ()	Thallium (total) (µg/l)	Thallium (dissolved) (µg/l)	Vanadium (total) (µg/l)	Vanadium (dissolved) (µg/l)	Zinc (dissolved) (µg/l)	Zinc (total) (µg/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	Fluoride (mg/l)	Nitrogen as Nitrate (mg/l)	Sulfate (mg/l)	TDS (mg/l)	Field Con-ductivity ()	Field pH ()	Field Temp. ()	Post-purge Dissolved Oxygen ()	Post-purge ORP ()	Comments
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
HISTORICT 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 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)		Comments
U-1															
7/13/1998	478.27	23.28	0	454.99	--	ND	--	ND	ND	ND	ND	ND	--	--	
10/7/1998	478.27	26.43	0	451.84	-3.15	ND	--	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	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
HISTORICT 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 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)		Comments
3/26/2007	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	--	--	--	--	--	--	--	--	--	ıugh water to
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
HISTORICT 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 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)		Comments
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
HISTORICT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

December 20, 2010
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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)		Comments
7/17/2000	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
HISTORICT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

December 20, 2010
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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)		Comments
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	ND	5.3	--	
10/8/2001	476.93	44.24	0	432.69	-6.28	--	--	--	--	--	--	--	--	--	ɔugh water to
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	4.4	--	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
HISTORICT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)		Comments
12/3/2008	478.95	--	--	--	--	--	--	--	--	--	--	--	--	--	Dry
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	--	--	--	--	--	--	--	--	--	--	--	--	--	‹ parked over
12/30/2002	476.51	--	--	--	--	--	--	--	--	--	--	--	--	--	parked over
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	--	--	--	--	--	--	--	--	--	--	--	--	--	parked over
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	--	

Table 2
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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)		Comments
6/12/2008	476.51	39.90	0	436.61	-5.62	--	55	ND<0.50	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
HISTORICT 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 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)		Comments
9/3/2008	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	--	--	--	--	--	--	--	--	--	ıugh water to
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
HISTORICT 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 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)		Comments
12/3/2008	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
HISTORICT 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 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)		Comments
12/3/2008	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 (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													
10/2/2000	ND	--	--	--	--	--	--	--	--	--	--	--	
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	
7/1/2003	--	ND<500000	--	--	--	--	--	--	--	--	--	--	
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	--	--	--	--	--	
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	--	--	--	--	--	
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	140	ND<50	3500	
U-2													
10/2/2000	ND	--	--	--	--	--	--	--	--	--	--	--	
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	
7/1/2003	--	ND<500000	--	--	--	--	--	--	--	--	--	--	
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 (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
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<14000000	ND<290	ND<290	ND<290	ND<290	ND<290	--	--	--	--	--	
1/3/2002	17000	D<50000000	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	--	--	
4/5/2002	66000	D<25000000	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	--	--	
7/2/2002	47000	D<13000000	ND<250	ND<250	ND<500	ND<250	ND<250	--	--	--	--	--	
10/1/2002	ND<50000	D<25000000	ND<1000	ND<1000	ND<1000	ND<1000	ND<1000	--	--	--	--	--	
12/30/2002	23000	D<10000000	ND<400	ND<400	ND<400	ND<400	ND<400	--	--	--	--	--	
5/2/2003	25000	D<50000000	ND<200	ND<200	ND<200	ND<200	ND<200	--	--	--	--	--	
7/1/2003	32000	D<10000000	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<100000	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 (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
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<500000	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<500000	--	--	--	--	--	--	--	--	--	--	
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

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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
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<100000(	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	--	--	--	--	--	
1/3/2002	ND<20	ND<500000	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<500000(	ND<10	ND<10	ND<10	ND<10	ND<10	--	--	--	--	--	

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
10/1/2002	--	--	--	--	--	--	--	--	--	--	--	--	
12/30/2002	--	--	--	--	--	--	--	--	--	--	--	--	
5/2/2003	--	--	--	--	--	--	--	--	--	--	--	--	
7/1/2003	--	ND<500000	--	--	--	--	--	--	--	--	--	--	
10/3/2003	--	ND<100000	--	--	--	--	--	--	--	--	--	--	
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<500000	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<500000	--	--	--	--	--	--	--	--	--	--	
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

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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
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<100	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

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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) (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
6/27/2007	--	--	--	--	--	--	--	--	--	--	--	--	
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) (µg/l)	Lead (dissolved) ()	Lead (total) (µg/l)	Magnesium (dissolved) (mg/l)	Manganese (dissolved) (µg/l)	Mercury (total) (µg/l)	Mercury (dissolved) (µg/l)	Molyb-denum (total) (µg/l)	Molyb-denum (dissolved) (µg/l)	Nickel (total) (µg/l)	Nickel (dissolved) (µg/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) (µg/l)	Lead (dissolved) ()	Lead (total) (µg/l)	Magnesium (dissolved) (mg/l)	Manganese (dissolved) (µg/l)	Mercury (total) (µg/l)	Mercury (dissolved) (µg/l)	Molyb-denum (total) (µg/l)	Molyb-denum (dissolved) (µg/l)	Nickel (total) (µg/l)	Nickel (dissolved) (µg/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) (µg/l)	Lead (dissolved) ()	Lead (total) (µg/l)	Magnesium (dissolved) (mg/l)	Manganese (dissolved) (µg/l)	Mercury (total) (µg/l)	Mercury (dissolved) (µg/l)	Molyb-denum (total) (µg/l)	Molyb-denum (dissolved) (µg/l)	Nickel (total) (µg/l)	Nickel (dissolved) (µg/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) (µg/l)	Lead (dissolved) ()	Lead (total) (µg/l)	Magnesium (dissolved) (mg/l)	Manganese (dissolved) (µg/l)	Mercury (total) (µg/l)	Mercury (dissolved) (µg/l)	Molyb-denum (total) (µg/l)	Molyb-denum (dissolved) (µg/l)	Nickel (total) (µg/l)	Nickel (dissolved) (µg/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	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	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	770	ND<10	2.8	
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													
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) (µg/l)	Lead (dissolved) ()	Lead (total) (µg/l)	Magnesium (dissolved) (mg/l)	Manganese (dissolved) (µg/l)	Mercury (total) (µg/l)	Mercury (dissolved) (µg/l)	Molyb-denum (total) (µg/l)	Molyb-denum (dissolved) (µg/l)	Nickel (total) (µg/l)	Nickel (dissolved) (µg/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) (µg/l)	Lead (dissolved) ()	Lead (total) (µg/l)	Magnesium (dissolved) (mg/l)	Manganese (dissolved) (µg/l)	Mercury (total) (µg/l)	Mercury (dissolved) (µg/l)	Molyb-denum (total) (µg/l)	Molyb-denum (dissolved) (µg/l)	Nickel (total) (µg/l)	Nickel (dissolved) (µg/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) (µg/l)	Lead (dissolved) ()	Lead (total) (µg/l)	Magnesium (dissolved) (mg/l)	Manganese (dissolved) (µg/l)	Mercury (total) (µg/l)	Mercury (dissolved) (µg/l)	Molyb-denum (total) (µg/l)	Molyb-denum (dissolved) (µg/l)	Nickel (total) (µg/l)	Nickel (dissolved) (µg/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) (µg/l)	Selenium (dissolved) (µg/l)	Silver (total) (µg/l)	Silver (dissolved) (µg/l)	Sodium ()	Thallium (total) (µg/l)	Thallium (dissolved) (µg/l)	Vanadium (total) (µg/l)	Vanadium (dissolved) (µg/l)	Zinc (dissolved) (µg/l)	Zinc (total) (µg/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) (µg/l)	Selenium (dissolved) (µg/l)	Silver (total) (µg/l)	Silver (dissolved) (µg/l)	Sodium ()	Thallium (total) (µg/l)	Thallium (dissolved) (µg/l)	Vanadium (total) (µg/l)	Vanadium (dissolved) (µg/l)	Zinc (dissolved) (µg/l)	Zinc (total) (µg/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) (µg/l)	Selenium (dissolved) (µg/l)	Silver (total) (µg/l)	Silver (dissolved) (µg/l)	Sodium ()	Thallium (total) (µg/l)	Thallium (dissolved) (µg/l)	Vanadium (total) (µg/l)	Vanadium (dissolved) (µg/l)	Zinc (dissolved) (µg/l)	Zinc (total) (µg/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) (µg/l)	Selenium (dissolved) (µg/l)	Silver (total) (µg/l)	Silver (dissolved) (µg/l)	Sodium ()	Thallium (total) (µg/l)	Thallium (dissolved) (µg/l)	Vanadium (total) (µg/l)	Vanadium (dissolved) (µg/l)	Zinc (dissolved) (µg/l)	Zinc (total) (µg/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) (µg/l)	Selenium (dissolved) (µg/l)	Silver (total) (µg/l)	Silver (dissolved) (µg/l)	Sodium ()	Thallium (total) (µg/l)	Thallium (dissolved) (µg/l)	Vanadium (total) (µg/l)	Vanadium (dissolved) (µg/l)	Zinc (dissolved) (µg/l)	Zinc (total) (µg/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) (µg/l)	Selenium (dissolved) (µg/l)	Silver (total) (µg/l)	Silver (dissolved) (µg/l)	Sodium ()	Thallium (total) (µg/l)	Thallium (dissolved) (µg/l)	Vanadium (total) (µg/l)	Vanadium (dissolved) (µg/l)	Zinc (dissolved) (µg/l)	Zinc (total) (µg/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) (µg/l)	Selenium (dissolved) (µg/l)	Silver (total) (µg/l)	Silver (dissolved) (µg/l)	Sodium ()	Thallium (total) (µg/l)	Thallium (dissolved) (µg/l)	Vanadium (total) (µg/l)	Vanadium (dissolved) (µg/l)	Zinc (dissolved) (µg/l)	Zinc (total) (µg/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	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	Fluoride (mg/l)	Nitrogen as Nitrate (mg/l)	Sulfate (mg/l)	TDS (mg/l)	Field Con-ductivity ()	Field pH ()	Field Temp. ()	Post-purge Dissolved Oxygen ()	Pre-purge Dissolved Oxygen ()	Pre-purge ORP ()	Post-purge ORP ()	Comments
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	Fluoride (mg/l)	Nitrogen as Nitrate (mg/l)	Sulfate (mg/l)	TDS (mg/l)	Field Con-ductivity ()	Field pH ()	Field Temp. ()	Post-purge Dissolved Oxygen ()	Pre-purge Dissolved Oxygen ()	Pre-purge ORP ()	Post-purge ORP ()	Comments
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	Fluoride (mg/l)	Nitrogen as Nitrate (mg/l)	Sulfate (mg/l)	TDS (mg/l)	Field Con-ductivity ()	Field pH ()	Field Temp. ()	Post-purge Dissolved Oxygen ()	Pre-purge Dissolved Oxygen ()	Pre-purge ORP ()	Post-purge ORP ()	Comments
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	Fluoride (mg/l)	Nitrogen as Nitrate (mg/l)	Sulfate (mg/l)	TDS (mg/l)	Field Con-ductivity ()	Field pH ()	Field Temp. ()	Post-purge Dissolved Oxygen ()	Pre-purge Dissolved Oxygen ()	Pre-purge ORP ()	Post-purge ORP ()	Comments
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	Fluoride (mg/l)	Nitrogen as Nitrate (mg/l)	Sulfate (mg/l)	TDS (mg/l)	Field Con-ductivity ()	Field pH ()	Field Temp. ()	Post-purge Dissolved Oxygen ()	Pre-purge Dissolved Oxygen ()	Pre-purge ORP ()	Post-purge ORP ()	Comments
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 Con-ductivity ()	Field pH ()	Field Temp. ()	Post-purge Dissolved Oxygen ()	Pre-purge Dissolved Oxygen ()	Pre-purge ORP ()	Post-purge ORP ()	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	Fluoride (mg/l)	Nitrogen as Nitrate (mg/l)	Sulfate (mg/l)	TDS (mg/l)	Field Con-ductivity ()	Field pH ()	Field Temp. ()	Post-purge Dissolved Oxygen ()	Pre-purge Dissolved Oxygen ()	Pre-purge ORP ()	Post-purge ORP ()	Comments
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

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 07/10/2012

Kathy Brandt

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Project:	4186
BC Work Order:	1211580
Invoice ID:	B125490

Enclosed are the results of analyses for samples received by the laboratory on 6/26/2012. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Molly Meyers

Contact Person: Molly Meyers
Client Service Rep

Authorized Signature

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12-11580

CHAIN OF CUSTODY FORM

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

COC 1 of 1

Union Oil Site ID: 4186	Union Oil Consultant: Arcadis
Site Global ID: T0600101777	Consultant Contact: Kathy Brandt
Site Address: 1771 First St. Livermore, CA	Consultant Phone No.: 510 596 9675
Union Oil PM: Roya Kamtin	Sampling Company: TRC
Union Oil PM Phone No.: 925 790 6270	Sampled By (PRINT): Andrew Vidaurre
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. Project Manager: Molly Meyers 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911

ANALYSES REQUIRED

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

Special Instructions

SAMPLE ID: Field Point Name	Matrix	DTW	Date (yymmdd)	Sample Time	# of Containers	Total CAM 17 Metals	TPH - G by GC/MS	BTEX/MTBE/OXYS by EPA 8260B	Ethanol by EPA 8260B	EPA 8260B Full List with OXYS	Sulfate, Nitrate, Dissolved Ferrous Iron by 350EF+B	Methane by EPA 8015B	Hexavalent Chromium by 6010, TDS by 160.1	Dissolved CAM 17 Metals	Chloride, Fluoride	Dissolved Metals (Ca, Na, Mg, K, Mn)	Notes / Comments
U-2	W-S-A	-1	120626	0802	7	X	X	X	X			X	X	X	X	X	
U-2	W-S-A	-2		1111	1						X						
U-4	W-S-A	-3		0556	9	X	X	X	X		X	X	X	X	X	X	
U-5	W-S-A	-4		0623	7		X	X	X		X	X					
U-6	W-S-A	-5		0926	7		X	X	X		X	X					
U-7	W-S-A	-6		1007	7		X	X	X		X	X					
U-8	W-S-A	-7		1058	9	X	X	X	X		X	X	X	X	X	X	
U-9	W-S-A	-8		0939	9	X	X	X	X		X	X	X	X	X	X	
U-10	W-S-A	-9		1038	9	X	X	X	X		X	X	X	X	X	X	
U-11	W-S-A	-10		1019	9	X	X	X	X		X	X	X	X	X	X	
	W-S-A																
	W-S-A																

Relinquished By	Company	Date / Time:	Relinquished By	Company	Date / Time:	Relinquished By	Company	Date / Time:
	TRC	6/26/12 1415	Mary Bogan	BC Lab	6/26/12 1830		BC Labs	6-26-12 23:50
Received By	**Company**	**Date / Time:**	**Received By**	**Company**	**Date / Time:**	**Received By**	**Company**	**Date / Time:**
Mary Bogan	BC Lab	6/26/12 1415		BC Labs	6-26-12 20:30		BC Lab	10-26-12 2350

4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com

Chain of Custody and Cooler Receipt Form for 1211580 Page 2 of 3

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 1 Of 2

Submission #: 12-11580

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

SHIPPING CONTAINER
Ice Chest ☒ None ☐
Box ☐ Other ☐ (Specify)_____

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

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

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

COC Received ☒ YES ☐ NO

Emissivity: 0.98 Container: pipe Thermometer ID: 177

Temperature: A 0.6 °C / C 0.7 °C

Date/Time 10-26-12

Analyst Init JDW 2350

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL		A								
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS							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										
40ml VOA VIAL	A3		A3	A3	A3	A3	A3	A3	A3	A3
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL-504 Methane	B2		B2	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										

CHK BY KG

DISTRIBUTION ☒ SUB-OUT ☐

SHORT HOLDING TIME
Cr⁶ NO₂ NO₃ OP SS
DO Cl₂ BOD MBAS COT

Comments: -2 was received ½ full.
Sample Numbering Completed By: JDW Date/Time: 10/27/12 0015
A = Actual / C = Corrected

[H:\DOCS\WP80\LAB_DOCS\FORMS\SAMREC2.WPD]

Chain of Custody and Cooler Receipt Form for 1211580 Page 3 of 3

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

Submission #: 12-11580

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

SHIPPING CONTAINER
Ice Chest ☒ None ☐
Box ☐ Other ☐ (Specify)_____

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

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

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

COC Received ☒ YES ☐ NO

Emissivity: 0.98 Container: Ope Thermometer ID: 177

Temperature: A 2.4 °C / C 2.5 °C

Date/Time 6-21-12

Analyst Init JDW 2350

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL	C		CD	C	C	C	CD	CD	CD	CD
PT PE UNPRESERVED			E	D	D	D	E	E	E	E
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS	D		F				F			F
PT CYANIDE							JDW 6-27-12	F		
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JDW Date/Time: 6/27/12 0015
A = Actual / C = Corrected

[H:\DOCS\WP80\LAB_DOCS\FORMS\SAMREC2.WPD]

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1211580-01	**COC Number:**	---	**Receive Date:** 06/26/2012 23:50
	Project Number:	4186	**Sampling Date:** 06/26/2012 08:02
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	U-2-W-120626	**Lab Matrix:** Water
	Sampled By:	TRCI	**Sample Type:** Groundwater
			Metal Analysis: 2-Lab Filtered and Acidified
			Delivery Work Order:
			Global ID: T0600101777
			Location ID (FieldPoint): U-2
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:
1211580-02	**COC Number:**	---	**Receive Date:** 06/26/2012 23:50
	Project Number:	4186	**Sampling Date:** 06/26/2012 11:11
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	U-2-W-120626	**Lab Matrix:** Water
	Sampled By:	TRCI	**Sample Type:** Groundwater
			Delivery Work Order:
			Global ID: T0600101777
			Location ID (FieldPoint): U-2
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:
1211580-03	**COC Number:**	---	**Receive Date:** 06/26/2012 23:50
	Project Number:	4186	**Sampling Date:** 06/26/2012 05:56
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	U-4-W-120626	**Lab Matrix:** Water
	Sampled By:	TRCI	**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: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1211580-04	**COC Number:**	---	**Receive Date:**	06/26/2012 23:50
	Project Number:	4186	**Sampling Date:**	06/26/2012 06:23
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	U-5-W-120626	**Lab Matrix:**	Water
	Sampled By:	TRCI	**Sample Type:**	Groundwater
	Delivery Work Order:			
	Global ID: T0600101777			
	Location ID (FieldPoint): U-5			
	Matrix: W			
	Sample QC Type (SACode): CS			
	Cooler ID:			
1211580-05	**COC Number:**	---	**Receive Date:**	06/26/2012 23:50
	Project Number:	4186	**Sampling Date:**	06/26/2012 09:26
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	U-6-W-120626	**Lab Matrix:**	Water
	Sampled By:	TRCI	**Sample Type:**	Groundwater
	Delivery Work Order:			
	Global ID: T0600101777			
	Location ID (FieldPoint): U-6			
	Matrix: W			
	Sample QC Type (SACode): CS			
	Cooler ID:			
1211580-06	**COC Number:**	---	**Receive Date:**	06/26/2012 23:50
	Project Number:	4186	**Sampling Date:**	06/26/2012 10:07
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	U-7-W-120626	**Lab Matrix:**	Water
	Sampled By:	TRCI	**Sample Type:**	Groundwater
	Delivery Work Order:			
	Global ID: T0600101777			
	Location ID (FieldPoint): U-7			
	Matrix: W			
	Sample QC Type (SACode): CS			
	Cooler ID:			

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1211580-07	**COC Number:**	---	**Receive Date:** 06/26/2012 23:50
	Project Number:	4186	**Sampling Date:** 06/26/2012 10:58
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	U-8-W-120626	**Lab Matrix:** Water
	Sampled By:	TRCI	**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:
1211580-08	**COC Number:**	---	**Receive Date:** 06/26/2012 23:50
	Project Number:	4186	**Sampling Date:** 06/26/2012 09:39
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	U-9-W-120626	**Lab Matrix:** Water
	Sampled By:	TRCI	**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:
1211580-09	**COC Number:**	---	**Receive Date:** 06/26/2012 23:50
	Project Number:	4186	**Sampling Date:** 06/26/2012 10:38
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	U-10-W-120626	**Lab Matrix:** Water
	Sampled By:	TRCI	**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: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1211580-10	**COC Number:**	---	**Receive Date:**	06/26/2012 23:50
	Project Number:	4186	**Sampling Date:**	06/26/2012 10:19
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	U-11-W-120626	**Lab Matrix:**	Water
	Sampled By:	TRCI	**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:

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1211580-01 | **Client Sample Name:** 4186, U-2-W-120626, 6/26/2012 8:02:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	110	%	75 - 125 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	100	%	80 - 120 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	06/29/12	06/30/12 03:07	JMC	MS-V12	1	BVG0012

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID: 1211580-01 | **Client Sample Name:** 4186, U-2-W-120626, 6/26/2012 8:02:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	**0.0010**	**mg/L**	**0.0010**	**RSK-175M**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	07/03/12	07/03/12 10:36	JMC	GC-V1	1	BVG0079

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID: 1211580-01 | **Client Sample Name:** 4186, U-2-W-120626, 6/26/2012 8:02:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**46**	**mg/L**	**0.10**	**EPA-6010B**	ND		1
Dissolved Magnesium	**68**	**mg/L**	**0.050**	**EPA-6010B**	ND		1
Dissolved Sodium	**53**	**mg/L**	**0.50**	**EPA-6010B**	ND		1
Dissolved Potassium	**2.1**	**mg/L**	**1.0**	**EPA-6010B**	ND		1
Chloride	**27**	**mg/L**	**0.50**	**EPA-300.0**	ND		2
Fluoride	**0.084**	**mg/L**	**0.050**	**EPA-300.0**	ND		2
Total Dissolved Solids @ 180 C	**540**	**mg/L**	**33**	**EPA-160.1**	ND		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/28/12	06/29/12 08:32	ARD	PE-OP1	1	BVF1900
2	EPA-300.0	06/26/12	06/27/12 04:48	LD1	IC5	1	BVF1793
3	EPA-160.1	06/27/12	06/27/12 13:15	NW1	MANUAL	3.333	BVF1754

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID: 1211580-01 | **Client Sample Name:** 4186, U-2-W-120626, 6/26/2012 8:02:00AM

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	**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	**480**	**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	**75**	**ug/L**	**10**	**EPA-6010B**	ND		4
Total Cobalt	ND	ug/L	50	EPA-6010B	ND		4
Total Copper	**38**	**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	**180**	**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

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID: 1211580-01 | **Client Sample Name:** 4186, U-2-W-120626, 6/26/2012 8:02:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Total Thallium	ND	ug/L	100	EPA-6010B	ND		4
Total Vanadium	**36**	**ug/L**	**10**	**EPA-6010B**	ND		4
Total Zinc	**81**	**ug/L**	**50**	**EPA-6010B**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/28/12	06/29/12 08:32	ARD	PE-OP1	1	BVF1900
2	EPA-7196	06/26/12	06/27/12 00:52	AKB	KONE-1	1	BVG0004
3	EPA-7470A	07/06/12	07/09/12 09:47	MEV	CETAC1	1	BVG0344
4	EPA-6010B	07/02/12	07/03/12 11:05	ARD	PE-OP1	1	BVG0043
5	EPA-7470A	07/05/12	07/06/12 10:45	MEV	CETAC1	1	BVG0213

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID: 1211580-02 | **Client Sample Name:** 4186, U-2-W-120626, 6/26/2012 11:11:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3	**21**	**mg/L**	**0.44**	**EPA-300.0**	ND		1
Sulfate	**54**	**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	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	06/26/12	06/27/12 06:15	LD1	IC5	1	BVF1793
2	SM-3500-FeD	06/27/12	06/27/12 07:24	TDC	KONE-1	1	BVG0007

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1211580-03 | **Client Sample Name:** 4186, U-4-W-120626, 6/26/2012 5:56:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260	ND		1
Methyl t-butyl ether	**4.5**	**ug/L**	**0.50**	**EPA-8260**	ND		1
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	99.3	%	80 - 120 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	98.7	%	80 - 120 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	06/29/12	06/30/12 02:49	JMC	MS-V12	1	BVG0012

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID: 1211580-03 | **Client Sample Name:** 4186, U-4-W-120626, 6/26/2012 5:56:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	**0.0013**	**mg/L**	**0.0010**	**RSK-175M**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	07/03/12	07/03/12 10:32	JMC	GC-V1	1	BVG0079

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID: 1211580-03 | **Client Sample Name:** 4186, U-4-W-120626, 6/26/2012 5:56:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**65**	**mg/L**	**0.10**	**EPA-6010B**	ND		1
Dissolved Magnesium	**94**	**mg/L**	**0.050**	**EPA-6010B**	ND		1
Dissolved Sodium	**33**	**mg/L**	**0.50**	**EPA-6010B**	ND		1
Dissolved Potassium	**2.1**	**mg/L**	**1.0**	**EPA-6010B**	ND		1
Chloride	**41**	**mg/L**	**0.50**	**EPA-300.0**	ND		2
Fluoride	**0.12**	**mg/L**	**0.050**	**EPA-300.0**	ND		2
Nitrate as NO3	**4.8**	**mg/L**	**0.44**	**EPA-300.0**	ND		2
Sulfate	**31**	**mg/L**	**1.0**	**EPA-300.0**	ND		2
Total Dissolved Solids @ 180 C	**640**	**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	06/28/12	06/29/12 08:41	ARD	PE-OP1	1	BVF1900
2	EPA-300.0	06/26/12	06/27/12 06:29	LD1	IC5	1	BVF1793
3	EPA-160.1	06/27/12	06/27/12 13:15	NW1	MANUAL	5	BVF1754
4	SM-3500-FeD	06/27/12	06/27/12 07:30	TDC	KONE-1	1	BVG0007

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID: 1211580-03 | **Client Sample Name:** 4186, U-4-W-120626, 6/26/2012 5:56:00AM

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	**470**	**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	**220**	**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	**76**	**ug/L**	**50**	**EPA-6010B**	ND		4
Total Barium	**3300**	**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	**1100**	**ug/L**	**10**	**EPA-6010B**	ND		4
Total Cobalt	**350**	**ug/L**	**50**	**EPA-6010B**	ND		4
Total Copper	**510**	**ug/L**	**10**	**EPA-6010B**	ND		4
Total Lead	**110**	**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	**3500**	**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: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID: 1211580-03 | **Client Sample Name:** 4186, U-4-W-120626, 6/26/2012 5:56:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Total Thallium	ND	ug/L	100	EPA-6010B	ND		4
Total Vanadium	**380**	**ug/L**	**10**	**EPA-6010B**	ND		4
Total Zinc	**680**	**ug/L**	**50**	**EPA-6010B**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/28/12	06/29/12 08:41	ARD	PE-OP1	1	BVF1900
2	EPA-7196	06/26/12	06/27/12 00:52	AKB	KONE-1	1	BVG0004
3	EPA-7470A	07/06/12	07/09/12 09:53	MEV	CETAC1	1	BVG0344
4	EPA-6010B	07/02/12	07/03/12 11:07	ARD	PE-OP1	1	BVG0043
5	EPA-7470A	07/05/12	07/06/12 10:47	MEV	CETAC1	1	BVG0213

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Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1211580-04 | **Client Sample Name:** 4186, U-5-W-120626, 6/26/2012 6:23:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260	ND		1
Methyl t-butyl ether	**54**	**ug/L**	**0.50**	**EPA-8260**	ND		1
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
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-8260			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	99.3	%	80 - 120 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	06/29/12	06/30/12 02:31	JMC	MS-V12	1	BVG0012

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Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID: 1211580-04 | **Client Sample Name:** 4186, U-5-W-120626, 6/26/2012 6:23:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	**0.0027**	**mg/L**	**0.0010**	**RSK-175M**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	07/03/12	07/03/12 09:58	JMC	GC-V1	1	BVG0079

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Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID: 1211580-04 | **Client Sample Name:** 4186, U-5-W-120626, 6/26/2012 6:23:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3	**1.5**	**mg/L**	**0.44**	**EPA-300.0**	ND		1
Sulfate	**22**	**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	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	06/26/12	06/27/12 06:44	LD1	IC5	1	BVF1793
2	SM-3500-FeD	06/27/12	06/27/12 07:30	TDC	KONE-1	1	BVG0007

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Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1211580-05 | **Client Sample Name:** 4186, U-6-W-120626, 6/26/2012 9:26:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	**11**	**ug/L**	**0.50**	**EPA-8260**	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260	ND		1
Ethylbenzene	**7.7**	**ug/L**	**0.50**	**EPA-8260**	ND		1
Methyl t-butyl ether	**2.4**	**ug/L**	**0.50**	**EPA-8260**	ND		1
Toluene	**0.76**	**ug/L**	**0.50**	**EPA-8260**	ND		1
Total Xylenes	**1.6**	**ug/L**	**1.0**	**EPA-8260**	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	**950**	**ug/L**	**50**	**Luft-GC/MS**	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	75 - 125 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	107	%	80 - 120 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	06/29/12	06/30/12 02:14	JMC	MS-V12	1	BVG0012

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Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID: 1211580-05 | **Client Sample Name:** 4186, U-6-W-120626, 6/26/2012 9:26:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	**1.5**	**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	07/03/12	07/03/12 09:53	JMC	GC-V1	20	BVG0079

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Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID: 1211580-05 | **Client Sample Name:** 4186, U-6-W-120626, 6/26/2012 9:26:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3	ND	mg/L	0.44	EPA-300.0	ND		1
Sulfate	**50**	**mg/L**	**1.0**	**EPA-300.0**	ND		1
Iron (II) Species, Dissolved	**210**	**ug/L**	**100**	**SM-3500-FeD**	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	06/26/12	06/27/12 06:58	LD1	IC5	1	BVF1793
2	SM-3500-FeD	06/27/12	06/27/12 07:30	TDC	KONE-1	1	BVG0007

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Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1211580-06 | **Client Sample Name:** 4186, U-7-W-120626, 6/26/2012 10:07:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260	ND		1
Methyl t-butyl ether	**17**	**ug/L**	**0.50**	**EPA-8260**	ND		1
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	**500**	**ug/L**	**50**	**Luft-GC/MS**	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	75 - 125 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	98.0	%	80 - 120 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	107	%	80 - 120 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	06/29/12	06/30/12 01:56	JMC	MS-V12	1	BVG0012

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Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID: 1211580-06 | **Client Sample Name:** 4186, U-7-W-120626, 6/26/2012 10:07:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	**1.0**	**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	07/03/12	07/03/12 09:45	JMC	GC-V1	20	BVG0079

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Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID: 1211580-06 | **Client Sample Name:** 4186, U-7-W-120626, 6/26/2012 10:07:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3	ND	mg/L	0.44	EPA-300.0	ND		1
Sulfate	**3.3**	**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	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	06/26/12	06/27/12 07:12	LD1	IC5	1	BVF1793
2	SM-3500-FeD	06/27/12	06/27/12 07:30	TDC	KONE-1	1	BVG0007

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Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1211580-07 | **Client Sample Name:** 4186, U-8-W-120626, 6/26/2012 10:58:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	**2.2**	**ug/L**	**0.50**	**EPA-8260**	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260	ND		1
Ethylbenzene	**1.5**	**ug/L**	**0.50**	**EPA-8260**	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	**640**	**ug/L**	**50**	**Luft-GC/MS**	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	75 - 125 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	98.5	%	80 - 120 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	108	%	80 - 120 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	06/29/12	06/30/12 01:38	JMC	MS-V12	1	BVG0012

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Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID: 1211580-07 | **Client Sample Name:** 4186, U-8-W-120626, 6/26/2012 10:58:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	**0.0038**	**mg/L**	**0.0010**	**RSK-175M**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	07/03/12	07/03/12 09:38	JMC	GC-V1	1	BVG0079

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Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID: 1211580-07 | **Client Sample Name:** 4186, U-8-W-120626, 6/26/2012 10:58:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**37**	**mg/L**	**0.10**	**EPA-6010B**	ND		1
Dissolved Magnesium	**64**	**mg/L**	**0.050**	**EPA-6010B**	ND		1
Dissolved Sodium	**47**	**mg/L**	**0.50**	**EPA-6010B**	ND		1
Dissolved Potassium	**1.4**	**mg/L**	**1.0**	**EPA-6010B**	ND		1
Chloride	**54**	**mg/L**	**0.50**	**EPA-300.0**	ND		2
Fluoride	**0.10**	**mg/L**	**0.050**	**EPA-300.0**	ND		2
Nitrate as NO3	ND	mg/L	0.44	EPA-300.0	ND		2
Sulfate	**31**	**mg/L**	**1.0**	**EPA-300.0**	ND		2
Total Dissolved Solids @ 180 C	**470**	**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	06/28/12	06/29/12 08:42	ARD	PE-OP1	1	BVF1900
2	EPA-300.0	06/26/12	06/27/12 07:27	LD1	IC5	1	BVF1793
3	EPA-160.1	06/27/12	06/27/12 13:15	NW1	MANUAL	3.333	BVF1754
4	SM-3500-FeD	06/27/12	06/27/12 07:30	TDC	KONE-1	1	BVG0007

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Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID: 1211580-07 | **Client Sample Name:** 4186, U-8-W-120626, 6/26/2012 10:58:00AM

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	**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	**1300**	**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	**76**	**ug/L**	**50**	**EPA-6010B**	ND		4
Total Barium	**1500**	**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	**420**	**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	**72**	**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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Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID: 1211580-07 | **Client Sample Name:** 4186, U-8-W-120626, 6/26/2012 10:58:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Total Thallium	ND	ug/L	100	EPA-6010B	ND		4
Total Vanadium	**170**	**ug/L**	**10**	**EPA-6010B**	ND		4
Total Zinc	**310**	**ug/L**	**50**	**EPA-6010B**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/28/12	06/29/12 08:42	ARD	PE-OP1	1	BVF1900
2	EPA-7196	06/26/12	06/27/12 00:52	AKB	KONE-1	1	BVG0004
3	EPA-7470A	07/06/12	07/09/12 09:55	MEV	CETAC1	1	BVG0344
4	EPA-6010B	07/02/12	07/03/12 11:08	ARD	PE-OP1	1	BVG0043
5	EPA-7470A	07/05/12	07/06/12 10:49	MEV	CETAC1	1	BVG0213

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Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1211580-08 | **Client Sample Name:** 4186, U-9-W-120626, 6/26/2012 9:39:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	**15**	**ug/L**	**0.50**	**EPA-8260**	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260	ND		1
Ethylbenzene	**52**	**ug/L**	**0.50**	**EPA-8260**	ND		1
Methyl t-butyl ether	**1.0**	**ug/L**	**0.50**	**EPA-8260**	ND		1
Toluene	**2.8**	**ug/L**	**0.50**	**EPA-8260**	ND		1
Total Xylenes	**5.0**	**ug/L**	**1.0**	**EPA-8260**	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	**2100**	**ug/L**	**50**	**Luft-GC/MS**	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	75 - 125 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	114	%	80 - 120 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	06/29/12	06/30/12 01:20	JMC	MS-V12	1	BVG0012

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Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID: 1211580-08 | **Client Sample Name:** 4186, U-9-W-120626, 6/26/2012 9:39:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	**12**	**mg/L**	**0.050**	**RSK-175M**	ND	**A01,S01**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	07/03/12	07/03/12 09:34	JMC	GC-V1	50	BVG0078

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Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID: 1211580-08 | **Client Sample Name:** 4186, U-9-W-120626, 6/26/2012 9:39:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**39**	**mg/L**	**0.10**	**EPA-6010B**	ND		1
Dissolved Magnesium	**72**	**mg/L**	**0.050**	**EPA-6010B**	ND		1
Dissolved Sodium	**67**	**mg/L**	**0.50**	**EPA-6010B**	ND		1
Dissolved Potassium	**1.3**	**mg/L**	**1.0**	**EPA-6010B**	ND		1
Chloride	**94**	**mg/L**	**0.50**	**EPA-300.0**	ND		2
Fluoride	**0.11**	**mg/L**	**0.050**	**EPA-300.0**	ND		2
Nitrate as NO3	ND	mg/L	0.44	EPA-300.0	ND		2
Sulfate	**33**	**mg/L**	**1.0**	**EPA-300.0**	ND		2
Total Dissolved Solids @ 180 C	**570**	**mg/L**	**33**	**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	06/28/12	06/29/12 08:44	ARD	PE-OP1	1	BVF1900
2	EPA-300.0	06/26/12	06/27/12 07:41	LD1	IC5	1	BVF1793
3	EPA-160.1	06/27/12	06/27/12 13:15	NW1	MANUAL	3.333	BVF1754
4	SM-3500-FeD	06/27/12	06/27/12 07:30	TDC	KONE-1	1	BVG0007

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Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID: 1211580-08 | **Client Sample Name:** 4186, U-9-W-120626, 6/26/2012 9:39:00AM

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	**430**	**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	**1800**	**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	**290**	**ug/L**	**10**	**EPA-6010B**	ND		4
Total Cobalt	**72**	**ug/L**	**50**	**EPA-6010B**	ND		4
Total Copper	**150**	**ug/L**	**10**	**EPA-6010B**	ND		4
Total Lead	ND	ug/L	50	EPA-6010B	ND		4
Total Mercury	**0.68**	**ug/L**	**0.20**	**EPA-7470A**	ND		5
Total Molybdenum	ND	ug/L	50	EPA-6010B	ND		4
Total Nickel	**840**	**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: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID: 1211580-08 | **Client Sample Name:** 4186, U-9-W-120626, 6/26/2012 9:39:00AM

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	**210**	**ug/L**	**50**	**EPA-6010B**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/28/12	06/29/12 08:44	ARD	PE-OP1	1	BVF1900
2	EPA-7196	06/26/12	06/27/12 00:52	AKB	KONE-1	1	BVG0004
3	EPA-7470A	07/06/12	07/09/12 09:58	MEV	CETAC1	1	BVG0344
4	EPA-6010B	07/02/12	07/03/12 11:10	ARD	PE-OP1	1	BVG0043
5	EPA-7470A	07/09/12	07/10/12 10:15	MEV	CETAC1	1	BVG0428

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Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1211580-09 | **Client Sample Name:** 4186, U-10-W-120626, 6/26/2012 10:38:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	**230**	**ug/L**	**5.0**	**EPA-8260**	ND	**A01**	1
1,2-Dibromoethane	ND	ug/L	5.0	EPA-8260	ND	A01	1
1,2-Dichloroethane	ND	ug/L	5.0	EPA-8260	ND	A01	1
Ethylbenzene	**230**	**ug/L**	**5.0**	**EPA-8260**	ND	**A01**	1
Methyl t-butyl ether	**130**	**ug/L**	**5.0**	**EPA-8260**	ND	**A01**	1
Toluene	**5.7**	**ug/L**	**5.0**	**EPA-8260**	ND	**A01**	1
Total Xylenes	**67**	**ug/L**	**10**	**EPA-8260**	ND	**A01**	1
t-Amyl Methyl ether	ND	ug/L	5.0	EPA-8260	ND	A01	1
t-Butyl alcohol	**2300**	**ug/L**	**100**	**EPA-8260**	ND	**A01**	1
Diisopropyl ether	ND	ug/L	5.0	EPA-8260	ND	A01	1
Ethanol	ND	ug/L	2500	EPA-8260	ND	A01	1
Ethyl t-butyl ether	ND	ug/L	5.0	EPA-8260	ND	A01	1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	**2000**	**ug/L**	**500**	**Luft-GC/MS**	ND	**A01**	1
1,2-Dichloroethane-d4 (Surrogate)	109	%	75 - 125 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	87.2	%	80 - 120 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	105	%	80 - 120 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	06/29/12	06/30/12 01:03	JMC	MS-V12	10	BVG0011

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Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID: 1211580-09 | **Client Sample Name:** 4186, U-10-W-120626, 6/26/2012 10:38:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	**19**	**mg/L**	**0.050**	**RSK-175M**	ND	**A01,S01**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	07/03/12	07/03/12 09:26	JMC	GC-V1	50	BVG0078

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Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID: 1211580-09 | **Client Sample Name:** 4186, U-10-W-120626, 6/26/2012 10:38:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**51**	**mg/L**	**0.10**	**EPA-6010B**	ND		1
Dissolved Magnesium	**100**	**mg/L**	**0.050**	**EPA-6010B**	ND		1
Dissolved Sodium	**50**	**mg/L**	**0.50**	**EPA-6010B**	ND		1
Dissolved Potassium	**3.3**	**mg/L**	**1.0**	**EPA-6010B**	ND		1
Chloride	**36**	**mg/L**	**0.50**	**EPA-300.0**	ND		2
Fluoride	**0.13**	**mg/L**	**0.050**	**EPA-300.0**	ND		2
Nitrate as NO3	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	**690**	**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	06/28/12	06/29/12 08:49	ARD	PE-OP1	1	BVF1900
2	EPA-300.0	06/26/12	06/27/12 07:56	LD1	IC5	1	BVF1793
3	EPA-160.1	06/27/12	06/27/12 13:15	NW1	MANUAL	5	BVF1754
4	SM-3500-FeD	06/27/12	06/27/12 07:30	TDC	KONE-1	1	BVG0007

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Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID: 1211580-09 | **Client Sample Name:** 4186, U-10-W-120626, 6/26/2012 10:38:00AM

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	**440**	**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	**2000**	**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	**250**	**ug/L**	**10**	**EPA-6010B**	ND		4
Total Cobalt	**57**	**ug/L**	**50**	**EPA-6010B**	ND		4
Total Copper	**120**	**ug/L**	**10**	**EPA-6010B**	ND		4
Total Lead	ND	ug/L	50	EPA-6010B	ND		4
Total Mercury	**0.64**	**ug/L**	**0.20**	**EPA-7470A**	ND		5
Total Molybdenum	ND	ug/L	50	EPA-6010B	ND		4
Total Nickel	**870**	**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: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID: 1211580-09 | **Client Sample Name:** 4186, U-10-W-120626, 6/26/2012 10:38:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Total Thallium	ND	ug/L	100	EPA-6010B	ND		4
Total Vanadium	**98**	**ug/L**	**10**	**EPA-6010B**	ND		4
Total Zinc	**170**	**ug/L**	**50**	**EPA-6010B**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/28/12	06/29/12 08:49	ARD	PE-OP1	1	BVF1900
2	EPA-7196	06/26/12	06/27/12 00:52	AKB	KONE-1	1	BVG0004
3	EPA-7470A	07/06/12	07/09/12 10:00	MEV	CETAC1	1	BVG0344
4	EPA-6010B	07/02/12	07/03/12 11:11	ARD	PE-OP1	1	BVG0043
5	EPA-7470A	07/09/12	07/10/12 10:17	MEV	CETAC1	1	BVG0428

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Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1211580-10 | **Client Sample Name:** 4186, U-11-W-120626, 6/26/2012 10:19:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	**7.3**	**ug/L**	**0.50**	**EPA-8260**	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260	ND		1
Methyl t-butyl ether	**72**	**ug/L**	**0.50**	**EPA-8260**	ND		1
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260	ND		1
t-Butyl alcohol	**5000**	**ug/L**	**10**	**EPA-8260**	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	**450**	**ug/L**	**50**	**Luft-GC/MS**	ND		1
1,2-Dichloroethane-d4 (Surrogate)	110	%	75 - 125 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	98.7	%	80 - 120 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	106	%	80 - 120 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	06/29/12	06/30/12 00:45	JMC	MS-V12	1	BVG0011

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Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID: 1211580-10 | **Client Sample Name:** 4186, U-11-W-120626, 6/26/2012 10:19:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	**6.0**	**mg/L**	**0.050**	**RSK-175M**	ND	**A01,S01**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	07/03/12	07/03/12 09:17	JMC	GC-V1	50	BVG0078

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Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID: 1211580-10 | **Client Sample Name:** 4186, U-11-W-120626, 6/26/2012 10:19:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**72**	**mg/L**	**0.10**	**EPA-6010B**	ND		1
Dissolved Magnesium	**170**	**mg/L**	**0.050**	**EPA-6010B**	ND		1
Dissolved Sodium	**60**	**mg/L**	**0.50**	**EPA-6010B**	ND		1
Dissolved Potassium	**1.6**	**mg/L**	**1.0**	**EPA-6010B**	ND		1
Chloride	**120**	**mg/L**	**0.50**	**EPA-300.0**	ND		2
Fluoride	**0.10**	**mg/L**	**0.050**	**EPA-300.0**	ND		2
Nitrate as NO3	ND	mg/L	0.44	EPA-300.0	ND		2
Sulfate	**320**	**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	**270**	**ug/L**	**100**	**SM-3500-FeD**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/28/12	06/29/12 08:51	ARD	PE-OP1	1	BVF1900
2	EPA-300.0	06/26/12	06/27/12 08:39	LD1	IC5	1	BVF1793
3	EPA-160.1	06/27/12	06/27/12 13:15	NW1	MANUAL	5	BVF1754
4	SM-3500-FeD	06/27/12	06/27/12 07:30	TDC	KONE-1	1	BVG0007

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID: 1211580-10 | **Client Sample Name:** 4186, U-11-W-120626, 6/26/2012 10:19:00AM

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	**58**	**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	**3100**	**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	**1100**	**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	**230**	**ug/L**	**10**	**EPA-6010B**	ND		4
Total Cobalt	**61**	**ug/L**	**50**	**EPA-6010B**	ND		4
Total Copper	**120**	**ug/L**	**10**	**EPA-6010B**	ND		4
Total Lead	ND	ug/L	50	EPA-6010B	ND		4
Total Mercury	**0.62**	**ug/L**	**0.20**	**EPA-7470A**	ND		5
Total Molybdenum	ND	ug/L	50	EPA-6010B	ND		4
Total Nickel	**760**	**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: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID: 1211580-10 | **Client Sample Name:** 4186, U-11-W-120626, 6/26/2012 10:19:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Total Thallium	ND	ug/L	100	EPA-6010B	ND		4
Total Vanadium	**110**	**ug/L**	**10**	**EPA-6010B**	ND		4
Total Zinc	**160**	**ug/L**	**50**	**EPA-6010B**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/28/12	06/29/12 08:51	ARD	PE-OP1	1	BVF1900
2	EPA-7196	06/26/12	06/27/12 00:55	AKB	KONE-1	1	BVG0004
3	EPA-7470A	07/06/12	07/09/12 10:02	MEV	CETAC1	1	BVG0344
4	EPA-6010B	07/02/12	07/03/12 11:17	ARD	PE-OP1	1	BVG0043
5	EPA-7470A	07/09/12	07/10/12 10:24	MEV	CETAC1	1	BVG0428

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Reported: 07/10/2012 14:38
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVG0011						
Benzene	BVG0011-BLK1	ND	ug/L	0.50		
1,2-Dibromoethane	BVG0011-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane	BVG0011-BLK1	ND	ug/L	0.50		
Ethylbenzene	BVG0011-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BVG0011-BLK1	ND	ug/L	0.50		
Toluene	BVG0011-BLK1	ND	ug/L	0.50		
Total Xylenes	BVG0011-BLK1	ND	ug/L	1.0		
t-Amyl Methyl ether	BVG0011-BLK1	ND	ug/L	0.50		
t-Butyl alcohol	BVG0011-BLK1	ND	ug/L	10		
Diisopropyl ether	BVG0011-BLK1	ND	ug/L	0.50		
Ethanol	BVG0011-BLK1	ND	ug/L	250		
Ethyl t-butyl ether	BVG0011-BLK1	ND	ug/L	0.50		
Total Purgeable Petroleum Hydrocarbons (C6-(	BVG0011-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	BVG0011-BLK1	110	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BVG0011-BLK1	100	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BVG0011-BLK1	94.9	%	80 - 120 (LCL - UCL)		
QC Batch ID: BVG0012						
Benzene	BVG0012-BLK1	ND	ug/L	0.50		
1,2-Dibromoethane	BVG0012-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane	BVG0012-BLK1	ND	ug/L	0.50		
Ethylbenzene	BVG0012-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BVG0012-BLK1	ND	ug/L	0.50		
Toluene	BVG0012-BLK1	ND	ug/L	0.50		
Total Xylenes	BVG0012-BLK1	ND	ug/L	1.0		
t-Amyl Methyl ether	BVG0012-BLK1	ND	ug/L	0.50		
t-Butyl alcohol	BVG0012-BLK1	ND	ug/L	10		
Diisopropyl ether	BVG0012-BLK1	ND	ug/L	0.50		
Ethanol	BVG0012-BLK1	ND	ug/L	250		
Ethyl t-butyl ether	BVG0012-BLK1	ND	ug/L	0.50		
Total Purgeable Petroleum Hydrocarbons (C6-(	BVG0012-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	BVG0012-BLK1	102	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BVG0012-BLK1	101	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BVG0012-BLK1	92.8	%	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	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BVG0011										
Benzene	BVG0011-BS1	LCS	32.340	25.000	ug/L	129		70 - 130		
Toluene	BVG0011-BS1	LCS	27.470	25.000	ug/L	110		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BVG0011-BS1	LCS	10.350	10.000	ug/L	104		75 - 125		
Toluene-d8 (Surrogate)	BVG0011-BS1	LCS	9.7500	10.000	ug/L	97.5		80 - 120		
4-Bromofluorobenzene (Surrogate)	BVG0011-BS1	LCS	10.830	10.000	ug/L	108		80 - 120		
QC Batch ID: BVG0012										
Benzene	BVG0012-BS1	LCS	31.570	25.000	ug/L	126		70 - 130		
Toluene	BVG0012-BS1	LCS	27.050	25.000	ug/L	108		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BVG0012-BS1	LCS	10.280	10.000	ug/L	103		75 - 125		
Toluene-d8 (Surrogate)	BVG0012-BS1	LCS	10.140	10.000	ug/L	101		80 - 120		
4-Bromofluorobenzene (Surrogate)	BVG0012-BS1	LCS	10.210	10.000	ug/L	102		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	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BVG0011	Used client sample: N										
Benzene	MS	1211463-02	ND	32.480	25.000	ug/L		130		70 - 130	
	MSD	1211463-02	ND	32.360	25.000	ug/L	0.4	129	20	70 - 130	
Toluene	MS	1211463-02	ND	27.790	25.000	ug/L		111		70 - 130	
	MSD	1211463-02	ND	28.240	25.000	ug/L	1.6	113	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1211463-02	ND	10.330	10.000	ug/L		103		75 - 125	
	MSD	1211463-02	ND	10.290	10.000	ug/L	0.4	103		75 - 125	
Toluene-d8 (Surrogate)	MS	1211463-02	ND	10.410	10.000	ug/L		104		80 - 120	
	MSD	1211463-02	ND	10.210	10.000	ug/L	1.9	102		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1211463-02	ND	10.260	10.000	ug/L		103		80 - 120	
	MSD	1211463-02	ND	10.020	10.000	ug/L	2.4	100		80 - 120	
QC Batch ID: BVG0012	Used client sample: N										
Benzene	MS	1211463-01	ND	30.200	25.000	ug/L		121		70 - 130	
	MSD	1211463-01	ND	31.130	25.000	ug/L	3.0	125	20	70 - 130	
Toluene	MS	1211463-01	ND	25.710	25.000	ug/L		103		70 - 130	
	MSD	1211463-01	ND	27.790	25.000	ug/L	7.8	111	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1211463-01	ND	10.390	10.000	ug/L		104		75 - 125	
	MSD	1211463-01	ND	10.130	10.000	ug/L	2.5	101		75 - 125	
Toluene-d8 (Surrogate)	MS	1211463-01	ND	9.5900	10.000	ug/L		95.9		80 - 120	
	MSD	1211463-01	ND	9.6900	10.000	ug/L	1.0	96.9		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1211463-01	ND	10.760	10.000	ug/L		108		80 - 120	
	MSD	1211463-01	ND	10.950	10.000	ug/L	1.8	110		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: BVG0078						
Methane	BVG0078-BLK1	ND	mg/L	0.0010		
QC Batch ID: BVG0079						
Methane	BVG0079-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	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BVG0078										
Methane	BVG0078-BS1	LCS	0.011154	0.010843	mg/L	103		80 - 120		
	BVG0078-BSD1	LCSD	0.011299	0.010843	mg/L	104	1.3	80 - 120	20	
QC Batch ID: BVG0079										
Methane	BVG0079-BS1	LCS	0.011334	0.010843	mg/L	105		80 - 120		
	BVG0079-BSD1	LCSD	0.011366	0.010843	mg/L	105	0.3	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: BVF1754						
Total Dissolved Solids @ 180 C	BVF1754-BLK1	ND	mg/L	6.7		
QC Batch ID: BVF1793						
Chloride	BVF1793-BLK1	ND	mg/L	0.50		
Fluoride	BVF1793-BLK1	ND	mg/L	0.050		
Nitrate as NO3	BVF1793-BLK1	ND	mg/L	0.44		
Sulfate	BVF1793-BLK1	ND	mg/L	1.0		
QC Batch ID: BVF1900						
Dissolved Calcium	BVF1900-BLK1	ND	mg/L	0.10		
Dissolved Magnesium	BVF1900-BLK1	ND	mg/L	0.050		
Dissolved Sodium	BVF1900-BLK1	ND	mg/L	0.50		
Dissolved Potassium	BVF1900-BLK1	ND	mg/L	1.0		
QC Batch ID: BVG0007						
Iron (II) Species, Dissolved	BVG0007-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	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BVF1754										
Total Dissolved Solids @ 180 C	BVF1754-BS1	LCS	540.00	586.00	mg/L	92.2		90 - 110		
QC Batch ID: BVF1793										
Chloride	BVF1793-BS1	LCS	51.730	50.000	mg/L	103		90 - 110		
Fluoride	BVF1793-BS1	LCS	0.97100	1.0000	mg/L	97.1		90 - 110		
Nitrate as NO3	BVF1793-BS1	LCS	23.011	22.134	mg/L	104		90 - 110		
Sulfate	BVF1793-BS1	LCS	103.92	100.00	mg/L	104		90 - 110		
QC Batch ID: BVF1900										
Dissolved Calcium	BVF1900-BS1	LCS	9.9187	10.000	mg/L	99.2		85 - 115		
Dissolved Magnesium	BVF1900-BS1	LCS	10.160	10.000	mg/L	102		85 - 115		
Dissolved Sodium	BVF1900-BS1	LCS	9.9764	10.000	mg/L	99.8		85 - 115		
Dissolved Potassium	BVF1900-BS1	LCS	9.6177	10.000	mg/L	96.2		85 - 115		
QC Batch ID: BVG0007										
Iron (II) Species, Dissolved	BVG0007-BS1	LCS	2428.0	2500.0	ug/L	97.1		90 - 110		

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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	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BVF1754	Used client sample: Y - Description: U-4-W-120626, 06/26/2012 05:56										
Total Dissolved Solids @ 180 C	DUP	1211580-03	640.00	645.00		mg/L	0.8		10		
QC Batch ID: BVF1793	Used client sample: Y - Description: U-2-W-120626, 06/26/2012 08:02										
Chloride	DUP	1211580-01	26.941	27.014		mg/L	0.3		10		
	MS	1211580-01	26.941	81.289	50.505	mg/L		108		80 - 120	
	MSD	1211580-01	26.941	81.249	50.505	mg/L	0.0	108	10	80 - 120	
Fluoride	DUP	1211580-01	0.084000	0.087000		mg/L	3.5		10		
	MS	1211580-01	0.084000	1.0636	1.0101	mg/L		97.0		80 - 120	
	MSD	1211580-01	0.084000	1.0566	1.0101	mg/L	0.7	96.3	10	80 - 120	
Nitrate as NO3	DUP	1211580-01	21.107	21.005		mg/L	0.5		10		
	MS	1211580-01	21.107	44.241	22.358	mg/L		103		80 - 120	
	MSD	1211580-01	21.107	44.107	22.358	mg/L	0.3	103	10	80 - 120	
Sulfate	DUP	1211580-01	54.770	54.794		mg/L	0.0		10		
	MS	1211580-01	54.770	164.28	101.01	mg/L		108		80 - 120	
	MSD	1211580-01	54.770	163.73	101.01	mg/L	0.3	108	10	80 - 120	
QC Batch ID: BVF1900	Used client sample: Y - Description: U-2-W-120626, 06/26/2012 08:02										
Dissolved Calcium	DUP	1211580-01	46.116	46.424		mg/L	0.7		20		
	MS	1211580-01	46.116	57.011	10.204	mg/L		107		75 - 125	
	MSD	1211580-01	46.116	57.662	10.204	mg/L	1.1	113	20	75 - 125	
Dissolved Magnesium	DUP	1211580-01	67.513	67.592		mg/L	0.1		20		
	MS	1211580-01	67.513	79.043	10.204	mg/L		113		75 - 125	
	MSD	1211580-01	67.513	80.557	10.204	mg/L	1.9	128	20	75 - 125	A03
Dissolved Sodium	DUP	1211580-01	53.485	53.386		mg/L	0.2		20		
	MS	1211580-01	53.485	63.239	10.204	mg/L		95.6		75 - 125	
	MSD	1211580-01	53.485	63.290	10.204	mg/L	0.1	96.1	20	75 - 125	
Dissolved Potassium	DUP	1211580-01	2.0612	2.0528		mg/L	0.4		20		
	MS	1211580-01	2.0612	12.598	10.204	mg/L		103		75 - 125	
	MSD	1211580-01	2.0612	12.549	10.204	mg/L	0.4	103	20	75 - 125	
QC Batch ID: BVG0007	Used client sample: Y - Description: U-2-W-120626, 06/26/2012 11:11										
Iron (II) Species, Dissolved	DUP	1211580-02	ND	ND		ug/L			10		

Arcadis
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Reported: 07/10/2012 14:38
Project: 4186
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Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVF1900						
Dissolved Antimony	BVF1900-BLK1	ND	ug/L	100		
Dissolved Arsenic	BVF1900-BLK1	ND	ug/L	50		
Dissolved Barium	BVF1900-BLK1	ND	ug/L	10		
Dissolved Beryllium	BVF1900-BLK1	ND	ug/L	10		
Dissolved Cadmium	BVF1900-BLK1	ND	ug/L	10		
Dissolved Chromium	BVF1900-BLK1	ND	ug/L	10		
Dissolved Cobalt	BVF1900-BLK1	ND	ug/L	50		
Dissolved Copper	BVF1900-BLK1	ND	ug/L	10		
Dissolved Lead	BVF1900-BLK1	ND	ug/L	50		
Dissolved Manganese	BVF1900-BLK1	ND	ug/L	10		
Dissolved Molybdenum	BVF1900-BLK1	ND	ug/L	50		
Dissolved Nickel	BVF1900-BLK1	ND	ug/L	10		
Dissolved Selenium	BVF1900-BLK1	ND	ug/L	100		
Dissolved Silver	BVF1900-BLK1	ND	ug/L	10		
Dissolved Thallium	BVF1900-BLK1	ND	ug/L	100		
Dissolved Vanadium	BVF1900-BLK1	ND	ug/L	10		
Dissolved Zinc	BVF1900-BLK1	ND	ug/L	10		
QC Batch ID: BVG0004						
Hexavalent Chromium	BVG0004-BLK1	ND	ug/L	2.0		
QC Batch ID: BVG0043						
Total Antimony	BVG0043-BLK1	ND	ug/L	100		
Total Arsenic	BVG0043-BLK1	ND	ug/L	50		
Total Barium	BVG0043-BLK1	ND	ug/L	10		
Total Beryllium	BVG0043-BLK1	ND	ug/L	10		
Total Cadmium	BVG0043-BLK1	ND	ug/L	10		
Total Chromium	BVG0043-BLK1	ND	ug/L	10		
Total Cobalt	BVG0043-BLK1	ND	ug/L	50		
Total Copper	BVG0043-BLK1	ND	ug/L	10		
Total Lead	BVG0043-BLK1	ND	ug/L	50		
Total Molybdenum	BVG0043-BLK1	ND	ug/L	50		
Total Nickel	BVG0043-BLK1	ND	ug/L	10		
Total Selenium	BVG0043-BLK1	ND	ug/L	100		
Total Silver	BVG0043-BLK1	ND	ug/L	10		

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Reported: 07/10/2012 14:38
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: BVG0043						
Total Thallium	BVG0043-BLK1	ND	ug/L	100		
Total Vanadium	BVG0043-BLK1	ND	ug/L	10		
Total Zinc	BVG0043-BLK1	ND	ug/L	50		
QC Batch ID: BVG0213						
Total Mercury	BVG0213-BLK1	ND	ug/L	0.20		
QC Batch ID: BVG0344						
Dissolved Mercury	BVG0344-BLK1	ND	ug/L	0.20		
QC Batch ID: BVG0428						
Total Mercury	BVG0428-BLK1	ND	ug/L	0.20		

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:38
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	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BVF1900										
Dissolved Antimony	BVF1900-BS1	LCS	358.15	400.00	ug/L	89.5		85 - 115		
Dissolved Arsenic	BVF1900-BS1	LCS	183.17	200.00	ug/L	91.6		85 - 115		
Dissolved Barium	BVF1900-BS1	LCS	393.14	400.00	ug/L	98.3		85 - 115		
Dissolved Beryllium	BVF1900-BS1	LCS	193.44	200.00	ug/L	96.7		85 - 115		
Dissolved Cadmium	BVF1900-BS1	LCS	193.58	200.00	ug/L	96.8		85 - 115		
Dissolved Chromium	BVF1900-BS1	LCS	191.73	200.00	ug/L	95.9		85 - 115		
Dissolved Cobalt	BVF1900-BS1	LCS	195.71	200.00	ug/L	97.9		85 - 115		
Dissolved Copper	BVF1900-BS1	LCS	373.88	400.00	ug/L	93.5		85 - 115		
Dissolved Lead	BVF1900-BS1	LCS	403.59	400.00	ug/L	101		85 - 115		
Dissolved Manganese	BVF1900-BS1	LCS	470.31	500.00	ug/L	94.1		85 - 115		
Dissolved Molybdenum	BVF1900-BS1	LCS	195.85	200.00	ug/L	97.9		85 - 115		
Dissolved Nickel	BVF1900-BS1	LCS	380.16	400.00	ug/L	95.0		85 - 115		
Dissolved Selenium	BVF1900-BS1	LCS	211.03	200.00	ug/L	106		85 - 115		
Dissolved Silver	BVF1900-BS1	LCS	88.408	100.00	ug/L	88.4		85 - 115		
Dissolved Thallium	BVF1900-BS1	LCS	404.29	400.00	ug/L	101		85 - 115		
Dissolved Vanadium	BVF1900-BS1	LCS	181.86	200.00	ug/L	90.9		85 - 115		
Dissolved Zinc	BVF1900-BS1	LCS	497.66	500.00	ug/L	99.5		85 - 115		
QC Batch ID: BVG0004										
Hexavalent Chromium	BVG0004-BS1	LCS	51.266	50.000	ug/L	103		85 - 115		
QC Batch ID: BVG0043										
Total Antimony	BVG0043-BS1	LCS	392.24	400.00	ug/L	98.1		85 - 115		
Total Arsenic	BVG0043-BS1	LCS	193.48	200.00	ug/L	96.7		85 - 115		
Total Barium	BVG0043-BS1	LCS	416.80	400.00	ug/L	104		85 - 115		
Total Beryllium	BVG0043-BS1	LCS	203.95	200.00	ug/L	102		85 - 115		
Total Cadmium	BVG0043-BS1	LCS	202.74	200.00	ug/L	101		85 - 115		
Total Chromium	BVG0043-BS1	LCS	213.02	200.00	ug/L	107		85 - 115		
Total Cobalt	BVG0043-BS1	LCS	206.76	200.00	ug/L	103		85 - 115		
Total Copper	BVG0043-BS1	LCS	392.88	400.00	ug/L	98.2		85 - 115		
Total Lead	BVG0043-BS1	LCS	414.04	400.00	ug/L	104		85 - 115		
Total Molybdenum	BVG0043-BS1	LCS	205.70	200.00	ug/L	103		85 - 115		
Total Nickel	BVG0043-BS1	LCS	422.05	400.00	ug/L	106		85 - 115		
Total Selenium	BVG0043-BS1	LCS	195.80	200.00	ug/L	97.9		85 - 115		
Total Silver	BVG0043-BS1	LCS	95.206	100.00	ug/L	95.2		85 - 115		

Arcadis
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Emeryville, CA 94608

Reported: 07/10/2012 14:38
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	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BVG0043										
Total Thallium	BVG0043-BS1	LCS	438.11	400.00	ug/L	110		85 - 115		
Total Vanadium	BVG0043-BS1	LCS	200.28	200.00	ug/L	100		85 - 115		
Total Zinc	BVG0043-BS1	LCS	528.22	500.00	ug/L	106		85 - 115		
QC Batch ID: BVG0213										
Total Mercury	BVG0213-BS1	LCS	0.99750	1.0000	ug/L	99.8		85 - 115		
QC Batch ID: BVG0344										
Dissolved Mercury	BVG0344-BS1	LCS	1.0150	1.0000	ug/L	102		85 - 115		
QC Batch ID: BVG0428										
Total Mercury	BVG0428-BS1	LCS	1.0375	1.0000	ug/L	104		85 - 115		

Arcadis
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Emeryville, CA 94608

Reported: 07/10/2012 14:38
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	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BVF1900	Used client sample: Y - Description: U-2-W-120626, 06/26/2012 08:02										
Dissolved Antimony	DUP	1211580-01	ND	ND		ug/L			20		
	MS	1211580-01	ND	360.51	408.16	ug/L		88.3		75 - 125	
	MSD	1211580-01	ND	364.91	408.16	ug/L	1.2	89.4	20	75 - 125	
Dissolved Arsenic	DUP	1211580-01	ND	ND		ug/L			20		
	MS	1211580-01	ND	205.13	204.08	ug/L		101		75 - 125	
	MSD	1211580-01	ND	214.36	204.08	ug/L	4.4	105	20	75 - 125	
Dissolved Barium	DUP	1211580-01	243.79	243.93		ug/L	0.1		20		
	MS	1211580-01	243.79	652.59	408.16	ug/L		100		75 - 125	
	MSD	1211580-01	243.79	654.97	408.16	ug/L	0.4	101	20	75 - 125	
Dissolved Beryllium	DUP	1211580-01	ND	ND		ug/L			20		
	MS	1211580-01	ND	210.74	204.08	ug/L		103		75 - 125	
	MSD	1211580-01	ND	211.50	204.08	ug/L	0.4	104	20	75 - 125	
Dissolved Cadmium	DUP	1211580-01	ND	ND		ug/L			20		
	MS	1211580-01	ND	206.16	204.08	ug/L		101		75 - 125	
	MSD	1211580-01	ND	205.22	204.08	ug/L	0.5	101	20	75 - 125	
Dissolved Chromium	DUP	1211580-01	1.8814	ND		ug/L			20		
	MS	1211580-01	1.8814	207.58	204.08	ug/L		101		75 - 125	
	MSD	1211580-01	1.8814	207.49	204.08	ug/L	0.0	101	20	75 - 125	
Dissolved Cobalt	DUP	1211580-01	ND	ND		ug/L			20		
	MS	1211580-01	ND	197.79	204.08	ug/L		96.9		75 - 125	
	MSD	1211580-01	ND	197.34	204.08	ug/L	0.2	96.7	20	75 - 125	
Dissolved Copper	DUP	1211580-01	ND	ND		ug/L			20		
	MS	1211580-01	ND	390.16	408.16	ug/L		95.6		75 - 125	
	MSD	1211580-01	ND	393.41	408.16	ug/L	0.8	96.4	20	75 - 125	
Dissolved Lead	DUP	1211580-01	ND	ND		ug/L			20		
	MS	1211580-01	ND	421.83	408.16	ug/L		103		75 - 125	
	MSD	1211580-01	ND	426.22	408.16	ug/L	1.0	104	20	75 - 125	
Dissolved Manganese	DUP	1211580-01	ND	ND		ug/L			20		
	MS	1211580-01	ND	504.00	510.20	ug/L		98.8		75 - 125	
	MSD	1211580-01	ND	499.25	510.20	ug/L	0.9	97.9	20	75 - 125	
Dissolved Molybdenum	DUP	1211580-01	7.2755	ND		ug/L			20		
	MS	1211580-01	7.2755	212.70	204.08	ug/L		101		75 - 125	
	MSD	1211580-01	7.2755	213.21	204.08	ug/L	0.2	101	20	75 - 125	
Dissolved Nickel	DUP	1211580-01	ND	ND		ug/L			20		
	MS	1211580-01	ND	388.91	408.16	ug/L		95.3		75 - 125	
	MSD	1211580-01	ND	388.74	408.16	ug/L	0.0	95.2	20	75 - 125	
Dissolved Selenium	DUP	1211580-01	ND	ND		ug/L			20		
	MS	1211580-01	ND	237.99	204.08	ug/L		117		75 - 125	
	MSD	1211580-01	ND	228.96	204.08	ug/L	3.9	112	20	75 - 125	

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:38
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	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BVF1900	Used client sample: Y - Description: U-2-W-120626, 06/26/2012 08:02										
Dissolved Silver	DUP	1211580-01	ND	ND		ug/L			20		
	MS	1211580-01	ND	90.221	102.04	ug/L		88.4		75 - 125	
	MSD	1211580-01	ND	92.270	102.04	ug/L	2.2	90.4	20	75 - 125	
Dissolved Thallium	DUP	1211580-01	ND	ND		ug/L			20		
	MS	1211580-01	ND	436.00	408.16	ug/L		107		75 - 125	
	MSD	1211580-01	ND	428.32	408.16	ug/L	1.8	105	20	75 - 125	
Dissolved Vanadium	DUP	1211580-01	2.5795	ND		ug/L			20		
	MS	1211580-01	2.5795	201.58	204.08	ug/L		97.5		75 - 125	
	MSD	1211580-01	2.5795	200.78	204.08	ug/L	0.4	97.1	20	75 - 125	
Dissolved Zinc	DUP	1211580-01	ND	ND		ug/L			20		
	MS	1211580-01	ND	540.16	510.20	ug/L		106		75 - 125	
	MSD	1211580-01	ND	552.11	510.20	ug/L	2.2	108	20	75 - 125	
QC Batch ID: BVG0004	Used client sample: Y - Description: U-2-W-120626, 06/26/2012 08:02										
Hexavalent Chromium	DUP	1211580-01	ND	ND		ug/L			10		
	MS	1211580-01	ND	51.472	52.632	ug/L		97.8		85 - 115	
	MSD	1211580-01	ND	51.551	52.632	ug/L	0.2	97.9	10	85 - 115	
QC Batch ID: BVG0043	Used client sample: N										
Total Antimony	DUP	1211566-01	ND	ND		ug/L			20		
	MS	1211566-01	ND	431.08	400.00	ug/L		108		75 - 125	
	MSD	1211566-01	ND	420.83	400.00	ug/L	2.4	105	20	75 - 125	
Total Arsenic	DUP	1211566-01	ND	ND		ug/L			20		
	MS	1211566-01	ND	211.01	200.00	ug/L		106		75 - 125	
	MSD	1211566-01	ND	204.06	200.00	ug/L	3.4	102	20	75 - 125	
Total Barium	DUP	1211566-01	61.571	61.635		ug/L	0.1		20		
	MS	1211566-01	61.571	491.14	400.00	ug/L		107		75 - 125	
	MSD	1211566-01	61.571	485.75	400.00	ug/L	1.1	106	20	75 - 125	
Total Beryllium	DUP	1211566-01	ND	ND		ug/L			20		
	MS	1211566-01	ND	220.30	200.00	ug/L		110		75 - 125	
	MSD	1211566-01	ND	214.99	200.00	ug/L	2.4	107	20	75 - 125	
Total Cadmium	DUP	1211566-01	ND	ND		ug/L			20		
	MS	1211566-01	ND	213.60	200.00	ug/L		107		75 - 125	
	MSD	1211566-01	ND	214.28	200.00	ug/L	0.3	107	20	75 - 125	
Total Chromium	DUP	1211566-01	3.3801	ND		ug/L			20		
	MS	1211566-01	3.3801	209.90	200.00	ug/L		103		75 - 125	
	MSD	1211566-01	3.3801	209.16	200.00	ug/L	0.4	103	20	75 - 125	
Total Cobalt	DUP	1211566-01	ND	ND		ug/L			20		
	MS	1211566-01	ND	204.83	200.00	ug/L		102		75 - 125	
	MSD	1211566-01	ND	207.88	200.00	ug/L	1.5	104	20	75 - 125	

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:38
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	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BVG0043	Used client sample: N										
Total Copper	DUP	1211566-01	ND	ND		ug/L			20		
	MS	1211566-01	ND	432.62	400.00	ug/L		108		75 - 125	
	MSD	1211566-01	ND	430.63	400.00	ug/L	0.5	108	20	75 - 125	
Total Lead	DUP	1211566-01	14.566	ND		ug/L			20		
	MS	1211566-01	14.566	422.32	400.00	ug/L		102		75 - 125	
	MSD	1211566-01	14.566	417.18	400.00	ug/L	1.2	101	20	75 - 125	
Total Molybdenum	DUP	1211566-01	17.598	ND		ug/L			20		
	MS	1211566-01	17.598	232.79	200.00	ug/L		108		75 - 125	
	MSD	1211566-01	17.598	230.48	200.00	ug/L	1.0	106	20	75 - 125	
Total Nickel	DUP	1211566-01	2.0783	ND		ug/L			20		
	MS	1211566-01	2.0783	411.84	400.00	ug/L		102		75 - 125	
	MSD	1211566-01	2.0783	416.74	400.00	ug/L	1.2	104	20	75 - 125	
Total Selenium	DUP	1211566-01	ND	ND		ug/L			20		
	MS	1211566-01	ND	214.45	200.00	ug/L		107		75 - 125	
	MSD	1211566-01	ND	213.99	200.00	ug/L	0.2	107	20	75 - 125	
Total Silver	DUP	1211566-01	ND	ND		ug/L			20		
	MS	1211566-01	ND	104.81	100.00	ug/L		105		75 - 125	
	MSD	1211566-01	ND	104.90	100.00	ug/L	0.1	105	20	75 - 125	
Total Thallium	DUP	1211566-01	ND	ND		ug/L			20		
	MS	1211566-01	ND	419.66	400.00	ug/L		105		75 - 125	
	MSD	1211566-01	ND	406.21	400.00	ug/L	3.3	102	20	75 - 125	
Total Vanadium	DUP	1211566-01	4.4827	ND		ug/L			20		
	MS	1211566-01	4.4827	217.20	200.00	ug/L		106		75 - 125	
	MSD	1211566-01	4.4827	216.86	200.00	ug/L	0.2	106	20	75 - 125	
Total Zinc	DUP	1211566-01	ND	ND		ug/L			20		
	MS	1211566-01	ND	529.71	500.00	ug/L		106		75 - 125	
	MSD	1211566-01	ND	531.17	500.00	ug/L	0.3	106	20	75 - 125	
QC Batch ID: BVG0213	Used client sample: N										
Total Mercury	DUP	1211790-01	0.052500	ND		ug/L			20		A02
	MS	1211790-01	0.052500	1.0225	1.0000	ug/L		97.0		70 - 130	
	MSD	1211790-01	0.052500	1.0075	1.0000	ug/L	1.5	95.5	20	70 - 130	
QC Batch ID: BVG0344	Used client sample: N										
Dissolved Mercury	DUP	1211782-01	ND	ND		ug/L			20		
	MS	1211782-01	ND	1.0250	1.0000	ug/L		102		70 - 130	
	MSD	1211782-01	ND	1.0325	1.0000	ug/L	0.7	103	20	70 - 130	
QC Batch ID: BVG0428	Used client sample: N										

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:38
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	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BVG0428	Used client sample: N										
Total Mercury	DUP	1211782-04	ND	ND		ug/L			20		
	MS	1211782-04	ND	1.0450	1.0000	ug/L		104		70 - 130	
	MSD	1211782-04	ND	1.0625	1.0000	ug/L	1.7	106	20	70 - 130	

Arcadis
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Reported: 07/10/2012 14:38
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Notes And Definitions

MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A02	The difference between duplicate readings is less than the PQL.
A03	The sample concentration is more than 4 times the spike level.
S01	Sample result is not within the quantitation range of the method.

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 07/10/2012

Kathy Brandt

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Project:	4186
BC Work Order:	1211472
Invoice ID:	B125489

Enclosed are the results of analyses for samples received by the laboratory on 6/25/2012. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Molly Meyers

Contact Person: Molly Meyers
Client Service Rep

Authorized Signature

Table of Contents

12-11472

CHAIN OF CUSTODY FORM

*address change per Drew, Union Oil Company of California ■ 6101 Bollinger Canyon Road ■ San Ramon, CA 94583

COC 1 of 1

Union Oil Site ID: 4186 MM6/26	Union Oil Consultant: Arcadis
Site Global ID: T0600101777	Consultant Contact: Kathy Brandt
Site Address: 1771 N. ~~Livermore St.~~ First St.* Livermore, CA	Consultant Phone No.: 510 596 9675
	Sampling Company: TRC
Union Oil PM: Roya Kambin	Sampled By (PRINT): Andrew Vidmers
Union Oil PM Phone No.: 925 790 6270	Sampler Signature: [signature]
Charge Code: NWRTB-0 351721 -0- LAB	BC Laboratories, Inc. Project Manager: Molly Meyers 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911

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

ANALYSES REQUIRED

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

Special Instructions

SAMPLE ID: Field Point Name	Matrix	DTW	Date (yymmdd)	Sample Time	# of Containers	Total CAM 17 Metals [redacted]	TPH - G by GC/MS	BTEX/MTBE/OXYS by EPA 8260B	Ethanol by EPA 8260B, EDB/EDC by 8260B	EPA 8260B Full List with OXYS	Sulfate, Nitrate, Methane by EPA 8015B	Dissolved Ferrous Iron by 3500Fe+B	Hexavalent Chromium by 6010, TDS by 160.1	Dissolved CAM 17 Metals	Chloride, Fluoride	Dissolved Metals (Ca, Na, Mg, K, Mn)	Notes / Comments
U-12	(W)-S-A	-1	120625	0843	7		X	X	X		X	X					
U-13	W-S-A	-2	↓	0926	9	X	↓	↓	↓		↓	↓	X	X	X	X	
U-14	W-S-A	-3	↓	1026	7		↓	↓	↓		↓	↓					
U-15	W-S-A	-4	↓	1124	9	X	↓	↓	↓		↓	↓	X	X	X	X	
	W-S-A																
	W-S-A																
	W-S-A																
	W-S-A																
	W-S-A																
	W-S-A																
	W-S-A																
	W-S-A																

CHK BY [initials] DISTRIBUTION MA MT JW KDC SUB-OUT ☐

SHORT HOLDING TIME: Cr^{6+} NO_2 (NO_3) OP SS DO Cl_2 BOD MBAS CCT

Relinquished By	Company	Date / Time	Relinquished By	Company	Date / Time	Relinquished By	Company	Date / Time
[signature]	TRC	6/25/12 1400	Mary Bogan	BcLAB	6/25/12 18:30	[signature]	BC LABS	6-25-12 21:30
Received By	**Company**	**Date / Time**	**Received By**	**Company**	**Date / Time**	**Received By**	**Company**	**Date / Time**
Mary Bogan	BcLAB	6/25/12 1400	[signature]	BC LABS	6-25-12 18:30	[signature]	FCL	6-25-12 21:30

Chain of Custody and Cooler Receipt Form for 1211472 Page 2 of 2

C LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 1 Of 1

ubmission #: 12-11472

SHIPPING INFORMATION	SHIPPING CONTAINER
ederal Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☒ None ☐
C Lab Field Service ☒ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

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

ustody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

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

COC Received ☒ YES ☐ NO

Emissivity: 0.98 Container: Dtpe Thermometer ID: 177

Temperature: A 0.7 °C / C 0.8 °C

Date/Time 10-25-12

Analyst Init JDW 2130

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
GENERAL MINERAL GENERAL PHYSICAL	C D	C D E	C D	C D E						
PE UNPRESERVED										
INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS		F		F						
CYANIDE										
NITROGEN FORMS										
TOTAL SULFIDE										
NITRATE / NITRITE										
TOTAL ORGANIC CARBON										
TOX										
CHEMICAL OXYGEN DEMAND										
PHENOLICS										
ml VOA VIAL TRAVEL BLANK										
ml VOA VIAL	A3	A3	A3	A3						
EPA 413.1, 413.2, 418.1										
ODOR										
BIOLOGICAL										
CTERIOLOGICAL										
ml VOA VIAL- 504 Methane	B2	B2	B2	B2						
EPA 508/608/8080										
EPA 515.1/8150										
EPA 525										
EPA 525 TRAVEL BLANK										
ml EPA 547										
ml EPA 531.1										
EPA 548										
EPA 549										
EPA 632										
EPA 8015M										
AMBER										
Z. JAR										
OZ. JAR										
IL SLEEVE										
B VIAL										
ASTIC BAG										
RROUS IRON										
CORE										

nments:

ple Numbering Completed By: JDW Date/Time: 10/25/12 2230

Actual—/ —C=Corrected

[H:\DOCS\WP60\CAD_DOCS\FORMS\SAMREC2.WPD]

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:35
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1211472-01	**COC Number:**	---	**Receive Date:** 06/25/2012 21:30
	Project Number:	4186	**Sampling Date:** 06/25/2012 08:43
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	U-12-W-120625	**Lab Matrix:** Water
	Sampled By:	TRCI	**Sample Type:** Groundwater
			Delivery Work Order:
			Global ID: T0600101777
			Location ID (FieldPoint): U-12
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:
1211472-02	**COC Number:**	---	**Receive Date:** 06/25/2012 21:30
	Project Number:	4186	**Sampling Date:** 06/25/2012 09:26
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	U-13-W-120625	**Lab Matrix:** Water
	Sampled By:	TRCI	**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:
1211472-03	**COC Number:**	---	**Receive Date:** 06/25/2012 21:30
	Project Number:	4186	**Sampling Date:** 06/25/2012 10:26
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	U-14-W-120625	**Lab Matrix:** Water
	Sampled By:	TRCI	**Sample Type:** Groundwater
			Delivery Work Order:
			Global ID: T0600101777
			Location ID (FieldPoint): U-14
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:

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Reported: 07/10/2012 14:35
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information

1211472-04

COC Number: ---
Project Number: 4186
Sampling Location: ---
Sampling Point: U-15-W-120625
Sampled By: TRCI

Receive Date: 06/25/2012 21:30
Sampling Date: 06/25/2012 11:24
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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Reported: 07/10/2012 14:35
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1211472-01 | **Client Sample Name:** 4186, U-12-W-120625, 6/25/2012 8:43:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	112	%	75 - 125 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	98.4	%	80 - 120 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	06/28/12	06/29/12 06:23	JMC	MS-V12	1	BVF1925

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Reported: 07/10/2012 14:35
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID: 1211472-01 | **Client Sample Name:** 4186, U-12-W-120625, 6/25/2012 8:43:00AM

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 Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	06/29/12	07/03/12 08:22	JMC	GC-V1	1	BVF1955

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Reported: 07/10/2012 14:35
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID: 1211472-01 | **Client Sample Name:** 4186, U-12-W-120625, 6/25/2012 8:43:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3	**23**	**mg/L**	**0.44**	**EPA-300.0**	ND		1
Sulfate	**52**	**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	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	06/25/12	06/26/12 04:27	LD1	IC2	1	BVF1642
2	SM-3500-FeD	06/26/12	06/26/12 11:02	TDC	KONE-1	1	BVF1752

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Reported: 07/10/2012 14:35
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1211472-02 | **Client Sample Name:** 4186, U-13-W-120625, 6/25/2012 9:26:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	110	%	75 - 125 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	107	%	80 - 120 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	95.1	%	80 - 120 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	06/28/12	06/29/12 06:06	JMC	MS-V12	1	BVF1925

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Reported: 07/10/2012 14:35
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID: 1211472-02 | **Client Sample Name:** 4186, U-13-W-120625, 6/25/2012 9:26:00AM

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 Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	06/29/12	07/03/12 08:19	JMC	GC-V1	1	BVF1955

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Reported: 07/10/2012 14:35
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID: 1211472-02 | **Client Sample Name:** 4186, U-13-W-120625, 6/25/2012 9:26:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**39**	**mg/L**	**0.10**	**EPA-6010B**	ND		1
Dissolved Magnesium	**71**	**mg/L**	**0.050**	**EPA-6010B**	ND		1
Dissolved Sodium	**56**	**mg/L**	**0.50**	**EPA-6010B**	ND		1
Dissolved Potassium	**13**	**mg/L**	**1.0**	**EPA-6010B**	ND		1
Chloride	**81**	**mg/L**	**0.50**	**EPA-300.0**	ND		2
Fluoride	**0.096**	**mg/L**	**0.050**	**EPA-300.0**	ND		2
Nitrate as NO3	**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	**600**	**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	06/26/12	06/27/12 16:16	ARD	PE-OP1	1	BVF1746
2	EPA-300.0	06/25/12	06/26/12 05:08	LD1	IC2	1	BVF1642
3	EPA-160.1	06/26/12	06/26/12 08:10	NW1	MANUAL	3.333	BVF1651
4	SM-3500-FeD	06/26/12	06/26/12 11:02	TDC	KONE-1	1	BVF1752

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Reported: 07/10/2012 14:35
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID: 1211472-02 | **Client Sample Name:** 4186, U-13-W-120625, 6/25/2012 9:26:00AM

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	**5.7**	**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		4
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		4
Total Antimony	ND	ug/L	100	EPA-6010B	ND		5
Total Arsenic	ND	ug/L	50	EPA-6010B	ND		5
Total Barium	**300**	**ug/L**	**10**	**EPA-6010B**	ND		5
Total Beryllium	ND	ug/L	10	EPA-6010B	ND		5
Total Cadmium	ND	ug/L	10	EPA-6010B	ND		5
Total Chromium	ND	ug/L	10	EPA-6010B	ND		5
Total Cobalt	ND	ug/L	50	EPA-6010B	ND		5
Total Copper	ND	ug/L	10	EPA-6010B	ND		5
Total Lead	ND	ug/L	50	EPA-6010B	ND		5
Total Mercury	ND	ug/L	0.20	EPA-7470A	ND		6
Total Molybdenum	ND	ug/L	50	EPA-6010B	ND		5
Total Nickel	ND	ug/L	10	EPA-6010B	ND		5
Total Selenium	ND	ug/L	100	EPA-6010B	ND		5
Total Silver	ND	ug/L	10	EPA-6010B	ND		5

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Reported: 07/10/2012 14:35
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID: 1211472-02 | **Client Sample Name:** 4186, U-13-W-120625, 6/25/2012 9:26:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Total Thallium	ND	ug/L	100	EPA-6010B	ND		5
Total Vanadium	ND	ug/L	10	EPA-6010B	ND		5
Total Zinc	ND	ug/L	50	EPA-6010B	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/26/12	06/27/12 16:16	ARD	PE-OP1	1	BVF1746
2	EPA-7196	06/25/12	06/25/12 23:08	AKB	KONE-1	1	BVF1679
3	EPA-7470A	07/06/12	07/09/12 09:42	MEV	CETAC1	1	BVG0344
4	EPA-6010B	06/26/12	06/28/12 09:26	ARD	PE-OP1	1	BVF1746
5	EPA-6010B	06/28/12	06/28/12 13:11	ARD	PE-OP1	1	BVF1868
6	EPA-7470A	07/05/12	07/06/12 10:04	MEV	CETAC1	1	BVG0212

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Reported: 07/10/2012 14:35
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1211472-03 | **Client Sample Name:** 4186, U-14-W-120625, 6/25/2012 10:26:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260	ND		1
t-Butyl alcohol	**10**	**ug/L**	**10**	**EPA-8260**	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	111	%	75 - 125 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	94.8	%	80 - 120 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	06/28/12	06/29/12 05:48	JMC	MS-V12	1	BVF1925

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:35
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID: 1211472-03 | **Client Sample Name:** 4186, U-14-W-120625, 6/25/2012 10:26:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	**0.014**	**mg/L**	**0.0010**	**RSK-175M**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	06/29/12	07/03/12 08:15	JMC	GC-V1	1	BVF1955

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1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:35
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID: 1211472-03 | **Client Sample Name:** 4186, U-14-W-120625, 6/25/2012 10:26:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3	**5.7**	**mg/L**	**0.44**	**EPA-300.0**	ND		1
Sulfate	**9.4**	**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	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	06/25/12	06/26/12 05:21	LD1	IC2	1	BVF1642
2	SM-3500-FeD	06/26/12	06/26/12 11:02	TDC	KONE-1	1	BVF1752

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Reported: 07/10/2012 14:35
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1211472-04 | **Client Sample Name:** 4186, U-15-W-120625, 6/25/2012 11:24:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260	ND		1
t-Butyl alcohol	ND	ug/L	10	EPA-8260	ND		1
Diisopropyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Ethanol	ND	ug/L	250	EPA-8260	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Total Purgeable Petroleum Hydrocarbons (C6-C12)	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	113	%	75 - 125 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	99.4	%	80 - 120 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	94.6	%	80 - 120 (LCL - UCL)	EPA-8260			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	06/28/12	06/29/12 05:31	JMC	MS-V12	1	BVF1925

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Reported: 07/10/2012 14:35
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Gas Testing in Water

BCL Sample ID: 1211472-04 | **Client Sample Name:** 4186, U-15-W-120625, 6/25/2012 11:24:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	**0.0054**	**mg/L**	**0.0010**	**RSK-175M**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	06/29/12	07/03/12 08:04	JMC	GC-V1	1	BVF1955

Arcadis
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Emeryville, CA 94608

Reported: 07/10/2012 14:35
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

BCL Sample ID: 1211472-04 | **Client Sample Name:** 4186, U-15-W-120625, 6/25/2012 11:24:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**10**	**mg/L**	**0.10**	**EPA-6010B**	ND		1
Dissolved Magnesium	**65**	**mg/L**	**0.050**	**EPA-6010B**	ND		1
Dissolved Sodium	**79**	**mg/L**	**0.50**	**EPA-6010B**	ND		1
Dissolved Potassium	**47**	**mg/L**	**1.0**	**EPA-6010B**	ND		1
Chloride	**80**	**mg/L**	**0.50**	**EPA-300.0**	ND		2
Fluoride	**0.077**	**mg/L**	**0.050**	**EPA-300.0**	ND		2
Nitrate as NO3	**23**	**mg/L**	**0.44**	**EPA-300.0**	ND		2
Sulfate	**50**	**mg/L**	**1.0**	**EPA-300.0**	ND		2
Total Dissolved Solids @ 180 C	**620**	**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	06/26/12	06/27/12 16:09	ARD	PE-OP1	1	BVF1746
2	EPA-300.0	06/25/12	06/26/12 05:35	LD1	IC2	1	BVF1642
3	EPA-160.1	06/26/12	06/26/12 08:10	NW1	MANUAL	3.333	BVF1651
4	SM-3500-FeD	06/26/12	06/26/12 11:02	TDC	KONE-1	1	BVF1752

Arcadis
1900 Powell Street 12th Floor
Emeryville, CA 94608

Reported: 07/10/2012 14:35
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID: 1211472-04 | **Client Sample Name:** 4186, U-15-W-120625, 6/25/2012 11:24:00AM

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	**22**	**ug/L**	**2.0**	**EPA-7196**	ND		2
Dissolved Barium	**67**	**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	**25**	**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		4
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		4
Total Antimony	ND	ug/L	100	EPA-6010B	ND		5
Total Arsenic	ND	ug/L	50	EPA-6010B	ND		5
Total Barium	**100**	**ug/L**	**10**	**EPA-6010B**	ND		5
Total Beryllium	ND	ug/L	10	EPA-6010B	ND		5
Total Cadmium	ND	ug/L	10	EPA-6010B	ND		5
Total Chromium	**23**	**ug/L**	**10**	**EPA-6010B**	ND		5
Total Cobalt	ND	ug/L	50	EPA-6010B	ND		5
Total Copper	ND	ug/L	10	EPA-6010B	ND		5
Total Lead	ND	ug/L	50	EPA-6010B	ND		5
Total Mercury	ND	ug/L	0.20	EPA-7470A	ND		6
Total Molybdenum	ND	ug/L	50	EPA-6010B	ND		5
Total Nickel	**10**	**ug/L**	**10**	**EPA-6010B**	ND		5
Total Selenium	ND	ug/L	100	EPA-6010B	ND		5
Total Silver	ND	ug/L	10	EPA-6010B	ND		5

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Reported: 07/10/2012 14:35
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Water Analysis (Metals)

BCL Sample ID: 1211472-04 | **Client Sample Name:** 4186, U-15-W-120625, 6/25/2012 11:24:00AM

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Total Thallium	ND	ug/L	100	EPA-6010B	ND		5
Total Vanadium	ND	ug/L	10	EPA-6010B	ND		5
Total Zinc	ND	ug/L	50	EPA-6010B	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/26/12	06/27/12 16:09	ARD	PE-OP1	1	BVF1746
2	EPA-7196	06/25/12	06/25/12 23:08	AKB	KONE-1	1	BVF1679
3	EPA-7470A	07/06/12	07/09/12 09:45	MEV	CETAC1	1	BVG0344
4	EPA-6010B	06/26/12	06/28/12 09:33	ARD	PE-OP1	1	BVF1746
5	EPA-6010B	06/28/12	06/28/12 13:12	ARD	PE-OP1	1	BVF1868
6	EPA-7470A	07/05/12	07/06/12 10:06	MEV	CETAC1	1	BVG0212

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Reported: 07/10/2012 14:35
Project: 4186
Project Number: 351721
Project Manager: Kathy Brandt

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVF1925						
Benzene	BVF1925-BLK1	ND	ug/L	0.50		
1,2-Dibromoethane	BVF1925-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane	BVF1925-BLK1	ND	ug/L	0.50		
Ethylbenzene	BVF1925-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BVF1925-BLK1	ND	ug/L	0.50		
Toluene	BVF1925-BLK1	ND	ug/L	0.50		
Total Xylenes	BVF1925-BLK1	ND	ug/L	1.0		
t-Amyl Methyl ether	BVF1925-BLK1	ND	ug/L	0.50		
t-Butyl alcohol	BVF1925-BLK1	ND	ug/L	10		
Diisopropyl ether	BVF1925-BLK1	ND	ug/L	0.50		
Ethanol	BVF1925-BLK1	ND	ug/L	250		
Ethyl t-butyl ether	BVF1925-BLK1	ND	ug/L	0.50		
Total Purgeable Petroleum Hydrocarbons (C6-(	BVF1925-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	BVF1925-BLK1	103	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BVF1925-BLK1	102	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BVF1925-BLK1	92.9	%	80 - 120 (LCL - UCL)		

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Reported: 07/10/2012 14:35
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Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BVF1925										
Benzene	BVF1925-BS1	LCS	27.280	25.000	ug/L	109		70 - 130		
Toluene	BVF1925-BS1	LCS	23.220	25.000	ug/L	92.9		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BVF1925-BS1	LCS	10.330	10.000	ug/L	103		75 - 125		
Toluene-d8 (Surrogate)	BVF1925-BS1	LCS	9.7900	10.000	ug/L	97.9		80 - 120		
4-Bromofluorobenzene (Surrogate)	BVF1925-BS1	LCS	10.440	10.000	ug/L	104		80 - 120		

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Reported: 07/10/2012 14:35
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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	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BVF1925	Used client sample: N										
Benzene	MS	1210608-37	ND	29.970	25.000	ug/L		120		70 - 130	
	MSD	1210608-37	ND	29.070	25.000	ug/L	3.0	116	20	70 - 130	
Toluene	MS	1210608-37	ND	25.600	25.000	ug/L		102		70 - 130	
	MSD	1210608-37	ND	25.810	25.000	ug/L	0.8	103	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1210608-37	ND	10.600	10.000	ug/L		106		75 - 125	
	MSD	1210608-37	ND	10.340	10.000	ug/L	2.5	103		75 - 125	
Toluene-d8 (Surrogate)	MS	1210608-37	ND	9.9000	10.000	ug/L		99.0		80 - 120	
	MSD	1210608-37	ND	9.9900	10.000	ug/L	0.9	99.9		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1210608-37	ND	10.330	10.000	ug/L		103		80 - 120	
	MSD	1210608-37	ND	10.540	10.000	ug/L	2.0	105		80 - 120	

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Reported: 07/10/2012 14:35
Project: 4186
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Project Manager: Kathy Brandt

Gas Testing in Water

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVF1955						
Methane	BVF1955-BLK1	ND	mg/L	0.0010		

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Reported: 07/10/2012 14:35
Project: 4186
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Project Manager: Kathy Brandt

Gas Testing in Water

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BVF1955										
Methane	BVF1955-BS1	LCS	0.010223	0.010843	mg/L	94.3		80 - 120		
	BVF1955-BSD1	LCSD	0.010255	0.010843	mg/L	94.6	0.3	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: BVF1642						
Chloride	BVF1642-BLK1	ND	mg/L	0.50		
Fluoride	BVF1642-BLK1	ND	mg/L	0.050		
Nitrate as NO3	BVF1642-BLK1	ND	mg/L	0.44		
Sulfate	BVF1642-BLK1	ND	mg/L	1.0		
QC Batch ID: BVF1651						
Total Dissolved Solids @ 180 C	BVF1651-BLK1	ND	mg/L	6.7		
QC Batch ID: BVF1746						
Dissolved Calcium	BVF1746-BLK1	ND	mg/L	0.10		
Dissolved Magnesium	BVF1746-BLK1	ND	mg/L	0.050		
Dissolved Sodium	BVF1746-BLK1	ND	mg/L	0.50		
Dissolved Potassium	BVF1746-BLK1	ND	mg/L	1.0		
QC Batch ID: BVF1752						
Iron (II) Species, Dissolved	BVF1752-BLK1	ND	ug/L	100		

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Reported: 07/10/2012 14:35
Project: 4186
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Project Manager: Kathy Brandt

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BVF1642										
Chloride	BVF1642-BS1	LCS	51.262	50.000	mg/L	103		90 - 110		
Fluoride	BVF1642-BS1	LCS	0.95900	1.0000	mg/L	95.9		90 - 110		
Nitrate as NO3	BVF1642-BS1	LCS	22.749	22.134	mg/L	103		90 - 110		
Sulfate	BVF1642-BS1	LCS	103.37	100.00	mg/L	103		90 - 110		
QC Batch ID: BVF1651										
Total Dissolved Solids @ 180 C	BVF1651-BS1	LCS	595.00	586.00	mg/L	102		90 - 110		
QC Batch ID: BVF1746										
Dissolved Calcium	BVF1746-BS1	LCS	10.757	10.000	mg/L	108		85 - 115		
Dissolved Magnesium	BVF1746-BS1	LCS	11.130	10.000	mg/L	111		85 - 115		
Dissolved Sodium	BVF1746-BS1	LCS	9.7839	10.000	mg/L	97.8		85 - 115		
Dissolved Potassium	BVF1746-BS1	LCS	9.5659	10.000	mg/L	95.7		85 - 115		
QC Batch ID: BVF1752										
Iron (II) Species, Dissolved	BVF1752-BS1	LCS	2674.6	2500.0	ug/L	107		90 - 110		

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Reported: 07/10/2012 14:35
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	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BVF1642	Used client sample: N										
Chloride	DUP	1211468-01	18.819	18.723		mg/L	0.5		10		
	MS	1211468-01	18.819	73.710	50.505	mg/L		109		80 - 120	
	MSD	1211468-01	18.819	73.565	50.505	mg/L	0.2	108	10	80 - 120	
Fluoride	DUP	1211468-01	ND	ND		mg/L			10		
	MS	1211468-01	ND	1.0949	1.0101	mg/L		108		80 - 120	
	MSD	1211468-01	ND	1.1051	1.0101	mg/L	0.9	109	10	80 - 120	
Nitrate as NO3	DUP	1211468-01	33.639	33.511		mg/L	0.4		10		
	MS	1211468-01	33.639	56.815	22.358	mg/L		104		80 - 120	
	MSD	1211468-01	33.639	57.902	22.358	mg/L	1.9	109	10	80 - 120	
Sulfate	DUP	1211468-01	6.8730	6.8960		mg/L	0.3		10		
	MS	1211468-01	6.8730	113.47	101.01	mg/L		106		80 - 120	
	MSD	1211468-01	6.8730	114.12	101.01	mg/L	0.6	106	10	80 - 120	
QC Batch ID: BVF1651	Used client sample: N										
Total Dissolved Solids @ 180 C	DUP	1211468-01	368.00	374.00		mg/L	1.6		10		
QC Batch ID: BVF1746	Used client sample: Y - Description: U-13-W-120625, 06/25/2012 09:26										
Dissolved Calcium	DUP	1211472-02	38.904	38.846		mg/L	0.1		20		
	MS	1211472-02	38.904	50.692	10.204	mg/L		116		75 - 125	
	MSD	1211472-02	38.904	50.336	10.204	mg/L	0.7	112	20	75 - 125	
Dissolved Magnesium	DUP	1211472-02	70.590	70.479		mg/L	0.2		20		
	MS	1211472-02	70.590	83.519	10.204	mg/L		127		75 - 125	A03
	MSD	1211472-02	70.590	83.169	10.204	mg/L	0.4	123	20	75 - 125	
Dissolved Sodium	DUP	1211472-02	55.809	55.770		mg/L	0.1		20		
	MS	1211472-02	55.809	66.921	10.204	mg/L		109		75 - 125	
	MSD	1211472-02	55.809	66.671	10.204	mg/L	0.4	106	20	75 - 125	
Dissolved Potassium	DUP	1211472-02	13.174	13.125		mg/L	0.4		20		
	MS	1211472-02	13.174	23.677	10.204	mg/L		103		75 - 125	
	MSD	1211472-02	13.174	23.638	10.204	mg/L	0.2	103	20	75 - 125	
QC Batch ID: BVF1752	Used client sample: Y - Description: U-12-W-120625, 06/25/2012 08:43										
Iron (II) Species, Dissolved	DUP	1211472-01	ND	ND		ug/L			10		

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Project: 4186
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Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVF1679						
Hexavalent Chromium	BVF1679-BLK1	ND	ug/L	2.0		
QC Batch ID: BVF1746						
Dissolved Antimony	BVF1746-BLK1	ND	ug/L	100		
Dissolved Arsenic	BVF1746-BLK1	ND	ug/L	50		
Dissolved Barium	BVF1746-BLK1	ND	ug/L	10		
Dissolved Beryllium	BVF1746-BLK1	ND	ug/L	10		
Dissolved Cadmium	BVF1746-BLK1	ND	ug/L	10		
Dissolved Chromium	BVF1746-BLK1	ND	ug/L	10		
Dissolved Cobalt	BVF1746-BLK1	ND	ug/L	50		
Dissolved Copper	BVF1746-BLK1	ND	ug/L	10		
Dissolved Lead	BVF1746-BLK1	ND	ug/L	50		
Dissolved Manganese	BVF1746-BLK1	ND	ug/L	10		
Dissolved Molybdenum	BVF1746-BLK1	ND	ug/L	50		
Dissolved Nickel	BVF1746-BLK2	ND	ug/L	10		
Dissolved Selenium	BVF1746-BLK1	ND	ug/L	100		
Dissolved Silver	BVF1746-BLK1	ND	ug/L	10		
Dissolved Thallium	BVF1746-BLK1	ND	ug/L	100		
Dissolved Vanadium	BVF1746-BLK1	ND	ug/L	10		
Dissolved Zinc	BVF1746-BLK2	ND	ug/L	10		
QC Batch ID: BVF1868						
Total Antimony	BVF1868-BLK1	ND	ug/L	100		
Total Arsenic	BVF1868-BLK1	ND	ug/L	50		
Total Barium	BVF1868-BLK1	ND	ug/L	10		
Total Beryllium	BVF1868-BLK1	ND	ug/L	10		
Total Cadmium	BVF1868-BLK1	ND	ug/L	10		
Total Chromium	BVF1868-BLK1	ND	ug/L	10		
Total Cobalt	BVF1868-BLK1	ND	ug/L	50		
Total Copper	BVF1868-BLK1	ND	ug/L	10		
Total Lead	BVF1868-BLK1	ND	ug/L	50		
Total Molybdenum	BVF1868-BLK1	ND	ug/L	50		
Total Nickel	BVF1868-BLK1	ND	ug/L	10		
Total Selenium	BVF1868-BLK1	ND	ug/L	100		
Total Silver	BVF1868-BLK1	ND	ug/L	10		

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Project: 4186
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Water Analysis (Metals)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVF1868						
Total Thallium	BVF1868-BLK1	ND	ug/L	100		
Total Vanadium	BVF1868-BLK1	ND	ug/L	10		
Total Zinc	BVF1868-BLK1	ND	ug/L	50		
QC Batch ID: BVG0212						
Total Mercury	BVG0212-BLK1	ND	ug/L	0.20		
QC Batch ID: BVG0344						
Dissolved Mercury	BVG0344-BLK1	ND	ug/L	0.20		

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Water Analysis (Metals)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BVF1679										
Hexavalent Chromium	BVF1679-BS1	LCS	51.039	50.000	ug/L	102		85 - 115		
QC Batch ID: BVF1746										
Dissolved Antimony	BVF1746-BS1	LCS	393.85	400.00	ug/L	98.5		85 - 115		
Dissolved Arsenic	BVF1746-BS1	LCS	196.67	200.00	ug/L	98.3		85 - 115		
Dissolved Barium	BVF1746-BS1	LCS	420.03	400.00	ug/L	105		85 - 115		
Dissolved Beryllium	BVF1746-BS1	LCS	212.97	200.00	ug/L	106		85 - 115		
Dissolved Cadmium	BVF1746-BS1	LCS	206.62	200.00	ug/L	103		85 - 115		
Dissolved Chromium	BVF1746-BS1	LCS	210.67	200.00	ug/L	105		85 - 115		
Dissolved Cobalt	BVF1746-BS1	LCS	216.83	200.00	ug/L	108		85 - 115		
Dissolved Copper	BVF1746-BS1	LCS	391.21	400.00	ug/L	97.8		85 - 115		
Dissolved Lead	BVF1746-BS1	LCS	448.03	400.00	ug/L	112		85 - 115		
Dissolved Manganese	BVF1746-BS1	LCS	474.93	500.00	ug/L	95.0		85 - 115		
Dissolved Molybdenum	BVF1746-BS1	LCS	209.86	200.00	ug/L	105		85 - 115		
Dissolved Nickel	BVF1746-BS2	LCS	406.99	400.00	ug/L	102		85 - 115		
Dissolved Selenium	BVF1746-BS1	LCS	193.74	200.00	ug/L	96.9		85 - 115		
Dissolved Silver	BVF1746-BS1	LCS	99.084	100.00	ug/L	99.1		85 - 115		
Dissolved Thallium	BVF1746-BS1	LCS	461.69	400.00	ug/L	115		85 - 115		
Dissolved Vanadium	BVF1746-BS1	LCS	209.85	200.00	ug/L	105		85 - 115		
Dissolved Zinc	BVF1746-BS2	LCS	527.28	500.00	ug/L	105		85 - 115		
QC Batch ID: BVF1868										
Total Antimony	BVF1868-BS1	LCS	396.48	400.00	ug/L	99.1		85 - 115		
Total Arsenic	BVF1868-BS1	LCS	191.57	200.00	ug/L	95.8		85 - 115		
Total Barium	BVF1868-BS1	LCS	400.60	400.00	ug/L	100		85 - 115		
Total Beryllium	BVF1868-BS1	LCS	196.71	200.00	ug/L	98.4		85 - 115		
Total Cadmium	BVF1868-BS1	LCS	193.10	200.00	ug/L	96.5		85 - 115		
Total Chromium	BVF1868-BS1	LCS	196.13	200.00	ug/L	98.1		85 - 115		
Total Cobalt	BVF1868-BS1	LCS	204.13	200.00	ug/L	102		85 - 115		
Total Copper	BVF1868-BS1	LCS	386.69	400.00	ug/L	96.7		85 - 115		
Total Lead	BVF1868-BS1	LCS	419.69	400.00	ug/L	105		85 - 115		
Total Molybdenum	BVF1868-BS1	LCS	201.11	200.00	ug/L	101		85 - 115		
Total Nickel	BVF1868-BS1	LCS	399.57	400.00	ug/L	99.9		85 - 115		
Total Selenium	BVF1868-BS1	LCS	199.64	200.00	ug/L	99.8		85 - 115		
Total Silver	BVF1868-BS1	LCS	92.416	100.00	ug/L	92.4		85 - 115		

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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	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BVF1868										
Total Thallium	BVF1868-BS1	LCS	436.60	400.00	ug/L	109		85 - 115		
Total Vanadium	BVF1868-BS1	LCS	191.88	200.00	ug/L	95.9		85 - 115		
Total Zinc	BVF1868-BS1	LCS	518.43	500.00	ug/L	104		85 - 115		
QC Batch ID: BVG0212										
Total Mercury	BVG0212-BS1	LCS	1.0000	1.0000	ug/L	100		85 - 115		
QC Batch ID: BVG0344										
Dissolved Mercury	BVG0344-BS1	LCS	1.0150	1.0000	ug/L	102		85 - 115		

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Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BVF1679	Used client sample: Y - Description: U-13-W-120625, 06/25/2012 09:26										
Hexavalent Chromium	DUP	1211472-02	5.7320	5.7390		ug/L	0.1		10		
	MS	1211472-02	5.7320	56.566	52.632	ug/L		96.6		85 - 115	
	MSD	1211472-02	5.7320	56.567	52.632	ug/L	0.0	96.6	10	85 - 115	
QC Batch ID: BVF1746	Used client sample: Y - Description: U-13-W-120625, 06/25/2012 09:26										
Dissolved Antimony	DUP	1211472-02	ND	ND		ug/L			20		
	MS	1211472-02	ND	368.92	408.16	ug/L		90.4		75 - 125	
	MSD	1211472-02	ND	390.99	408.16	ug/L	5.8	95.8	20	75 - 125	
Dissolved Arsenic	DUP	1211472-02	ND	ND		ug/L			20		
	MS	1211472-02	ND	209.18	204.08	ug/L		102		75 - 125	
	MSD	1211472-02	ND	208.97	204.08	ug/L	0.1	102	20	75 - 125	
Dissolved Barium	DUP	1211472-02	235.51	233.52		ug/L	0.8		20		
	MS	1211472-02	235.51	674.16	408.16	ug/L		107		75 - 125	
	MSD	1211472-02	235.51	667.09	408.16	ug/L	1.1	106	20	75 - 125	
Dissolved Beryllium	DUP	1211472-02	ND	ND		ug/L			20		
	MS	1211472-02	ND	222.96	204.08	ug/L		109		75 - 125	
	MSD	1211472-02	ND	223.71	204.08	ug/L	0.3	110	20	75 - 125	
Dissolved Cadmium	DUP	1211472-02	ND	ND		ug/L			20		
	MS	1211472-02	ND	213.86	204.08	ug/L		105		75 - 125	
	MSD	1211472-02	ND	217.29	204.08	ug/L	1.6	106	20	75 - 125	
Dissolved Chromium	DUP	1211472-02	8.8970	ND		ug/L			20		
	MS	1211472-02	8.8970	222.02	204.08	ug/L		104		75 - 125	
	MSD	1211472-02	8.8970	223.00	204.08	ug/L	0.4	105	20	75 - 125	
Dissolved Cobalt	DUP	1211472-02	ND	ND		ug/L			20		
	MS	1211472-02	ND	209.33	204.08	ug/L		103		75 - 125	
	MSD	1211472-02	ND	212.67	204.08	ug/L	1.6	104	20	75 - 125	
Dissolved Copper	DUP	1211472-02	ND	ND		ug/L			20		
	MS	1211472-02	ND	399.24	408.16	ug/L		97.8		75 - 125	
	MSD	1211472-02	ND	404.34	408.16	ug/L	1.3	99.1	20	75 - 125	
Dissolved Lead	DUP	1211472-02	ND	ND		ug/L			20		
	MS	1211472-02	ND	447.39	408.16	ug/L		110		75 - 125	
	MSD	1211472-02	ND	451.29	408.16	ug/L	0.9	111	20	75 - 125	
Dissolved Manganese	DUP	1211472-02	3.4234	ND		ug/L			20		
	MS	1211472-02	3.4234	511.48	510.20	ug/L		99.6		75 - 125	
	MSD	1211472-02	3.4234	525.72	510.20	ug/L	2.7	102	20	75 - 125	
Dissolved Molybdenum	DUP	1211472-02	5.6119	ND		ug/L			20		
	MS	1211472-02	5.6119	218.53	204.08	ug/L		104		75 - 125	
	MSD	1211472-02	5.6119	223.03	204.08	ug/L	2.0	107	20	75 - 125	

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Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BVF1746	Used client sample: Y - Description: U-13-W-120625, 06/25/2012 09:26										
Dissolved Nickel	DUP	1211472-02	2.0006	ND		ug/L			20		
	MS	1211472-02	2.0006	396.99	408.16	ug/L		96.8		75 - 125	
	MSD	1211472-02	2.0006	406.26	408.16	ug/L	2.3	99.0	20	75 - 125	
Dissolved Selenium	DUP	1211472-02	ND	ND		ug/L			20		
	MS	1211472-02	ND	219.77	204.08	ug/L		108		75 - 125	
	MSD	1211472-02	ND	222.69	204.08	ug/L	1.3	109	20	75 - 125	
Dissolved Silver	DUP	1211472-02	ND	ND		ug/L			20		
	MS	1211472-02	ND	100.91	102.04	ug/L		98.9		75 - 125	
	MSD	1211472-02	ND	100.64	102.04	ug/L	0.3	98.6	20	75 - 125	
Dissolved Thallium	DUP	1211472-02	ND	ND		ug/L			20		
	MS	1211472-02	ND	449.72	408.16	ug/L		110		75 - 125	
	MSD	1211472-02	ND	452.19	408.16	ug/L	0.5	111	20	75 - 125	
Dissolved Vanadium	DUP	1211472-02	1.4151	ND		ug/L			20		A02
	MS	1211472-02	1.4151	222.51	204.08	ug/L		108		75 - 125	
	MSD	1211472-02	1.4151	220.17	204.08	ug/L	1.1	107	20	75 - 125	
Dissolved Zinc	DUP	1211472-02	ND	ND		ug/L			20		
	MS	1211472-02	ND	558.45	510.20	ug/L		109		75 - 125	
	MSD	1211472-02	ND	553.22	510.20	ug/L	0.9	108	20	75 - 125	
QC Batch ID: BVF1868	Used client sample: N										
Total Antimony	DUP	1211407-02	ND	ND		ug/L			20		
	MS	1211407-02	ND	ND	400.00	ug/L		96.6		75 - 125	
	MSD	1211407-02	ND	ND	400.00	ug/L	17.3	81.2	20	75 - 125	
Total Arsenic	DUP	1211407-02	ND	ND		ug/L			20		
	MS	1211407-02	ND	ND	200.00	ug/L		76.1		75 - 125	
	MSD	1211407-02	ND	ND	200.00	ug/L	18.7	91.8	20	75 - 125	
Total Barium	DUP	1211407-02	46.503	ND		ug/L			20		
	MS	1211407-02	46.503	441.99	400.00	ug/L		98.9		75 - 125	
	MSD	1211407-02	46.503	449.73	400.00	ug/L	1.7	101	20	75 - 125	
Total Beryllium	DUP	1211407-02	ND	ND		ug/L			20		
	MS	1211407-02	ND	216.40	200.00	ug/L		108		75 - 125	
	MSD	1211407-02	ND	209.76	200.00	ug/L	3.1	105	20	75 - 125	
Total Cadmium	DUP	1211407-02	ND	ND		ug/L			20		
	MS	1211407-02	ND	182.81	200.00	ug/L		91.4		75 - 125	
	MSD	1211407-02	ND	174.09	200.00	ug/L	4.9	87.0	20	75 - 125	
Total Chromium	DUP	1211407-02	14.274	ND		ug/L			20		
	MS	1211407-02	14.274	214.51	200.00	ug/L		100		75 - 125	
	MSD	1211407-02	14.274	206.91	200.00	ug/L	3.6	96.3	20	75 - 125	

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Water Analysis (Metals)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BVF1868	Used client sample: N										
Total Cobalt	DUP	1211407-02	ND	ND		ug/L			20		
	MS	1211407-02	ND	ND	200.00	ug/L		113		75 - 125	
	MSD	1211407-02	ND	ND	200.00	ug/L	4.2	109	20	75 - 125	
Total Copper	DUP	1211407-02	ND	ND		ug/L			20		
	MS	1211407-02	ND	404.24	400.00	ug/L		101		75 - 125	
	MSD	1211407-02	ND	394.64	400.00	ug/L	2.4	98.7	20	75 - 125	
Total Lead	DUP	1211407-02	77.236	ND		ug/L			20		A02
	MS	1211407-02	77.236	ND	400.00	ug/L		102		75 - 125	
	MSD	1211407-02	77.236	ND	400.00	ug/L	10.1	90.0	20	75 - 125	
Total Molybdenum	DUP	1211407-02	ND	ND		ug/L			20		
	MS	1211407-02	ND	ND	200.00	ug/L		130		75 - 125	Q03
	MSD	1211407-02	ND	ND	200.00	ug/L	5.1	124	20	75 - 125	
Total Nickel	DUP	1211407-02	21.463	ND		ug/L			20		
	MS	1211407-02	21.463	422.53	400.00	ug/L		100		75 - 125	
	MSD	1211407-02	21.463	403.52	400.00	ug/L	4.6	95.5	20	75 - 125	
Total Selenium	DUP	1211407-02	ND	ND		ug/L			20		
	MS	1211407-02	ND	ND	200.00	ug/L		83.5		75 - 125	
	MSD	1211407-02	ND	ND	200.00	ug/L	38.6	123	20	75 - 125	Q02
Total Silver	DUP	1211407-02	ND	ND		ug/L			20		
	MS	1211407-02	ND	102.13	100.00	ug/L		102		75 - 125	
	MSD	1211407-02	ND	102.25	100.00	ug/L	0.1	102	20	75 - 125	
Total Thallium	DUP	1211407-02	ND	ND		ug/L			20		
	MS	1211407-02	ND	ND	400.00	ug/L		103		75 - 125	
	MSD	1211407-02	ND	ND	400.00	ug/L	4.9	98.3	20	75 - 125	
Total Vanadium	DUP	1211407-02	ND	ND		ug/L			20		
	MS	1211407-02	ND	208.40	200.00	ug/L		104		75 - 125	
	MSD	1211407-02	ND	196.03	200.00	ug/L	6.1	98.0	20	75 - 125	
Total Zinc	DUP	1211407-02	ND	ND		ug/L			20		
	MS	1211407-02	ND	592.11	500.00	ug/L		118		75 - 125	
	MSD	1211407-02	ND	577.12	500.00	ug/L	2.6	115	20	75 - 125	
QC Batch ID: BVG0212	Used client sample: N										
Total Mercury	DUP	1211407-03	ND	0.96500		ug/L			20		
	MS	1211407-03	ND	0.99000	1.0000	ug/L		99.0		70 - 130	
	MSD	1211407-03	ND	0.98250	1.0000	ug/L	0.8	98.2	20	70 - 130	
QC Batch ID: BVG0344	Used client sample: N										
Dissolved Mercury	DUP	1211782-01	ND	ND		ug/L			20		
	MS	1211782-01	ND	1.0250	1.0000	ug/L		102		70 - 130	
	MSD	1211782-01	ND	1.0325	1.0000	ug/L	0.7	103	20	70 - 130	

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Notes And Definitions

MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A02	The difference between duplicate readings is less than the PQL.
A03	The sample concentration is more than 4 times the spike level.
Q02	Matrix spike precision is not within the control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A GEO_REPORT FILE

SUCCESS

Your GEO_REPORT file has been successfully submitted!

Submittal Type:	GEO_REPORT
Report Title:	351721 - 2012SA1 Groundwater Monitoring Report
Report Type:	Monitoring Report - Semi-Annually
Report Date:	8/10/2012
Facility Global ID:	T0600101777
Facility Name:	UNOCAL #4186
File Name:	351721_GMR_2012SA1_FINAL_08102012.pdf
Organization Name:	ARCADIS
Username:	ARCADIS76
IP Address:	216.207.98.101
Submittal Date/Time:	8/10/2012 10:24:50 AM
Confirmation Number:	2283497631

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Report Title:	**351721 - GEO_WELL - 2012SA1**
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:	**8/9/2012 3:38:40 PM**
Confirmation Number:	**4024198174**

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Submittal Type:	**EDF**
Report Title:	**351721 - Lab Data - 2Q2012 - 1 of 2**
Report Type:	**Monitoring Report - Semi-Annually**
Facility Global ID:	**T0600101777**
Facility Name:	**UNOCAL #4186**
File Name:	**EDD_BCLabs_1211472_EDF2.zip**
Organization Name:	**ARCADIS**
Username:	**ARCADIS76**
IP Address:	**216.207.98.101**
Submittal Date/Time:	**8/9/2012 3:40:50 PM**
Confirmation Number:	**8162870287**

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STATE WATER RESOURCES CONTROL BOARD

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Submittal Type:	**EDF**
Report Title:	**351721 - Lab Data - 2Q2012 - 2 of 2**
Report Type:	**Monitoring Report - Semi-Annually**
Facility Global ID:	**T0600101777**
Facility Name:	**UNOCAL #4186**
File Name:	**EDD_BCLabs_1211580_EDF2.zip**
Organization Name:	**ARCADIS**
Username:	**ARCADIS76**
IP Address:	**216.207.98.101**
Submittal Date/Time:	**8/9/2012 3:41:36 PM**
Confirmation Number:	**9525497376**

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