

Atlantic Richfield Company

Chuck Carmel
Environmental Business Manager

RECEIVED

9:03 am, Jan 06, 2010

Alameda County
Environmental Health

PO Box 1257
San Ramon, CA 94583
Phone: (925) 275-3803
Fax: (925) 275-3815
E-Mail: charles.carmel@bp.com

5 January 2010

Re: Fourth Quarter 2009 Semi-Annual Ground-Water Monitoring Report
Atlantic Richfield Company Station #6113
785 East Stanley Boulevard, Livermore, California
ACEH Case #RO0000393

"I declare, that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct.

Submitted by,



Chuck Carmel
Environmental Business Manager

Attachment:

**Fourth Quarter 2009 Semi-Annual
Ground-Water Monitoring Report**
Atlantic Richfield Company Station #6113
785 East Stanley Boulevard, Livermore, California
ACEH Case #RO0000393

Prepared for

Mr. Chuck Carmel
Environmental Business Manager
Atlantic Richfield Company
P.O. Box 1257
San Ramon, California 94583

Prepared by



1324 Mangrove Avenue, Suite 212
Chico, California 95926
(530) 566-1400
www.broadbentinc.com

5 January 2010

Project No. 06-82-637

5 January 2010

Project No. 06-82-637

Atlantic Richfield Company
P.O. Box 1257
San Ramon, CA 94583
Submitted via ENFOS

Attn.: Mr. Chuck Carmel

Re: Fourth Quarter 2009 Semi-Annual Ground-Water Monitoring Report, Atlantic Richfield Company Station #6113, 785 East Stanley Boulevard, Livermore, California;
ACEH Case #RO0000393

Dear Mr. Carmel:

Attached is the *Fourth Quarter 2009 Semi-Annual Ground-Water Monitoring Report* for Atlantic Richfield Company (a BP affiliated company) Station #6113 located at 785 East Stanley Boulevard, Livermore, California (Site). This report presents results of ground-water monitoring conducted at the Site during the Fourth Quarter of 2009.

Should you have questions regarding the work performed or results obtained, please do not hesitate to contact me at (530) 566-1400.

Sincerely,

BROADBENT & ASSOCIATES, INC.



Thomas A. Venus, P.E.
Senior Engineer



Enclosures

cc: Mr. Paresh Khatri, Alameda County Environmental Health (submitted via ACEH ftp site)
Mr. Paul M. Smith/Ms. Danielle Stefani, Livermore-Pleasanton Fire Department
(submitted via GeoTracker)
Electronic copy uploaded to GeoTracker

STATION # 6113 SEMI-ANNUAL GROUND-WATER MONITORING REPORT

Facility: 6113	Address:	785 East Stanley Boulevard, Livermore, CA
Environmental Business Manager:		Mr. Chuck Carmel
Consulting Co./Contact Person:		Broadbent & Associates, Inc. (BAI) / Mr. Tom Venus, PE (530) 566-1400
Primary Agency/Regulatory ID No.:		Alameda County Environmental Health (ACEH) / ACEH Case #RO0000393
Consultant Project No.:		06-82-637
Facility Permits/Permitting Agency.:		NA

WORK PERFORMED THIS QUARTER (Fourth Quarter 2009):

1. Submitted *Third Quarter 2009 Status Report* (BAI, 10/26/2009).
2. Conducted ground-water monitoring/sampling for Fourth Quarter 2009. Work performed on 9 November 2009 by BAI.

WORK PROPOSED FOR NEXT QUARTER (First Quarter 2010):

1. Prepare and submit this *Fourth Quarter 2009 Semi-Annual Ground-Water Monitoring Report* (contained herein).
2. Install replacement well MW-13R in accordance with *Replacement Well Work Plan* (BAI, 9/4/2009).
3. No ground-water monitoring/sampling activities are scheduled at the Site during the First Quarter 2010.

QUARTERLY RESULTS SUMMARY:

Current phase of project:	Ground-water monitoring/sampling
Frequency of ground-water monitoring:	Semi-Annually (2Q and 4Q): Wells MW-2, MW-4, MW-7, MW-9, MW-11, MW-12, VW-1, VW-2, VW-4
Frequency of ground-water sampling:	Semi-Annually (2Q and 4Q): Wells MW-4, MW-7, MW-11, MW-12, VW-1 Annually (4Q): Well MW-9
Is free product (FP) present on-site:	No
FP recovered this quarter:	NA
Bulk Soil Removed to Date:	288 cubic yards TPH impacted soil
Current remediation techniques:	Air Diffusion (discontinued in September 2008 as a result of station raze and rebuild activities)
Depth to ground water (below TOC):	20.69 ft (MW-9) to 23.74 ft (MW-12)
General ground-water flow direction:	Northeast
Approximate hydraulic gradient:	0.02 ft/ft

DISCUSSION:

Fourth quarter 2009 ground-water monitoring and sampling was conducted at Station #6113 on 9 November 2009 by BAI personnel. Water levels were gauged in the nine wells currently associated with the Site. No irregularities were noted during water level gauging. Depth to water measurements ranged from 20.69 ft at MW-9 to 23.74 ft at MW-12. Resulting ground-water surface elevations ranged from 438.20 ft above datum (NAVD88) in well MW-2 to 433.63 ft at well MW-12. Water level elevations are summarized in Table 1. Water level elevations yielded a potentiometric ground-water flow

direction and gradient to the northeast at approximately 0.02 ft/ft, generally consistent with previous monitoring events (see Table 3). Ground-water monitoring field data sheets are provided within Appendix A. Measured depths to ground water and respective ground-water elevations are summarized in Table 1. A Site Location Map is provided as Drawing 1. Potentiometric ground-water elevation contours are presented in Drawing 2.

Ground-water samples were collected from wells MW-4, MW-7, MW-9, MW-11, MW-12, and VW-1. No irregularities were reported during sampling. Samples were submitted under chain-of-custody protocol to Calscience Environmental Laboratories, Inc. (Garden Grove, California), for analysis of Gasoline Range Organics (GRO, C6-12) by EPA Method 8015B; for Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) by EPA Method 8260B; and Methyl Tert-Butyl Ether (MTBE), Ethyl Tert-Butyl Ether (ETBE), Tert-Amyl Methyl Ether (TAME), Di-Isopropyl Ether (DIPE), 1,2-Dibromomethane (EDB), 1,2-Dichloroethane (1,2-DCA), Tert-Butyl Alcohol (TBA) and Ethanol by EPA Method 8260B. The laboratory reported that GRO analysis of samples MW-4 and VW-1 indicated unknown hydrocarbon(s) present based on gasoline. No other significant irregularities were encountered during laboratory analysis of the samples. Ground-water sampling field data sheets and the laboratory analytical report, including chain-of-custody documentation, are provided in Appendix A.

Concentrations of GRO were detected above the laboratory reporting limit in two of the six wells sampled at concentrations of 270 micrograms per liter ($\mu\text{g/L}$) in well MW-4 and 230 $\mu\text{g/L}$ in well VW-1. Benzene was detected above the laboratory reporting limit in wells MW-4 and VW-1 at concentrations of 4.6 $\mu\text{g/L}$ and 1.8 $\mu\text{g/L}$, respectively. MTBE was detected above the laboratory reporting limit in three of the six wells sampled at concentrations up to 12 $\mu\text{g/L}$ in well MW-11. TBA was detected in well MW-4 at a concentration of 12 $\mu\text{g/L}$. The remaining fuel additives and oxygenates were not detected above their laboratory reporting limits in the six wells sampled this quarter. Laboratory analytical results are summarized in Table 1 and Table 2. The most recent GRO, Benzene, and MTBE concentrations are also presented in Drawing 2. Ground-water monitoring data (GEO_WELL) and laboratory analytical results (EDF) were uploaded to the GeoTracker AB2886 database. Upload confirmation receipts are provided in Appendix B.

CONCLUSIONS AND RECOMMENDATIONS:

Results of Fourth Quarter 2009 ground-water sampling activities indicate dissolved constituent concentrations remain relatively consistent with those observed during previous quarters. Ground-water elevations increased approximately 10 feet across the property relative to the Second Quarter 2009 monitoring event. The ground-water flow direction remains generally consistent with prior directions (northeasterly) and the gradient magnitude is consistent with those previously observed.

As stated in prior reports, Station #6113 has been sold. The new property owner has recently completed raze and rebuild activities. With approval from the ACEH (email dated 5 June 2008) wells MW-1 and MW-8 were properly abandoned and destroyed in June 2008 as these wells were within the footprint of the new station building. With approval from the ACEH (email dated 18 August 2008) wells MW-3, MW-6, MW-10, and MW-13 were properly abandoned and destroyed in September 2008 to facilitate construction activities associated with the raze and rebuild. Abandonment/destruction of wells MW-6, MW-10, and MW-13 was required to allow for the widening of East Stanley Boulevard and abandonment/destruction of MW-3 was necessary as the well was within the construction demolition area of the Site.

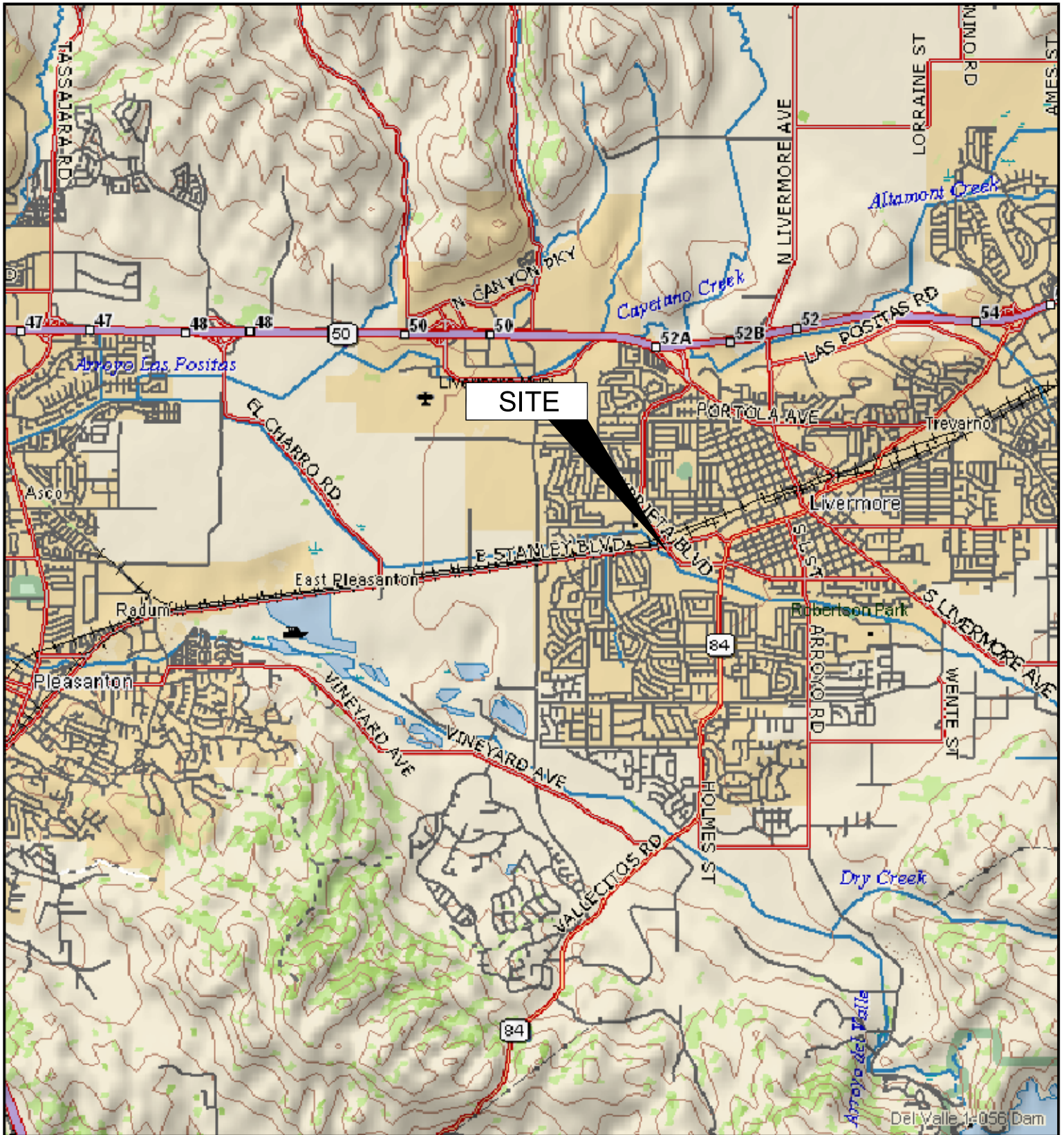
It is recommended that ground-water monitoring/sampling continue on a semi-annual basis in accordance with the plan detailed on page 1 (frequency of ground-water monitoring and sampling).

CLOSURE:

The findings presented in this report are based upon: observations of Broadbent & Associates, Inc. and/or their subcontractors' field personnel (see Appendix A), the points investigated, and results of laboratory tests performed by Calscience (Garden Grove, CA). Our services were performed in accordance with the generally accepted standard of practice at the time this report was written. No other warranty, expressed or implied was made. This report has been prepared for the exclusive use of Atlantic Richfield Company. It is possible that variations in soil or ground-water conditions could exist beyond points explored in this investigation. Also, changes in site conditions could occur in the future due to variations in rainfall, temperature, regional water usage, or other factors.

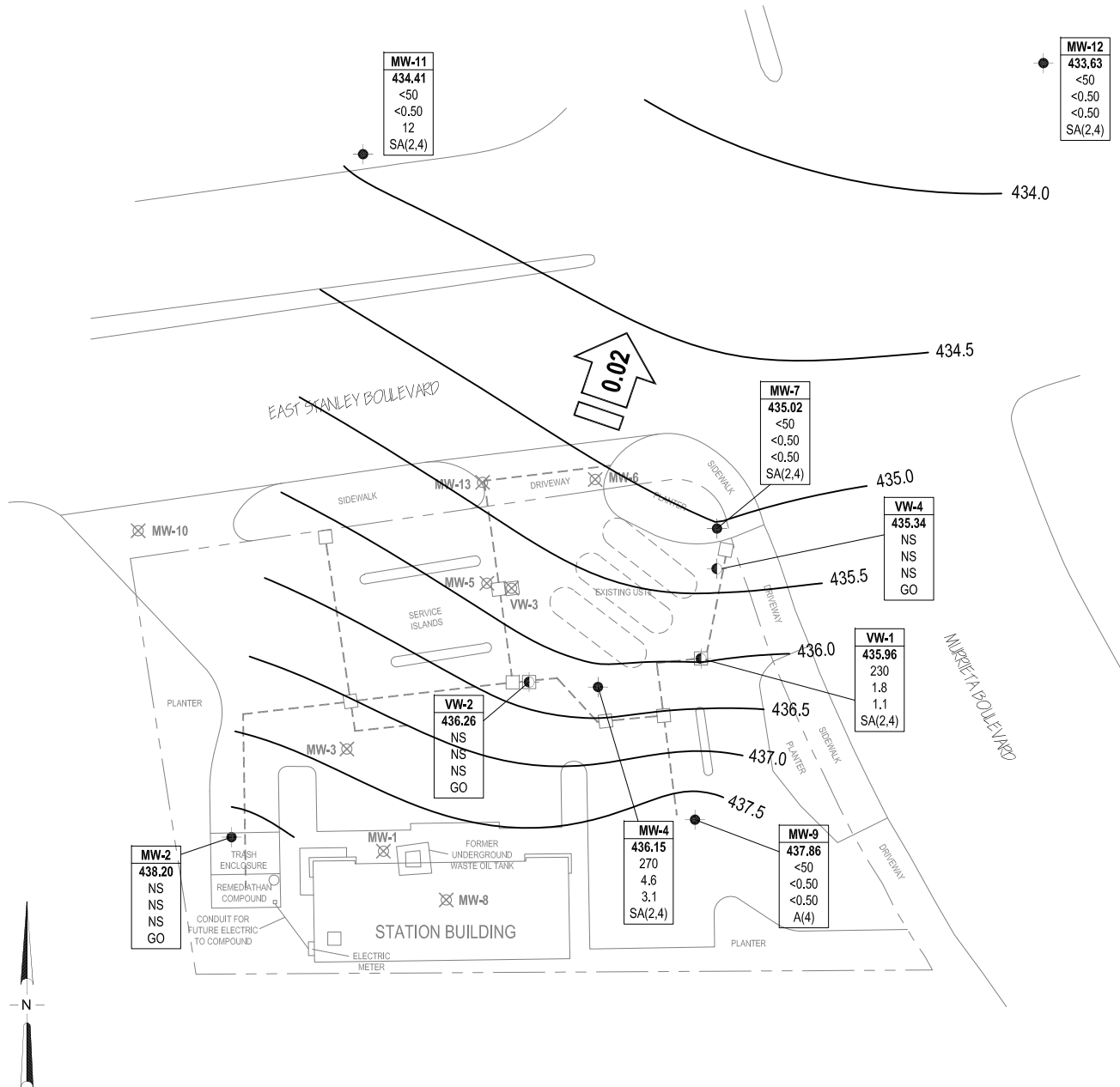
ATTACHMENTS:

- Drawing 1. Site Location Map, Station #6113, 785 East Stanley Boulevard, Livermore, California
- Drawing 2. Ground-Water Elevation Contour and Analytical Summary Map, 9 November 2009, Station #6113, 785 East Stanley Boulevard, Livermore, California
- Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses, Station #6113, 785 East Stanley Boulevard, Livermore, California
- Table 2. Summary of Fuel Additives Analytical Data, Station #6113, 785 East Stanley Boulevard, Livermore, California
- Table 3. Historical Ground-Water Flow Direction and Gradient, Station #6113, 785 East Stanley Boulevard, Livermore, California
- Appendix A. BAI Ground-Water Sampling Data Package (Field Data Sheets, Certified Analytical Results with Chain-of-Custody Documentation, and Field Procedures)
- Appendix B. GeoTracker Upload Confirmation Receipts



APPROXIMATE SCALE (mi)

IMAGE SOURCE: DELORME



LEGEND

- Monitoring well
- Vapor extraction well
- Abandoned well
- 434.0 Ground-water elevation contour (ft/MSL)

Well	Well Designation
ELEV	Ground-water Elevation
GRO	GRO, Benzene and MTBE concentration (µg/L)
Benzene	
MTBE	
A/SA	Sampling frequency
A(4)	Sampled annually, 4th quarter
SA(2,4)	Semi-annual sampling, 2nd and 4th quarters
GO	Gauge only
NS	Not Sampled
NM	Not Measured

- Approximate ground-water flow direction and gradient (ft/ft)
- Vault box
- Piping trench

NOTE: SITE MAP ADAPTED FROM CAMBRIA ENVIRONMENTAL FIGURES. SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.



BROADBENT & ASSOCIATES, INC.
 ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
 1324 Mangrove Ave, Suite 212, Chico, California 95926
 Project No.: 06-82-637 Date: 12/23/2009

Station #6113
 785 East Stanley Boulevard
 Livermore, California

Ground-Water Elevation Contour
 and Analytical Summary Map
 November 9, 2009

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #6113, 785 East Stanley Blvd., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-1															
3/23/1995	--	e	457.04	29.0	44.0	14.12	442.92	--	--	--	--	--	--	--	--
5/31/1995	--	e	457.04	29.0	44.0	14.45	442.59	--	--	--	--	--	--	--	--
8/31/1995	--	e	457.04	29.0	44.0	17.12	439.92	--	--	--	--	--	--	--	--
11/28/1995	--		457.04	29.0	44.0	16.34	440.70	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/22/1996	--	e	457.04	29.0	44.0	13.23	443.81	--	--	--	--	--	--	--	--
5/23/1996	--	e	457.04	29.0	44.0	14.02	443.02	--	--	--	--	--	--	--	--
8/8/1996	--	e	457.04	29.0	44.0	16.13	440.91	--	--	--	--	--	--	--	--
11/7/1996	--		457.04	29.0	44.0	17.28	439.76	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
3/27/1997	--	e	457.04	29.0	44.0	14.91	442.13	--	--	--	--	--	--	--	--
5/19/1997	--	e	457.04	29.0	44.0	16.47	440.57	--	--	--	--	--	--	--	--
5/18/1998	--	e	457.04	29.0	44.0	14.69	442.35	--	--	--	--	--	--	--	--
11/2/1998	--		457.04	29.0	44.0	25.94	431.10	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
6/4/1999	--	e	457.04	29.0	44.0	17.38	439.66	--	--	--	--	--	--	--	--
11/11/1999	P		457.04	29.0	44.0	18.63	438.41	<50	<0.5	<0.5	<0.5	<1	<3	1.03	--
6/20/2000	--	e	457.04	29.0	44.0	17.09	439.95	--	--	--	--	--	--	3.1	--
8/29/2000	--	e	457.04	29.0	44.0	18.20	438.84	--	--	--	--	--	--	2.66	--
11/29/2000	P		457.04	29.0	44.0	20.30	436.74	<50.0	<0.500	<0.500	<0.500	1.36	<2.50	0.71	--
5/2/2001	--	e	457.04	29.0	44.0	22.39	434.65	--	--	--	--	--	--	--	--
8/15/2001	--	e	457.04	29.0	44.0	24.97	432.07	--	--	--	--	--	--	--	--
10/5/2001	P		457.04	29.0	44.0	25.09	431.95	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.78	--
1/21/2002	--	e	457.04	29.0	44.0	24.58	432.46	--	--	--	--	--	--	--	--
4/26/2002	--	e	457.04	29.0	44.0	24.19	432.85	--	--	--	--	--	--	--	--
10/7/2002	--		457.04	29.0	44.0	20.13	436.91	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.8	--
05/01/2003	--	r	457.04	29.0	44.0	17.98	439.06	--	--	--	--	--	--	--	--
10/27/2005	--		459.41	29.0	44.0	18.45	440.96	--	--	--	--	--	--	--	--
04/12/2006	--		459.41	29.0	44.0	15.18	444.23	--	--	--	--	--	--	--	--
10/31/2006	--		459.41	29.0	44.0	19.18	440.23	--	--	--	--	--	--	--	--
4/19/2007	--		459.41	29.0	44.0	23.20	436.21	--	--	--	--	--	--	--	--
10/16/2007	--		459.41	29.0	44.0	38.28	421.13	--	--	--	--	--	--	--	--
4/24/2008	--		459.41	29.0	44.0	25.97	433.44	--	--	--	--	--	--	--	--
6/18/2008	--	k	--	29.0	44.0	--	--	--	--	--	--	--	--	--	--

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #6113, 785 East Stanley Blvd., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-1															
MW-2															
3/23/1995	--		457.74	28.0	38.0	14.15	443.59	--	--	--	--	--	--	--	--
5/31/1995	--	e	457.74	28.0	38.0	14.67	443.07	--	--	--	--	--	--	--	--
8/31/1995	--	e	457.74	28.0	38.0	17.24	440.50	--	--	--	--	--	--	--	--
11/28/1995	--		457.74	28.0	38.0	16.40	441.34	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/22/1996	--	e	457.74	28.0	38.0	13.55	444.19	--	--	--	--	--	--	--	--
5/23/1996	--	e	457.74	28.0	38.0	14.29	443.45	--	--	--	--	--	--	--	--
8/8/1996	--	e	457.74	28.0	38.0	16.19	441.55	--	--	--	--	--	--	--	--
11/7/1996	--		457.74	28.0	38.0	17.50	440.24	65	0.6	7.4	2.1	12	5	--	--
3/27/1997	--	e	457.74	28.0	38.0	15.32	442.42	--	--	--	--	--	--	--	--
5/19/1997	--	e	457.74	28.0	38.0	16.62	441.12	--	--	--	--	--	--	--	--
5/18/1998	--	e	457.74	28.0	38.0	15.12	442.62	--	--	--	--	--	--	--	--
11/2/1998	--		457.74	28.0	38.0	26.66	431.08	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
6/4/1999	--	e	457.74	28.0	38.0	17.74	440.00	--	--	--	--	--	--	--	--
11/11/1999	P		457.74	28.0	38.0	18.75	438.99	<50	<0.5	<0.5	<0.5	<1	<3	0.82	--
6/20/2000	--	e	457.74	28.0	38.0	17.21	440.53	--	--	--	--	--	--	2.6	--
8/29/2000	--	e	457.74	28.0	38.0	18.25	439.49	--	--	--	--	--	--	2.65	--
11/29/2000	P		457.74	28.0	38.0	20.69	437.05	<50.0	<0.500	0.581	0.827	4.38	<2.50	0.88	--
5/2/2001	--	e	457.74	28.0	38.0	22.69	435.05	--	--	--	--	--	--	--	--
8/15/2001	--	e	457.74	28.0	38.0	25.15	432.59	--	--	--	--	--	--	--	--
10/5/2001	P		457.74	28.0	38.0	25.22	432.52	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.8	--
1/21/2002	--	e	457.74	28.0	38.0	24.70	433.04	--	--	--	--	--	--	--	--
4/26/2002	--	e	457.74	28.0	38.0	24.53	433.21	--	--	--	--	--	--	--	--
10/7/2002	--		457.74	28.0	38.0	19.45	438.29	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.5	--
05/01/2003	--	r	457.74	28.0	38.0	18.18	439.56	--	--	--	--	--	--	--	--
10/27/2005	--	t	460.07	28.0	38.0	--	--	--	--	--	--	--	--	--	--
04/12/2006	--		460.07	28.0	38.0	15.30	444.77	--	--	--	--	--	--	--	--
10/31/2006	--		460.07	28.0	38.0	19.48	440.59	--	--	--	--	--	--	--	--
4/19/2007	--		460.07	28.0	38.0	23.85	436.22	--	--	--	--	--	--	--	--
10/16/2007	--		460.07	28.0	38.0	36.78	423.29	--	--	--	--	--	--	--	--

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #6113, 785 East Stanley Blvd., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-2 Cont.															
4/24/2008	--		460.07	28.0	38.0	26.38	433.69	--	--	--	--	--	--	--	--
10/15/2008	--		460.07	28.0	38.0	37.21	422.86	--	--	--	--	--	--	--	--
4/28/2009	--		460.07	28.0	38.0	33.30	426.77	--	--	--	--	--	--	--	--
11/9/2009	--		460.07	28.0	38.0	21.87	438.20	--	--	--	--	--	--	--	--
MW-3															
3/23/1995	--	e	456.97	28.5	38.5	14.13	442.84	--	--	--	--	--	--	--	--
5/31/1995	--	e	456.97	28.5	38.5	14.46	442.51	--	--	--	--	--	--	--	--
8/31/1995	--	e	456.97	28.5	38.5	17.06	439.91	--	--	--	--	--	--	--	--
11/28/1995	--		456.97	28.5	38.5	16.27	440.70	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/22/1996	--	e	456.97	28.5	38.5	13.14	443.83	--	--	--	--	--	--	--	--
5/23/1996	--	e	456.97	28.5	38.5	13.95	443.02	--	--	--	--	--	--	--	--
8/8/1996	--	e	456.97	28.5	38.5	16.03	440.94	--	--	--	--	--	--	--	--
11/7/1996	--		456.97	28.5	38.5	17.26	439.71	<50	<0.5	0.9	<0.5	1.5	<3	--	--
3/27/1997	--	e	456.97	28.5	38.5	14.85	442.12	--	--	--	--	--	--	--	--
5/19/1997	--	e	456.97	28.5	38.5	16.40	440.57	--	--	--	--	--	--	--	--
5/18/1998	--	e	456.97	28.5	38.5	14.66	442.31	--	--	--	--	--	--	--	--
11/2/1998	--		456.97	28.5	38.5	25.85	431.12	<1,000	<10	<10	<10	<10	1,700	--	--
6/4/1999	--	e	456.97	28.5	38.5	17.35	439.62	--	--	--	--	--	--	--	--
11/11/1999	P		456.97	28.5	38.5	18.58	438.39	<50	<0.5	<0.5	<0.5	<1	<3	0.79	--
6/20/2000	--	e	456.97	28.5	38.5	17.03	439.94	--	--	--	--	--	--	2.8	--
8/29/2000	--	e	456.97	28.5	38.5	18.25	438.72	--	--	--	--	--	--	3.39	--
11/29/2000	--		456.97	28.5	38.5	20.27	436.70	<50.0	<0.500	<0.500	1.08	3.34	<2.50	0.67	--
5/2/2001	--	e	456.97	28.5	38.5	22.33	434.64	--	--	--	--	--	--	--	--
8/15/2001	--	e	456.97	28.5	38.5	25.03	431.94	--	--	--	--	--	--	--	--
10/5/2001	P		456.97	28.5	38.5	25.17	431.80	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.79	--
1/21/2002	--	e	456.97	28.5	38.5	24.79	432.18	--	--	--	--	--	--	--	--
4/26/2002	--	e	456.97	28.5	38.5	24.27	432.70	--	--	--	--	--	--	--	--
10/7/2002	--		456.97	28.5	38.5	20.20	436.77	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	--
05/01/2003	--	c, e	456.97	28.5	38.5	18.27	438.70	--	--	--	--	--	--	--	--
10/03/2003	P	d	456.97	28.5	38.5	20.07	436.90	<50	<0.50	<0.50	<0.50	<0.50	<0.50	5.2	7.3

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #6113, 785 East Stanley Blvd., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-3 Cont.															
04/06/2004	--	e	459.32	28.5	38.5	17.24	442.08	--	--	--	--	--	--	--	--
10/28/2004	P		459.32	28.5	38.5	19.38	439.94	<50	<0.50	<0.50	<0.50	<0.50	<0.50	8.1	7.3
04/13/2005	--		459.32	28.5	38.5	16.02	443.30	--	--	--	--	--	--	--	--
10/27/2005	--	t	459.32	28.5	38.5	--	--	--	--	--	--	--	--	--	--
04/12/2006	--		459.32	28.5	38.5	15.12	444.20	--	--	--	--	--	--	--	--
10/31/2006	P		459.32	28.5	38.5	19.14	440.18	400	5.5	<0.50	5.5	9.6	22	--	7.64
4/19/2007	--		459.32	28.5	38.5	23.07	436.25	--	--	--	--	--	--	--	--
10/16/2007	--	f	459.32	28.5	38.5	--	--	--	--	--	--	--	--	--	--
4/24/2008	--		459.32	28.5	38.5	25.65	433.67	--	--	--	--	--	--	--	--
9/10/2008	--	k	459.32	28.5	38.5	--	--	--	--	--	--	--	--	--	--
MW-4															
3/23/1995	--		456.55	21.0	27.0	15.39	441.16	210	2.1	0.6	0.8	2.1	--	--	--
5/31/1995	--		456.55	21.0	27.0	15.32	441.23	190	1.6	<0.5	0.7	0.9	--	--	--
8/31/1995	--		456.55	21.0	27.0	17.86	438.69	160	1.2	0.7	<0.5	<2	<3	--	--
11/28/1995	--		456.55	21.0	27.0	17.18	439.37	150	0.7	<0.5	0.7	1.4	<3	--	--
2/22/1996	--		456.55	21.0	27.0	14.80	441.75	100	<0.5	<0.5	<0.6	0.8	<3	--	--
5/23/1996	--		456.55	21.0	27.0	14.43	442.12	86	<0.5	<0.5	<0.5	<0.7	<3	--	--
8/8/1996	--		456.55	21.0	27.0	16.80	439.75	98	<0.5	<0.5	<0.5	1.3	<3	--	--
11/7/1996	--		456.55	21.0	27.0	17.90	438.65	140	<0.5	<0.5	<0.9	1.3	<3	--	--
3/27/1997	--		456.55	21.0	27.0	15.22	441.33	<50	1.1	<0.5	<0.5	1.6	<3	--	--
5/19/1997	--		456.55	21.0	27.0	16.98	439.57	62	<0.5	<0.5	<0.5	0.6	<3	--	--
5/18/1998	--		456.55	21.0	27.0	14.99	441.56	<50	<0.5	<0.5	<0.5	<0.5	64	--	--
11/2/1998	--		456.55	21.0	27.0	25.29	431.26	74	<0.5	<0.5	<0.5	<0.5	96	--	--
6/4/1999	P		456.55	21.0	27.0	17.95	438.60	100	<0.5	<0.5	<0.5	<0.5	38	--	--
11/11/1999	P		456.55	21.0	27.0	19.25	437.30	88	<0.5	<0.5	<0.5	<1	10	0.77	--
6/20/2000	--	q	456.55	21.0	27.0	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	62.3	--	--
6/20/2000	P		456.55	21.0	27.0	17.79	438.76	<50.0	<0.500	<0.500	<0.500	<0.500	82.4	1.3	--
8/29/2000	P		456.55	21.0	27.0	18.90	437.65	56	<0.500	<0.500	<0.500	<0.500	47.9	0.97	--
11/29/2000	P	s	456.55	21.0	27.0	20.50	436.05	<50.0	<0.500	<0.500	<0.500	<0.500	9.88/10.4	0.59	--
5/2/2001	P	q, s	456.55	21.0	27.0	22.65	433.90	<50.0	<0.500	<0.500	<0.500	<0.500	61.1/70.9	0.74	--

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #6113, 785 East Stanley Blvd., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-4 Cont.															
5/2/2001	--	s	456.55	21.0	27.0	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	59.4/68.4	--	--
8/15/2001	--	f	456.55	21.0	27.0	--	--	--	--	--	--	--	--	--	--
10/5/2001	--	f	456.55	21.0	27.0	--	--	--	--	--	--	--	--	--	--
1/21/2002	--	f	456.55	21.0	27.0	--	--	--	--	--	--	--	--	--	--
4/26/2002	P		456.55	21.0	27.0	20.15	436.40	110	<0.50	<0.50	<0.50	<0.50	150	0.21	--
10/7/2002	P	a	456.55	21.0	27.0	20.76	435.79	96	<0.50	<0.50	0.54	<0.50	260	1.0	--
05/01/2003	P	c	456.55	21.0	27.0	19.67	436.88	120	1.3	<0.50	<0.50	<0.50	86	1.7	--
10/03/2003	P	d	456.55	21.0	27.0	20.23	436.32	<50	<0.50	<0.50	<0.50	<0.50	22	13.5	6.8
04/06/2004	P		458.88	21.0	27.0	18.13	440.75	96	<0.50	<0.50	<0.50	<0.50	17	1.6	6.8
10/28/2004	P		458.88	21.0	27.0	20.02	438.86	<50	<0.50	<0.50	<0.50	<0.50	4.5	1.2	6.7
04/13/2005	P		458.88	21.0	27.0	16.68	442.20	<50	<0.50	<0.50	<0.50	<0.50	2.8	0.8	6.7
10/27/2005	P		458.88	21.0	27.0	19.05	439.83	400	14	<0.50	11	1.8	22	1.0	6.9
04/12/2006	P		458.88	21.0	27.0	15.47	443.41	100	<0.50	<0.50	<0.50	<0.50	1.9	1.6	7.2
10/31/2006	P		458.88	21.0	27.0	19.67	439.21	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	7.63
4/19/2007	NP		458.88	21.0	27.0	22.72	436.16	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.92	7.36
10/16/2007	--	f	458.88	21.0	27.0	--	--	--	--	--	--	--	--	--	--
4/24/2008	--	f	458.88	21.0	27.0	--	--	--	--	--	--	--	--	--	--
10/15/2008	--	f	458.88	21.0	27.0	--	--	--	--	--	--	--	--	--	--
4/28/2009	--	f	458.88	21.0	27.0	--	--	--	--	--	--	--	--	--	--
11/9/2009	NP	x (GRO)	458.88	21.0	27.0	22.73	436.15	270	4.6	<0.50	<0.50	<0.50	3.1	--	--
MW-5															
3/23/1995	--		455.84	43.0	63.0	13.97	441.87	68	4.2	3.4	2.3	12	--	--	--
5/31/1995	--	g	455.84	43.0	63.0	--	--	--	--	--	--	--	--	--	--
8/31/1995	--	g	455.84	43.0	63.0	--	--	--	--	--	--	--	--	--	--
11/28/1995	--		455.84	43.0	63.0	16.46	439.38	960	41	24	38	210	<5	--	--
2/22/1996	--	f	455.84	43.0	63.0	13.34	442.50	--	--	--	--	--	--	--	--
5/23/1996	--		455.84	43.0	63.0	14.36	441.48	7,100	440	180	270	1,700	<50	--	--
8/8/1996	--	f	455.84	43.0	63.0	16.38	439.46	--	--	--	--	--	--	--	--
11/7/1996	--		455.84	43.0	63.0	17.26	438.58	5,600	230	86	210	1,100	<80	--	--
3/27/1997	--	f	455.84	43.0	63.0	15.95	439.89	--	--	--	--	--	--	--	--

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #6113, 785 East Stanley Blvd., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-5 Cont.															
5/19/1997	--		455.84	43.0	63.0	16.64	439.20	7,600	480	140	400	1,200	<40	--	--
5/18/1998	--		455.84	43.0	63.0	14.75	441.09	990	46	13	45	180	4	--	--
11/2/1998	--		455.84	43.0	63.0	27.83	428.01	14,000	690	140	550	2,200	100	--	--
6/4/1999	P		455.84	43.0	63.0	17.47	438.37	8,300	690	370	90	440	1,400	--	--
11/11/1999	P		455.84	43.0	63.0	18.80	437.04	18,000	900	190	1,100	3,200	72	0.86	--
6/20/2000	P		455.84	43.0	63.0	17.14	438.70	10,200	618	122	832	2,020	<50.0	1.6	--
8/29/2000	P		455.84	43.0	63.0	18.60	437.24	12,300	436	166	711	2,120	517	0.79	--
11/29/2000	P	s	455.84	43.0	63.0	20.57	435.27	26,000	491	149	1,090	3,810	671/<20.0	0.51	--
5/2/2001	--	k	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6															
3/23/1995	--		454.93	48.0	68.0	13.38	441.55	<50	1.5	<0.5	<0.5	0.9	--	--	--
5/31/1995	--		454.93	48.0	68.0	13.96	440.97	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/31/1995	--		454.93	48.0	68.0	16.71	438.22	150	9	1.8	4	12	<3	--	--
11/28/1995	--		454.93	48.0	68.0	15.65	439.28	<50	0.6	<0.5	<0.5	0.8	<3	--	--
2/22/1996	--		454.93	48.0	68.0	12.53	442.40	<50	1.9	<0.5	0.8	2.1	<3	--	--
5/23/1996	--		454.93	48.0	68.0	13.24	441.69	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
8/8/1996	--		454.93	48.0	68.0	16.65	438.28	<50	0.5	<0.5	<0.5	0.5	<3	--	--
11/7/1996	--		454.93	48.0	68.0	16.65	438.28	110	5.3	1.3	3.1	6.6	<3	--	--
3/27/1997	--		454.93	48.0	68.0	14.25	440.68	<50	2.3	<0.5	0.9	3.5	4	--	--
5/19/1997	--		454.93	48.0	68.0	15.87	439.06	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/18/1998	--		454.93	48.0	68.0	14.00	440.93	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/2/1998	--		454.93	48.0	68.0	24.95	429.98	<50	1.2	<0.5	<0.5	<0.5	3	--	--
6/4/1999	P		454.93	48.0	68.0	16.68	438.25	310	41	3.8	11	19	33	--	--
11/11/1999	P		454.93	48.0	68.0	16.12	438.81	<50	0.5	<0.5	<0.5	<1	<3	0.92	--
6/20/2000	P		454.93	48.0	68.0	16.63	438.30	<50.0	<0.500	<0.500	<0.500	<0.500	17.3	1.9	--
8/29/2000	--	q	454.93	48.0	68.0	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--	--
8/29/2000	P		454.93	48.0	68.0	17.91	437.02	<50.0	<0.500	0.551	<0.500	<0.500	<2.50	1.67	--
11/29/2000	P		454.93	48.0	68.0	20.30	434.63	<50.0	<0.500	<0.500	<0.500	1.03	<2.50	0.79	--
5/2/2001	P	s	454.93	48.0	68.0	22.20	432.73	3,230	1,300	33.6	89.4	136	1,810/2,310	0.95	--
8/15/2001	P	s	454.93	48.0	68.0	27.95	426.98	<50	<0.50	<0.50	<0.50	<0.50	21/25	0.63	--

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #6113, 785 East Stanley Blvd., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-6 Cont.															
10/5/2001	P		454.93	48.0	68.0	28.05	426.88	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.85	--
1/21/2002	P		454.93	48.0	68.0	26.81	428.12	<50	<0.50	<0.50	<0.50	<0.50	<5.0	0.91	--
4/26/2002	P		454.93	48.0	68.0	26.27	428.66	<50	<0.50	<0.50	<0.50	<0.50	17	0.75	--
10/7/2002	P	a	454.93	48.0	68.0	20.05	434.88	60	13	1.7	1.7	3.5	8	2.8	--
05/01/2003	P	c	454.93	48.0	68.0	17.62	437.31	<50	5.4	<0.50	0.63	1.3	12	1.6	--
10/03/2003	P	d	454.93	48.0	68.0	19.62	435.31	80	2.6	<2.5	<2.5	<2.5	120	5.1	6.9
04/06/2004	P		457.24	48.0	68.0	16.88	440.36	<2,500	<25	<25	<25	<25	1,700	4.1	7.0
10/28/2004	P		457.24	48.0	68.0	19.20	438.04	3,200	<25	<25	<25	<25	3,100	6.8	6.9
04/13/2005	P		457.24	48.0	68.0	15.15	442.09	<5,000	<50	<50	<50	<50	3,900	3.9	7.0
10/27/2005	P		457.24	48.0	68.0	18.12	439.12	<5,000	<50	<50	<50	<50	2,900	3.15	7.0
04/12/2006	P		457.24	48.0	68.0	15.32	441.92	<5,000	<50	<50	<50	<50	3,400	4.3	7.6
10/31/2006	P	u, v	457.24	48.0	68.0	18.85	438.39	2,700	<25	<25	<25	<25	3,400	--	10.36
4/19/2007	P	v	457.24	48.0	68.0	22.25	434.99	970	<25	<25	<25	<25	2,200	5.54	10.52
10/16/2007	P	v, w (MTBE)	457.24	48.0	68.0	37.17	420.07	2,700	240	<25	50	55	2,600	4.56	10.26
4/24/2008	P		457.24	48.0	68.0	24.55	432.69	15,000	5,300	200	620	470	4,200	2.15	6.90
9/10/2008	--	k	457.24	48.0	68.0	--	--	--	--	--	--	--	--	--	--
MW-7															
3/23/1995	--		454.92	48.0	68.0	13.29	441.63	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
5/31/1995	--		454.92	48.0	68.0	13.72	441.20	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/31/1995	--		454.92	48.0	68.0	16.53	438.39	<50	<0.5	<0.5	<0.5	1.2	<3	--	--
11/28/1995	--		454.92	48.0	68.0	15.50	439.42	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/22/1996	--		454.92	48.0	68.0	12.30	442.62	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/23/1996	--		454.92	48.0	68.0	13.02	441.90	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
8/8/1996	--	m	454.92	48.0	68.0	--	--	--	--	--	--	--	--	--	--
11/7/1996	--		454.92	48.0	68.0	16.50	438.42	<50	<0.5	<0.5	<0.5	0.8	<3	--	--
3/27/1997	--		454.92	48.0	68.0	14.22	440.70	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/19/1997	--		454.92	48.0	68.0	15.74	439.18	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/18/1998	--		454.92	48.0	68.0	13.82	441.10	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/2/1998	--		454.92	48.0	68.0	24.80	430.12	<50	<0.5	<0.5	<0.5	<0.5	4	--	--
6/4/1999	P		454.92	48.0	68.0	16.55	438.37	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #6113, 785 East Stanley Blvd., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-7 Cont.															
11/11/1999	P		454.92	48.0	68.0	18.02	436.90	<50	<0.5	<0.5	<0.5	<1	<3	1.03	--
6/20/2000	P		454.92	48.0	68.0	16.50	438.42	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	1.3	--
8/29/2000	P		454.92	48.0	68.0	17.80	437.12	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	1.67	--
11/29/2000	P		454.92	48.0	68.0	19.61	435.31	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	0.51	--
5/2/2001	P	s	454.92	48.0	68.0	22.05	432.87	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50/2.66	0.9	--
8/15/2001	P		454.92	48.0	68.0	27.55	427.37	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.84	--
10/5/2001	P		454.92	48.0	68.0	27.59	427.33	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.62	--
1/21/2002	P	s	454.92	48.0	68.0	26.50	428.42	<50	<0.50	<0.50	<0.50	<0.50	15/21	0.65	--
4/26/2002	P		454.92	48.0	68.0	26.22	428.70	<50	<0.50	<0.50	<0.50	<0.50	18	0.61	--
10/7/2002	--		454.92	48.0	68.0	20.04	434.88	<50	1.2	<0.50	<0.50	0.77	41	4.8	--
05/01/2003	P	c	454.92	48.0	68.0	17.47	437.45	<50	<0.50	<0.50	<0.50	0.5	43	2.7	--
10/03/2003	P	d	454.92	48.0	68.0	19.55	435.37	<50	<1.0	<1.0	<1.0	<1.0	49	5.7	7.1
04/06/2004	P		457.17	48.0	68.0	16.60	440.57	<50	<0.50	<0.50	<0.50	0.75	0.76	0.7	7.0
10/28/2004	P		457.17	48.0	68.0	19.17	438.00	<50	<0.50	<0.50	<0.50	<0.50	14	6.7	6.9
04/13/2005	P		457.17	48.0	68.0	14.84	442.33	<50	<0.50	<0.50	<0.50	<0.50	1.7	2.3	6.9
10/27/2005	P		457.17	48.0	68.0	17.38	439.79	<50	<0.50	<0.50	<0.50	<0.50	2.3	2.16	7.0
04/12/2006	P		457.17	48.0	68.0	14.84	442.33	<50	<0.50	<0.50	<0.50	<0.50	1.1	3.0	7.2
10/31/2006	P		457.17	48.0	68.0	18.74	438.43	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	7.55
4/19/2007	P		457.17	48.0	68.0	22.11	435.06	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.37	7.60
10/16/2007	P		457.17	48.0	68.0	37.23	419.94	140	68	6.8	<0.50	5.0	24	4.87	8.02
4/24/2008	P		457.17	48.0	68.0	24.47	432.70	<50	<0.50	0.99	<0.50	<0.50	22	1.96	7.24
10/15/2008	P		457.17	48.0	68.0	43.40	413.77	<50	<0.50	<0.50	<0.50	<0.50	8.2	2.31	7.14
4/28/2009	P		457.17	48.0	68.0	32.13	425.04	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.78	6.93
11/9/2009	P		457.17	48.0	68.0	22.15	435.02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.3	6.8
MW-8															
3/23/1995	--	e	456.97	47.0	67.0	11.55	445.42	--	--	--	--	--	--	--	--
5/31/1995	--	e	456.97	47.0	67.0	12.37	444.60	--	--	--	--	--	--	--	--
8/31/1995	--	e	456.97	47.0	67.0	15.68	441.29	--	--	--	--	--	--	--	--
11/28/1995	--		456.97	47.0	67.0	14.15	442.82	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/22/1996	--	e	456.97	47.0	67.0	10.97	446.00	--	--	--	--	--	--	--	--

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #6113, 785 East Stanley Blvd., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-8 Cont.															
5/23/1996	--	e	456.97	47.0	67.0	11.90	445.07	--	--	--	--	--	--	--	--
8/8/1996	--	e	456.97	47.0	67.0	13.85	443.12	--	--	--	--	--	--	--	--
11/7/1996	--		456.97	47.0	67.0	15.08	441.89	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
3/27/1997	--	e	456.97	47.0	67.0	12.96	444.01	--	--	--	--	--	--	--	--
5/19/1997	--	e	456.97	47.0	67.0	14.35	442.62	--	--	--	--	--	--	--	--
5/18/1998	--	e	456.97	47.0	67.0	12.97	444.00	--	--	--	--	--	--	--	--
11/2/1998	--		456.97	47.0	67.0	26.01	430.96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
6/4/1999	--	e	456.97	47.0	67.0	15.53	441.44	--	--	--	--	--	--	--	--
11/11/1999	P		456.97	47.0	67.0	16.67	440.30	<50	<0.5	<0.5	<0.5	<1	<3	1.01	--
6/20/2000	--	e	456.97	47.0	67.0	15.29	441.68	--	--	--	--	--	--	2.4	--
8/29/2000	--	e	456.97	47.0	67.0	16.59	440.38	--	--	--	--	--	--	3.37	--
11/29/2000	P		456.97	47.0	67.0	19.80	437.17	<50.0	<0.500	<0.500	<0.500	0.772	<2.50	1.35	--
5/2/2001	--	e	456.97	47.0	67.0	22.12	434.85	--	--	--	--	--	--	--	--
8/15/2001	--	e	456.97	47.0	67.0	27.63	429.34	--	--	--	--	--	--	--	--
10/5/2001	P		456.97	47.0	67.0	27.65	429.32	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.07	--
1/21/2002	--	e	456.97	47.0	67.0	26.73	430.24	--	--	--	--	--	--	--	--
4/26/2002	--	e	456.97	47.0	67.0	26.39	430.58	--	--	--	--	--	--	--	--
10/7/2002	--		456.97	47.0	67.0	18.43	438.54	<50	<0.50	<0.50	<0.50	0.86	<0.50	4.2	--
05/01/2003	--	r	456.97	47.0	67.0	16.47	440.50	--	--	--	--	--	--	--	--
10/27/2005	--		456.97	47.0	67.0	17.14	439.83	--	--	--	--	--	--	--	--
04/12/2006	--		456.97	47.0	67.0	14.08	442.89	--	--	--	--	--	--	--	--
10/31/2006	--		456.97	47.0	67.0	18.12	438.85	--	--	--	--	--	--	--	--
4/19/2007	--		456.97	47.0	67.0	22.39	434.58	--	--	--	--	--	--	--	--
10/16/2007	--		456.97	47.0	67.0	38.18	418.79	--	--	--	--	--	--	--	--
4/24/2008	--		456.97	47.0	67.0	25.43	431.54	--	--	--	--	--	--	--	--
6/18/2008	--	k	--	47.0	67.0	--	--	--	--	--	--	--	--	--	--
MW-9															
3/23/1995	--	e	456.18	48.0	68.0	13.18	443.00	--	--	--	--	--	--	--	--
5/31/1995	--	e	456.18	48.0	68.0	12.66	443.52	--	--	--	--	--	--	--	--
8/31/1995	--	e	456.18	48.0	68.0	14.40	441.78	--	--	--	--	--	--	--	--

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses
Station #6113, 785 East Stanley Blvd., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-9 Cont.															
11/28/1995	--		456.18	48.0	68.0	14.26	441.92	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/22/1996	--	e	456.18	48.0	68.0	12.05	444.13	--	--	--	--	--	--	--	--
5/23/1996	--	e	456.18	48.0	68.0	12.07	444.11	--	--	--	--	--	--	--	--
8/8/1996	--	e	456.18	48.0	68.0	14.12	442.06	--	--	--	--	--	--	--	--
11/7/1996	--		456.18	48.0	68.0	15.42	440.76	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
3/27/1997	--	e	456.18	48.0	68.0	13.01	443.17	--	--	--	--	--	--	--	--
5/19/1997	--	e	456.18	48.0	68.0	14.60	441.58	--	--	--	--	--	--	--	--
5/18/1998	--	e	456.18	48.0	68.0	12.60	443.58	--	--	--	--	--	--	--	--
11/2/1998	--	e	456.18	48.0	68.0	25.08	431.10	--	--	--	--	--	--	--	--
6/4/1999	P		456.18	48.0	68.0	15.87	440.31	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/11/1999	P		456.18	48.0	68.0	17.02	439.16	<50	<0.5	<0.5	<0.5	<1	<3	0.96	--
6/20/2000	--	e	456.18	48.0	68.0	15.54	440.64	--	--	--	--	--	--	2.1	--
8/29/2000	--	e	456.18	48.0	68.0	16.81	439.37	--	--	--	--	--	--	2.59	--
11/29/2000	P		456.18	48.0	68.0	18.81	437.37	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	0.81	--
5/2/2001	--	e	456.18	48.0	68.0	22.09	434.09	--	--	--	--	--	--	--	--
8/15/2001	--	e	456.18	48.0	68.0	27.59	428.59	--	--	--	--	--	--	--	--
10/5/2001	--	q	456.18	48.0	68.0	27.63	428.55	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
10/5/2001	P		456.18	48.0	68.0	27.63	428.55	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.93	--
1/21/2002	--	e	456.18	48.0	68.0	26.77	429.41	--	--	--	--	--	--	--	--
4/26/2002	--	e	456.18	48.0	68.0	26.41	429.77	--	--	--	--	--	--	--	--
10/7/2002	P		456.18	48.0	68.0	18.85	437.33	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.6	--
05/01/2003	--	c, e	456.18	48.0	68.0	17.84	438.34	--	--	--	--	--	--	--	--
10/03/2003	P	d	456.18	48.0	68.0	18.69	437.49	<50	1.1	0.57	<0.50	<0.50	<0.50	4.9	6.8
04/06/2004	--	e	458.55	48.0	68.0	16.08	442.47	--	--	--	--	--	--	--	--
10/28/2004	P		458.55	48.0	68.0	18.35	440.20	<50	<0.50	<0.50	<0.50	<0.50	<0.50	6.8	6.9
04/13/2005	--	e	458.55	48.0	68.0	14.09	444.46	--	--	--	--	--	--	--	--
10/27/2005	P		458.55	48.0	68.0	17.41	441.14	<50	0.51	<0.50	<0.50	<0.50	1.4	2.56	7.0
04/12/2006	--		458.55	48.0	68.0	14.18	444.37	--	--	--	--	--	--	--	--
10/31/2006	P		458.55	48.0	68.0	17.97	440.58	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	7.46
4/19/2007	--		458.55	48.0	68.0	22.37	436.18	--	--	--	--	--	--	--	--
10/16/2007	P		458.55	48.0	68.0	37.75	420.80	<50	0.83	<0.50	<0.50	<0.50	<0.50	1.27	7.59

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #6113, 785 East Stanley Blvd., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-9 Cont.															
4/24/2008	--		458.55	48.0	68.0	24.89	433.66	--	--	--	--	--	--	--	--
10/15/2008	P		458.55	48.0	68.0	44.16	414.39	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.14	7.08
4/28/2009	--		458.55	48.0	68.0	32.61	425.94	--	--	--	--	--	--	--	--
11/9/2009	P		458.55	48.0	68.0	20.69	437.86	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.33	6.82
MW-10															
3/23/1995	--	e	456.85	32.0	52.0	14.86	441.99	--	--	--	--	--	--	--	--
5/31/1995	--	e	456.85	32.0	52.0	15.63	441.22	--	--	--	--	--	--	--	--
8/31/1995	--	e	456.85	32.0	52.0	14.40	442.45	--	--	--	--	--	--	--	--
11/28/1995	--		456.85	32.0	52.0	17.24	439.61	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/22/1996	--	e	456.85	32.0	52.0	14.30	442.55	--	--	--	--	--	--	--	--
5/23/1996	--	e	456.85	32.0	52.0	14.93	441.92	--	--	--	--	--	--	--	--
8/8/1996	--	e	456.85	32.0	52.0	17.20	439.65	--	--	--	--	--	--	--	--
11/7/1996	--		456.85	32.0	52.0	18.25	438.60	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
3/27/1997	--	e	456.85	32.0	52.0	15.77	441.08	--	--	--	--	--	--	--	--
5/19/1997	--	e	456.85	32.0	52.0	17.38	439.47	--	--	--	--	--	--	--	--
5/18/1998	--	e	456.85	32.0	52.0	15.47	441.38	--	--	--	--	--	--	--	--
11/2/1998	--		456.85	32.0	52.0	26.94	429.91	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
6/4/1999	--	e	456.85	32.0	52.0	17.19	439.66	--	--	--	--	--	--	--	--
11/11/1999	P		456.85	32.0	52.0	19.35	437.50	<50	<0.5	<0.5	<0.5	<1	<3	0.68	--
6/20/2000	--	e	456.85	32.0	52.0	17.92	438.93	--	--	--	--	--	--	2.9	--
8/29/2000	--	e	456.85	32.0	52.0	19.15	437.70	--	--	--	--	--	--	1.54	--
11/29/2000	P		456.85	32.0	52.0	21.30	435.55	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	0.95	--
5/2/2001	--	e	456.85	32.0	52.0	29.95	426.90	--	--	--	--	--	--	--	--
8/15/2001	--	e	456.85	32.0	52.0	30.74	426.11	--	--	--	--	--	--	--	--
10/5/2001	P		456.85	32.0	52.0	30.95	425.90	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.89	--
1/21/2002	--	e	456.85	32.0	52.0	28.97	427.88	--	--	--	--	--	--	--	--
4/26/2002	--	e	456.85	32.0	52.0	28.50	428.35	--	--	--	--	--	--	--	--
10/7/2002	--		456.85	32.0	52.0	21.15	435.70	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.0	--
05/01/2003	--	c, e	456.85	32.0	52.0	18.90	437.95	--	--	--	--	--	--	--	--
10/03/2003	P	d	456.85	32.0	52.0	20.64	436.21	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.4	7.1

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #6113, 785 East Stanley Blvd., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-10 Cont.															
04/06/2004	--	e	459.20	32.0	52.0	17.99	441.21	--	--	--	--	--	--	--	--
10/28/2004	P		459.20	32.0	52.0	20.27	438.93	<50	<0.50	<0.50	<0.50	<0.50	<0.50	5.9	7.1
04/13/2005	--	e	459.20	32.0	52.0	16.25	442.95	--	--	--	--	--	--	--	--
10/27/2005	P		459.20	32.0	52.0	19.03	440.17	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.38	7.2
04/12/2006	--		459.20	32.0	52.0	14.95	444.25	--	--	--	--	--	--	--	--
10/31/2006	P		459.20	32.0	52.0	20.20	439.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	7.30
4/19/2007	--		459.20	32.0	52.0	24.00	435.20	--	--	--	--	--	--	--	--
10/16/2007	NP		459.20	32.0	52.0	38.99	420.21	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.20	7.36
4/24/2008	--		459.20	32.0	52.0	26.62	432.58	--	--	--	--	--	--	--	--
9/10/2008	--	k	459.20	32.0	52.0	--	--	--	--	--	--	--	--	--	--
MW-11															
3/23/1995	--		455.07	38.0	45.0	17.34	437.73	--	--	--	--	--	--	--	--
5/31/1995	--		455.07	38.0	45.0	16.68	438.39	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/31/1995	--	h	455.07	38.0	45.0	20.20	434.87	--	--	--	--	--	--	--	--
11/28/1995	--		455.07	38.0	45.0	17.80	437.27	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/22/1996	--	h	455.07	38.0	45.0	15.97	439.10	--	--	--	--	--	--	--	--
5/23/1996	--		455.07	38.0	45.0	15.50	439.57	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
8/8/1996	--	h	455.07	38.0	45.0	17.77	437.30	--	--	--	--	--	--	--	--
11/7/1996	--		455.07	38.0	45.0	17.45	437.62	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
3/27/1997	--	h	455.07	38.0	45.0	15.77	439.30	--	--	--	--	--	--	--	--
5/19/1997	--		455.07	38.0	45.0	16.80	438.27	<50	1.1	4.5	<0.5	2.2	<3	--	--
5/18/1998	--		455.07	38.0	45.0	15.38	439.69	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/2/1998	--		455.07	38.0	45.0	24.15	430.92	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
6/4/1999	P		455.07	38.0	45.0	18.39	436.68	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/11/1999	P		455.07	38.0	45.0	18.62	436.45	<50	<0.5	<0.5	<0.5	<1	<3	1.01	--
6/20/2000	P		455.07	38.0	45.0	17.82	437.25	<50.0	0.631	<0.500	<0.500	<0.500	<2.50	4.1	--
8/29/2000	--	h	455.07	38.0	45.0	19.50	435.57	--	--	--	--	--	--	--	--
11/29/2000	P		455.07	38.0	45.0	20.60	434.47	<50.0	<0.500	<0.500	<0.500	1.63	<2.50	0.97	--
5/2/2001	P		455.07	38.0	45.0	22.42	432.65	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	1.04	--
8/15/2001	--	h	455.07	38.0	45.0	27.41	427.66	--	--	--	--	--	--	--	--

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #6113, 785 East Stanley Blvd., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-11 Cont.															
10/5/2001	P		455.07	38.0	45.0	27.59	427.48	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.05	--
1/21/2002	--	h	455.07	38.0	45.0	26.75	428.32	--	--	--	--	--	--	--	--
4/26/2002	P		455.07	38.0	45.0	26.50	428.57	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.47	--
10/7/2002	--		455.07	38.0	45.0	20.79	434.28	<50	<0.50	<0.50	<0.50	<0.50	1.0	1.4	--
05/01/2003	P	c	455.07	38.0	45.0	20.55	434.52	<50	<0.50	<0.50	<0.50	<0.50	1.5	3.2	--
10/03/2003	P	d	455.07	38.0	45.0	20.58	434.49	<50	<0.50	<0.50	<0.50	<0.50	3.1	3.0	7.1
04/06/2004	P		457.40	38.0	45.0	17.52	439.88	<50	<0.50	<0.50	<0.50	<0.50	14	5.1	6.7
10/28/2004	P		457.40	38.0	45.0	20.32	437.08	<50	<0.50	<0.50	<0.50	<0.50	29	1.3	7.2
04/13/2005	P		457.40	38.0	45.0	16.20	441.20	<50	<0.50	<0.50	<0.50	<0.50	3.7	2.8	7.0
10/27/2005	P		457.40	38.0	45.0	21.98	435.42	<50	<0.50	<0.50	<0.50	<0.50	21	1.04	7.2
04/12/2006	--	Well inaccessible m	457.40	38.0	45.0	--	--	--	--	--	--	--	--	--	--
10/31/2006	--		457.40	38.0	45.0	--	--	--	--	--	--	--	--	--	--
4/19/2007	P		457.40	38.0	45.0	22.38	435.02	<50	<0.50	<0.50	<0.50	<0.50	12	7.11	7.57
10/16/2007	P		457.40	38.0	45.0	37.11	420.29	<50	<0.50	<0.50	<0.50	<0.50	6.6	0.60	7.57
4/24/2008	P		457.40	38.0	45.0	26.10	431.30	<50	<0.50	<0.50	<0.50	<0.50	17	1.83	7.26
10/15/2008	--		457.40	38.0	45.0	43.34	414.06	--	--	--	--	--	--	--	--
4/28/2009	P		457.40	38.0	45.0	32.85	424.55	<50	<0.50	<0.50	<0.50	<0.50	5.3	5.89	7.23
11/9/2009	P		457.40	38.0	45.0	22.99	434.41	<50	<0.50	<0.50	<0.50	<0.50	12	0.72	7.0
MW-12															
3/23/1995	--	h	455.04	18.0	34.5	15.54	439.50	--	--	--	--	--	--	--	--
5/31/1995	--		455.04	18.0	34.5	15.66	439.38	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/31/1995	--	h	455.04	18.0	34.5	18.23	436.81	--	--	--	--	--	--	--	--
11/28/1995	--		455.04	18.0	34.5	17.53	437.51	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/22/1996	--	h	455.04	18.0	34.5	14.45	440.59	--	--	--	--	--	--	--	--
5/23/1996	--		455.04	18.0	34.5	14.88	440.16	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
8/8/1996	--	h	455.04	18.0	34.5	17.30	437.74	--	--	--	--	--	--	--	--
11/7/1996	--		455.04	18.0	34.5	18.30	436.74	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
3/27/1997	--	h	455.04	18.0	34.5	15.69	439.35	--	--	--	--	--	--	--	--
5/19/1997	--		455.04	18.0	34.5	17.41	437.63	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/18/1998	--		455.04	18.0	34.5	15.21	439.83	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #6113, 785 East Stanley Blvd., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-12 Cont.															
11/2/1998	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
6/4/1999	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
11/11/1999	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
6/20/2000	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
8/29/2000	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
11/29/2000	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
5/2/2001	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
8/15/2001	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
10/5/2001	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
1/21/2002	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
4/26/2002	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
10/7/2002	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
05/01/2003	--	c, m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
10/03/2003	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
04/06/2004	P		457.37	18.0	34.5	18.14	439.23	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.4	6.4
10/28/2004	P		457.37	18.0	34.5	20.66	436.71	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.7	6.8
04/13/2005	P		457.37	18.0	34.5	16.25	441.12	<50	<0.50	<0.50	<0.50	0.55	<0.50	1.9	7.5
10/27/2005	P		457.37	18.0	34.5	19.77	437.60	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.81	7.0
04/12/2006	P		457.37	18.0	34.5	16.08	441.29	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.6	7.2
10/31/2006	--		457.37	18.0	34.5	--	--	--	--	--	--	--	--	--	--
4/19/2007	NP		457.37	18.0	34.5	22.34	435.03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.66	7.28
10/16/2007	--	f	457.37	18.0	34.5	--	--	--	--	--	--	--	--	--	--
4/24/2008	--	m	457.37	18.0	34.5	--	--	--	--	--	--	--	--	--	--
10/15/2008	--	f	457.37	18.0	34.5	--	--	--	--	--	--	--	--	--	--
4/28/2009	NP		457.37	18.0	34.5	32.21	425.16	<50	<0.50	<0.50	<0.50	<0.50	1.4	7.68	6.63
11/9/2009	NP		457.37	18.0	34.5	23.74	433.63	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--
MW-13															
1/21/2002	P		--	--	--	24.61	--	15,000	160	68	1,700	3,200	4,900/5,200	0.71	--
4/26/2002	P		--	--	--	24.20	--	17,000	98	<100	1,700	3,400	1,600	0.6	--
10/7/2002	--	b	--	--	--	20.12	--	14,000	510	<50	2,200	2,300	2,800	0.8	--

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #6113, 785 East Stanley Blvd., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-13 Cont.															
05/01/2003	P	c	--	--	--	17.82	--	21,000	230	<50	1,900	2,300	1,600	1.9	--
10/03/2003	P	d	--	--	--	19.91	--	19,000	570	55	1,900	2,300	2,400	0.8	6.9
04/06/2004	P		457.91	--	--	17.14	440.77	15,000	470	35	1,600	1,300	1,800	2.0	6.7
10/28/2004	P		457.91	--	--	18.83	439.08	18,000	350	<25	1,900	1,800	1,800	0.8	6.7
04/13/2005	P		457.91	--	--	15.23	442.68	9,700	110	<25	860	280	920	0.9	6.9
10/27/2005	P		457.91	--	--	18.45	439.46	11,000	120	12	1,500	450	580	0.75	6.8
04/12/2006	P		457.91	--	--	15.06	442.85	4,700	65	<10	450	69	470	1.2	6.8
10/31/2006	P		457.91	--	--	19.06	438.85	15,000	150	<25	1,700	400	710	--	6.87
4/19/2007	NP		457.91	--	--	22.21	435.70	14,000	60	<25	1,800	640	330	1.44	7.09
10/16/2007	--	f	457.91	--	--	--	--	--	--	--	--	--	--	--	--
4/24/2008	NP		457.91	--	--	24.68	433.23	1,400	4.5	1.1	9.4	15	49	2.78	7.25
9/10/2008	--	k	457.91	--	--	--	--	--	--	--	--	--	--	--	--
VW-1															
8/29/2000	P		--	24	45	17.40	--	2,360	27.6	11.6	26.3	33.2	110	4.47	--
11/29/2000	P		--	24.0	45	18.75	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	0.46	--
5/2/2001	--		--	24.0	45	21.59	--	--	--	--	--	--	--	--	--
8/15/2001	--	q	--	24.0	45	--	--	1,200	6.2	4.1	1.8	1.1	20/17	--	--
8/15/2001	P	s	--	24.0	45	24.62	--	1,200	6.3	4.3	1.7	1.3	20/17	--	--
10/5/2001	P	s	--	24.0	45	24.75	--	1,500	140	55	28	82	610/660	0.71	--
1/21/2002	--	q, s	--	24.0	45	--	--	8,000	770	320	96	1,100	2,500/3,200	--	--
1/21/2002	P	s	--	24.0	45	24.59	--	6,700	810	350	270	1,100	2,600/3,400	0.69	--
4/26/2002	P		--	24.0	45	24.27	--	370	26	2.1	6.6	1.7	48	0.5	--
4/26/2002	--	q	--	24.0	45	--	--	350	24	1.6	5.9	1.6	45	--	--
10/7/2002	P	b	--	24.0	45	19.20	--	410	25	2.2	8	4.3	88	1.7	--
05/01/2003	P	c	--	24.0	45	16.60	--	240	6.4	<0.50	3.3	1.3	36	1.7	--
10/03/2003	P	d	--	24.0	45	18.82	--	180	1.5	<0.50	0.69	<0.50	12	1.1	7.3
04/06/2004	P		457.08	24.0	45	15.78	441.30	300	2.2	<0.50	3.0	1.3	13	2.4	7.2
10/28/2004	P		457.08	24.0	45	18.33	438.75	210	<0.50	<0.50	0.67	<0.50	<0.50	1.2	7.1
04/13/2005	P		457.08	24.0	45	14.02	443.06	740	1.8	<0.50	3.6	1.1	9.6	2.4	7.1
10/27/2005	P		457.08	24.0	45	17.65	439.43	1,500	78	73	36	81	13	1.64	7.3

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #6113, 785 East Stanley Blvd., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
VW-1 Cont.															
04/12/2006	P		457.08	24.0	45	13.89	443.19	230	1.4	<0.50	2.2	0.76	1.6	1.4	7.3
10/31/2006	P		457.08	24.0	45	17.87	439.21	80	<0.50	<0.50	2.3	0.82	<0.50	--	7.76
4/19/2007	P		457.08	24.0	45	21.09	435.99	250	1.6	<0.50	4.7	1.3	3.0	1.15	7.66
10/16/2007	NP		457.08	24.0	45	37.10	419.98	12,000	2,300	1,900	860	2,800	150	2.65	7.61
4/24/2008	NP		457.08	24.0	45	24.40	432.68	<50	<0.50	<0.50	<0.50	<0.50	4.5	4.95	7.47
10/15/2008	--		457.08	24.0	45	43.07	414.01	--	--	--	--	--	--	--	--
4/28/2009	NP		457.08	24.0	45	31.06	426.02	3,500	140	2.8	25	4.0	19	6.38	7.02
11/9/2009	P	x (GRO)	457.08	24.0	45	21.12	435.96	230	1.8	<0.50	<0.50	<0.50	1.1	2.28	6.95
VW-2															
8/29/2000	--	g	--	28	49.5	--	--	--	--	--	--	--	--	--	--
11/29/2000	--	g	--	28	49.5	--	--	--	--	--	--	--	--	--	--
5/2/2001	--		--	28	49.5	--	--	--	--	--	--	--	--	--	--
10/5/2001	--	g	--	28	49.5	--	--	--	--	--	--	--	--	--	--
1/21/2002	--	g	--	28	49.5	--	--	--	--	--	--	--	--	--	--
4/26/2002	--	m	--	28	49.5	--	--	--	--	--	--	--	--	--	--
10/7/2002	--	g	--	28	49.5	--	--	--	--	--	--	--	--	--	--
05/01/2003	--	c, g	--	28	49.5	--	--	--	--	--	--	--	--	--	--
10/03/2003	--	Well inaccessible g	--	28	49.5	--	--	--	--	--	--	--	--	--	--
04/06/2004	--		458.64	28	49.5	16.96	441.68	--	--	--	--	--	--	--	--
10/28/2004	--		458.64	28	49.5	19.35	439.29	--	--	--	--	--	--	--	--
04/13/2005	--		458.64	28	49.5	15.51	443.13	--	--	--	--	--	--	--	--
10/27/2005	--		458.64	28	49.5	18.50	440.14	--	--	--	--	--	--	--	--
04/12/2006	--		458.64	28	49.5	14.92	443.72	--	--	--	--	--	--	--	--
10/31/2006	--		458.64	28	49.5	19.01	439.63	--	--	--	--	--	--	--	--
4/19/2007	--		458.64	28	49.5	22.52	436.12	--	--	--	--	--	--	--	--
10/16/2007	--		458.64	28	49.5	38.58	420.06	--	--	--	--	--	--	--	--
4/24/2008	--		458.64	28	49.5	24.91	433.73	--	--	--	--	--	--	--	--
10/15/2008	--		458.64	28	49.5	43.31	415.33	--	--	--	--	--	--	--	--
4/28/2009	--		458.64	28	49.5	32.56	426.08	--	--	--	--	--	--	--	--
11/9/2009	--		458.64	28	49.5	22.38	436.26	--	--	--	--	--	--	--	--

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #6113, 785 East Stanley Blvd., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
VW-3															
8/29/2000	P		--	15.5	24	17.93	--	25,400	3,540	10,600	1,280	43,000	44,700	--	--
11/29/2000	P	s	--	15.5	24	19.75	--	54,200	9,450	1,870	2,350	9,400	12,300/15,100	0.47	--
5/2/2001	--	k	--	15.5	24	--	--	--	--	--	--	--	--	--	--
VW-4															
8/29/2000	--	g	--	17	30	--	--	--	--	--	--	--	--	--	--
11/29/2000	P	s	--	17	30	19.45	--	37,500	4,510	206	2,100	9,030	6,770/7,880	0.42	--
11/29/2000	--	q, s	--	17	30	--	--	36,100	3,700	206	1,850	7,890	6,430/8,460	--	--
5/2/2001	--		--	17	30	21.66	--	--	--	--	--	--	--	--	--
8/15/2001	--		--	17	30	--	--	--	--	--	--	--	--	--	--
10/5/2001	--	f	--	17	30	--	--	--	--	--	--	--	--	--	--
1/21/2002	--	f	--	17	30	--	--	--	--	--	--	--	--	--	--
4/26/2002	--	f	--	17	30	--	--	--	--	--	--	--	--	--	--
10/7/2002	--		--	17	30	19.25	--	--	--	--	--	--	--	--	--
05/01/2003	--	c	--	17	30	17.29	--	--	--	--	--	--	--	--	--
10/03/2003	P	d, n	--	17	30	19.10	--	48,000	3,300	1,700	3,600	21,000	1,600	10.5	6.7
04/06/2004	--		456.99	17	30	18.05	438.94	--	--	--	--	--	--	--	--
10/28/2004	--		456.99	17	30	18.71	438.28	--	--	--	--	--	--	--	--
04/13/2005	--		456.99	17	30	14.62	442.37	--	--	--	--	--	--	--	--
10/27/2005	--		456.99	17	30	18.00	438.99	--	--	--	--	--	--	--	--
04/12/2006	--		456.99	17	30	14.42	442.57	--	--	--	--	--	--	--	--
10/31/2006	--		456.99	17	30	18.30	438.69	--	--	--	--	--	--	--	--
4/19/2007	--		456.99	17	30	20.91	436.08	--	--	--	--	--	--	--	--
10/16/2007	--	f	456.99	17	30	--	--	--	--	--	--	--	--	--	--
4/24/2008	--		456.99	17	30	23.40	433.59	--	--	--	--	--	--	--	--
10/15/2008	--	f	456.99	17	30	--	--	--	--	--	--	--	--	--	--
4/28/2009	--	f	456.99	17	30	--	--	--	--	--	--	--	--	--	--
11/9/2009	--		456.99	17	30	21.65	435.34	--	--	--	--	--	--	--	--

ABBREVIATIONS & SYMBOLS:

-- = Not analyzed/applicable/measured/available
< = Not detected at or above specified laboratory reporting limit
DO = Dissolved oxygen
DTW = Depth to water in ft bgs
GRO = Gasoline range organics
GWE = Groundwater elevation measured in ft
mg/L = Milligrams per liter
MTBE = Methyl tert-butyl ether
NP = Well not purged prior to sampling
P = Well purged prior to sampling
TOC = Top of casing measured in ft
TPH-g = Total petroleum hydrocarbons as gasoline
µg/L = Micrograms per liter

FOOTNOTES:

a = Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.
b = Chromatogram Pattern: C6-C10.
c = TPH-g, benzene, toluene, ethylbenzene, and total xylenes (BTEX), and MTBE analyzed using EPA Method 8260B beginning second quarter 2003 (05/01/03).
d = This sample was analyzed 3 days after the EPA recommended holding time. The results may still be useful for their intended purpose.
e = Well sampled annually in the fourth quarter.
f = Well dry.
g = Well inaccessible.
h = Well sampled semi-annually in second and fourth quarters.
k = Well abandoned.
m = Unable to locate well.
n = Sheen in well.
q = Duplicate sample.
r = Well removed from sampling schedule.
s = Original sample analyzed by 8021B and confirmation by 8260.
t = Bolts securing well box cover stripped at head. Unable to sample well.
u = Hydrocarbon result partly due to individ. peak(s) in quant. range.
v = pH measurement is believed to be erroneous.
w = Sample > 4x spike concentration.
x = Quantitation of unknown hydrocarbon(s) in sample based on gasoline.

NOTES:

Beginning in the second quarter 2003 (05/01/03) TPH-g and BTEX were analyzed using EPA Method 8260B, and MTBE was analyzed by EPA Method 8260B beginning in fourth quarter 2002. Prior to 05/01/03, TPH-g was analyzed by EPA Method 8015; BTEX by EPA Method 8021B (EPA method 8020 before 11/11/99); and MTBE by EPA Method 8021B. (EPA method 8020 before 11/11/99). Any MTBE detection by 8021B was confirmed by EPA Method 8260 beginning third quarter 2000 (08-29-00 results).

Beginning in the fourth quarter 2003, the laboratory modified the reported analyte list. TPH-g was changed to GRO. The resulting data may be impacted by the potential of non-TPH-g analytes within the requested fuel range resulting in a higher concentration being reported.

Beginning in the second quarter 2004, the carbon range for GRO was changed from C6-C10 to C4-C12.

Wells were resurveyed to NAVD '88 datum by URS Corporation on March 8, 2004.

Values for DO and pH were obtained through field measurements.

GRO analysis was completed by EPA method 8260B (C4-C12) for samples collected from the time period April 2006 through February 4, 2008. The analysis for GRO was changed to EPA method 8015B (C6-C12) for samples collected from the time period February 5, 2008 through the present.

Note: The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not

verified the accuracy of this information.

**Table 2. Summary of Fuel Additives Analytical Data
Station #6113, 785 East Stanley Blvd., Livermore, CA**

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-1									
10/7/2002	<40	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-2									
10/7/2002	<40	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-3									
10/7/2002	<40	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/03/2003	<100	<20	<0.50	<1.0	<1.0	<1.0	<0.50	<0.50	a
10/28/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/31/2006	<300	<20	22	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-4									
10/7/2002	<400	<200	260	<5.0	<5.0	<5.0	<5.0	<5.0	
5/1/2003	<100	25	86	<0.50	<0.50	<0.50	<0.50	<0.50	
10/03/2003	<100	<20	22	<1.0	<1.0	<1.0	<0.50	<0.50	a
04/06/2004	<100	<20	17	<0.50	<0.50	<0.50	<0.50	<0.50	
10/28/2004	<100	<20	4.5	<0.50	<0.50	<0.50	<0.50	<0.50	
04/13/2005	<100	<20	2.8	<0.50	<0.50	<0.50	<0.50	<0.50	
10/27/2005	<100	<20	22	<0.50	<0.50	<0.50	<0.50	<0.50	
04/12/2006	<300	<20	1.9	<0.50	<0.50	<0.50	<0.50	<0.50	b
10/31/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
4/19/2007	<300	<20	<0.50	<0.50	<0.50	0.66	<0.50	<0.50	
11/9/2009	<300	12	3.1	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-6									
10/7/2002	<40	<20	8	<0.50	<0.50	<0.50	<0.50	<0.50	
5/1/2003	<100	<20	12	<0.50	<0.50	<0.50	<0.50	<0.50	
10/03/2003	<500	<100	120	<5.0	<5.0	<5.0	<2.5	<2.5	a
04/06/2004	<5,000	<1,000	1,700	<25	<25	<25	<25	<25	
10/28/2004	<5,000	<1,000	3,100	<25	<25	<25	<25	<25	
04/13/2005	<10,000	<2,000	3,900	<50	<50	<50	<50	<50	
10/27/2005	<10,000	<2,000	2,900	<50	<50	<50	<50	<50	b
04/12/2006	<30,000	<2,000	3,400	<50	<50	<50	<50	<50	b

**Table 2. Summary of Fuel Additives Analytical Data
Station #6113, 785 East Stanley Blvd., Livermore, CA**

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-6 Cont.									
10/31/2006	<15,000	<1,000	3,400	<25	<25	<25	<25	<25	b
4/19/2007	<15,000	<1,000	2,200	<25	<25	<25	<25	<25	
10/16/2007	<15,000	<1,000	2,600	<25	<25	<25	<25	<25	c (MTBE)
4/24/2008	<6,000	1,500	4,200	<10	<10	<10	<10	<10	
MW-7									
10/7/2002	<40	<20	41	<0.50	<0.50	<0.50	<0.50	<0.50	
5/1/2003	<100	<20	43	<0.50	<0.50	<0.50	<0.50	<0.50	
10/03/2003	<200	<40	49	<2.0	<2.0	<2.0	<1.0	<1.0	a
04/06/2004	<100	<20	0.76	<0.50	<0.50	<0.50	<0.50	<0.50	
10/28/2004	<100	<20	14	<0.50	<0.50	<0.50	<0.50	<0.50	
04/13/2005	<100	<20	1.7	<0.50	<0.50	<0.50	<0.50	<0.50	
10/27/2005	<100	<20	2.3	<0.50	<0.50	<0.50	<0.50	<0.50	b
04/12/2006	<300	<20	1.1	<0.50	<0.50	<0.50	<0.50	<0.50	b
10/31/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b
4/19/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/16/2007	<300	<20	24	<0.50	<0.50	<0.50	<0.50	<0.50	
4/24/2008	<300	<10	22	<0.50	<0.50	<0.50	<0.50	<0.50	
10/15/2008	<300	<10	8.2	<0.50	<0.50	<0.50	<0.50	<0.50	
4/28/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	d
11/9/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-8									
10/7/2002	<40	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-9									
10/7/2002	<40	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/03/2003	<100	<20	<0.50	<1.0	<1.0	<1.0	<0.50	<0.50	a
10/28/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/27/2005	<100	<20	1.4	<0.50	<0.50	<0.50	<0.50	<0.50	b
10/31/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b
10/16/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/15/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

**Table 2. Summary of Fuel Additives Analytical Data
Station #6113, 785 East Stanley Blvd., Livermore, CA**

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-9 Cont.									
11/9/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-10									
10/7/2002	<40	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/03/2003	<100	<20	<0.50	<1.0	<1.0	<1.0	<0.50	<0.50	a
10/28/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/27/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/31/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b
10/16/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-11									
10/7/2002	<40	<20	1.0	<0.50	<0.50	<0.50	<0.50	<0.50	
5/1/2003	<100	<20	--	<0.50	<0.50	<0.50	<0.50	<0.50	
10/03/2003	<100	<20	3.1	<1.0	<1.0	<1.0	<0.50	<0.50	a
04/06/2004	<100	<20	14	<0.50	<0.50	<0.50	<0.50	<0.50	
10/28/2004	<100	<20	29	<0.50	<0.50	<0.50	<0.50	<0.50	
04/13/2005	<100	<20	3.7	<0.50	<0.50	<0.50	<0.50	<0.50	
10/27/2005	<100	<20	21	<0.50	<0.50	<0.50	<0.50	<0.50	
04/12/2006	--	--	--	--	--	--	--	--	Well inaccessible
4/19/2007	<300	<20	12	<0.50	<0.50	<0.50	<0.50	<0.50	
10/16/2007	<300	<20	6.6	<0.50	<0.50	<0.50	<0.50	<0.50	
4/24/2008	<300	<10	17	<0.50	<0.50	<0.50	<0.50	<0.50	
4/28/2009	<300	<10	5.3	<0.50	<0.50	<0.50	<0.50	<0.50	d
11/9/2009	<300	<10	12	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-12									
04/06/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/28/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
04/13/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/27/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
04/12/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b
4/19/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
4/28/2009	<300	<10	1.4	<0.50	<0.50	<0.50	<0.50	<0.50	d

**Table 2. Summary of Fuel Additives Analytical Data
Station #6113, 785 East Stanley Blvd., Livermore, CA**

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-12 Cont.									
11/9/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-13									
10/7/2002	<4,000	<2,000	2,800	<50	<50	<50	<50	<50	
5/1/2003	<10,000	<2,000	--	<50	<50	<50	<50	<50	
10/03/2003	<10,000	<2,000	2,400	<100	<100	<100	<50	<50	a
04/06/2004	<5,000	<1,000	1,800	<25	<25	<25	<25	<25	
10/28/2004	<5,000	<1,000	1,800	<25	<25	<25	<25	<25	
04/13/2005	<5,000	<1,000	920	<25	<25	<25	<25	<25	
10/27/2005	<2,000	<400	580	<10	<10	<10	<10	<10	
04/12/2006	<6,000	<400	470	<10	<10	<10	<10	<10	b
10/31/2006	<15,000	<1,000	710	<25	<25	<25	<25	<25	b
4/19/2007	<15,000	<1,000	330	<25	<25	<25	<25	<25	
4/24/2008	<300	14	49	<0.50	<0.50	<0.50	<0.50	<0.50	
VW-1									
10/7/2002	<80	<40	--	<1.0	<1.0	<1.0	<1.0	<1.0	
5/1/2003	<100	<20	--	<0.50	<0.50	<0.50	<0.50	<0.50	
10/03/2003	<100	<20	12	<1.0	<1.0	<1.0	<0.50	<0.50	a
04/06/2004	<100	<20	13	<0.50	<0.50	<0.50	<0.50	<0.50	
10/28/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
04/13/2005	<100	<20	9.6	<0.50	<0.50	<0.50	<0.50	<0.50	
10/27/2005	<100	<20	13	<0.50	<0.50	<0.50	<0.50	<0.50	
04/12/2006	<300	<20	1.6	<0.50	<0.50	<0.50	<0.50	<0.50	b
10/31/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b
4/19/2007	<300	<20	3.0	<0.50	<0.50	<0.50	<0.50	<0.50	
10/16/2007	<15,000	<1,000	150	<25	<25	<25	<25	<25	b
4/24/2008	<300	<10	4.5	<0.50	<0.50	<0.50	<0.50	<0.50	
4/28/2009	<300	<10	19	<0.50	<0.50	<0.50	<0.50	<0.50	d
11/9/2009	<300	<10	1.1	<0.50	<0.50	<0.50	<0.50	<0.50	
VW-2									
10/03/2003	--	--	--	--	--	--	--	--	Well inaccessible

**Table 2. Summary of Fuel Additives Analytical Data
Station #6113, 785 East Stanley Blvd., Livermore, CA**

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
VW-4									
10/03/2003	<100,000	<20,000	1,600	<1,000	<1,000	<1,000	<500	<500	a

ABBREVIATIONS & SYMBOLS:

-- = Not analyzed/applicable/measured/available

< = Not detected at or above specified laboratory reporting limit

1,2-DCA = 1,2-Dichloroethane

DIPE = Di-isopropyl ether

EDB = 1,2-Dibromoethane

ETBE = Ethyl tert-butyl ether

MTBE = Methyl tert-butyl ether

TAME = tert-Amyl methyl ether

TBA = tert-Butyl alcohol

µg/L = Micrograms per Liter

FOOTNOTES:

a = This sample was analyzed 3 days after the EPA recommended holding time. The results may still be useful for their intended purpose.

b = Calibration verification for ethanol was within method limits but outside contract limits.

c = Sample >4x spike concentration.

d = Calibrtn. verif. recov. Below method CL for TAME.

NOTES:

All volatile organic compounds analyzed using EPA Method 8260B.

Note: The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not verified the accuracy of this information.

**Table 3. Historical Ground-Water Flow Direction and Gradient
Station #6113, 785 East Stanley Blvd., Livermore, CA**

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
3/23/1995	Northwest	0.035
5/31/1995	North-Northwest	0.028
8/31/1995	North-Northwest	0.03
11/28/1995	North-Northwest	0.025
2/22/1996	North-Northwest	0.031
5/23/1996	North-Northwest	0.025
8/8/1996	North	0.019
11/7/1996	North-Northeast	0.019
3/27/1997	North-Northwest	0.021
5/19/1997	North	0.019
5/18/1998	North	0.02
11/2/1998	North	0.02
6/4/1999	North	0.02
11/11/1999	North	0.03
6/20/2000	North-Northeast	0.014
8/29/2000	North-Northeast	0.013
11/29/2000	North-Northwest	0.026
5/2/2001	Northeast	0.026
8/15/2001	Northeast	0.047
10/5/2001	Northeast	0.031
1/21/2002	Northeast	0.033
4/26/2002	Northeast	0.031
10/7/2002	Northeast	0.017
5/1/2003	North-Northeast	0.011
10/3/2003	North-Northeast	0.016
4/6/2004	North-Northeast	0.013
10/28/2004	North-Northeast	0.014
4/13/2005	North-Northwest	0.02
10/27/2005	North-Northwest	0.01 to 0.03
4/12/2006	Northeast	0.01
10/31/2006	Northeast	0.014
4/19/2007	Northeast	0.013
10/16/2007	Northeast	0.031
4/24/2008	North-Northwest	0.013
10/15/2008	Northeast	0.070
4/28/2009	Northeast	0.008
11/9/2009	Northeast	0.02

Note: The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not verified the accuracy of this information.

APPENDIX A

BAI GROUND-WATER SAMPLING DATA PACKAGE
(Includes Field Data Sheets, Certified Analytical Results with Chain of Custody
Documentation, and Field Procedures)

Project: BP 498 BP 613 Project No.: 08-82-603

Field Representative(s): CFTG Day: Monday Date: 11/09/00

Time Onsite: From: _____ To: _____; From: _____ To: _____; From: _____ To: _____

Signed HASP Safety Glasses Hard Hat Steel Toe Boots Safety Vest
 UST Emergency System Shut-off Switches Located Proper Gloves
 Proper Level of Barricading Other PPE (describe) _____

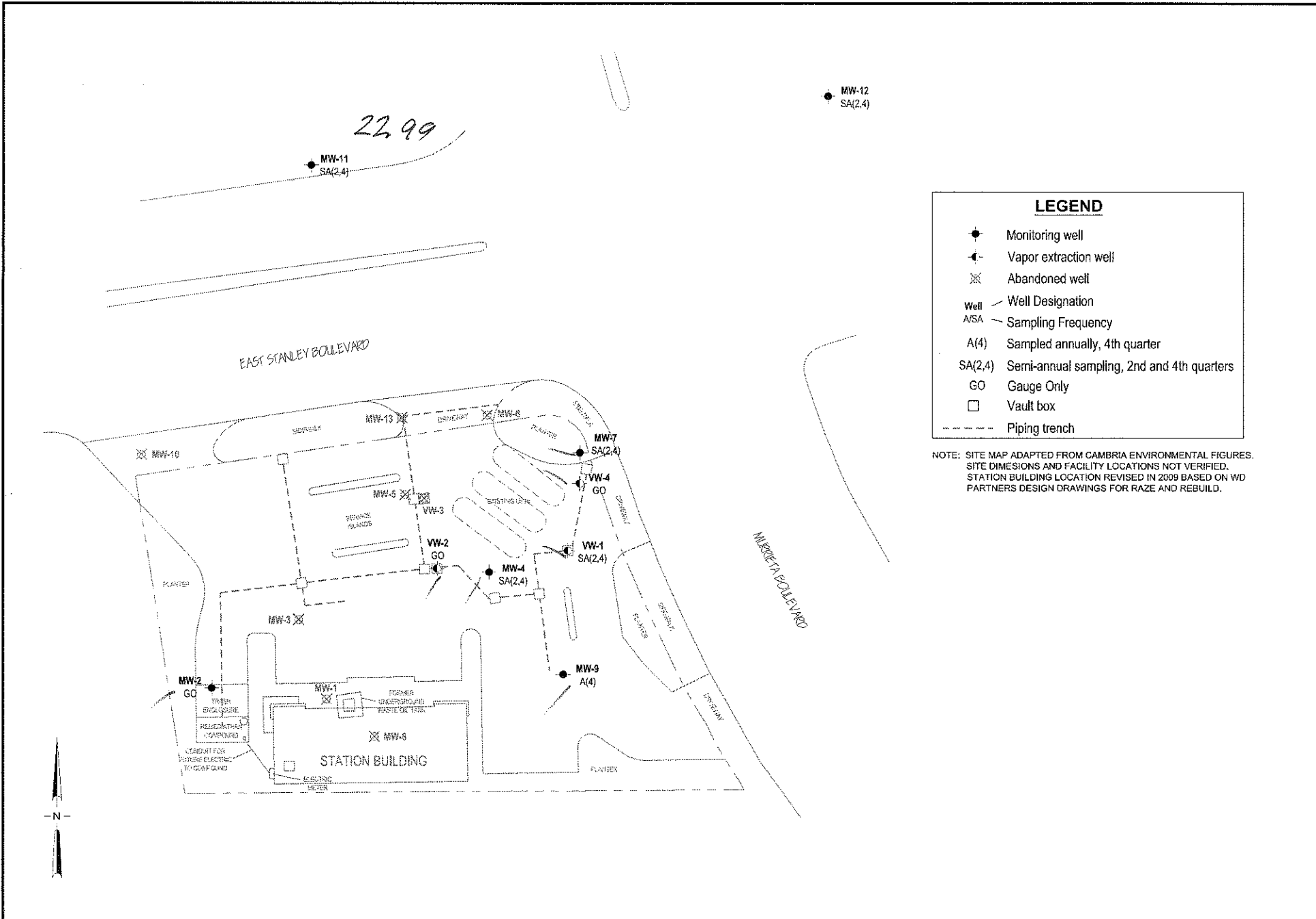
Weather: Clear, 55°

Equipment In Use: Service Truck

Visitors: _____

TIME:	WORK DESCRIPTION:	
0700	@ office, prep ship samples	
0800	Depart office for BP 613	2747.3
0930	@ equipco for batteries	
1000	dropoff 5332 samples @ Testarr. Co	
1015	on site BP 613	
1430	offsite BP 613	2619.1
1445	on site 498	
1635	offsite 498	2620.8
		2955.2 leave office 11/10 0815
		1
		81
		12.5
		30.5
		23
		147
		5
		152 gal

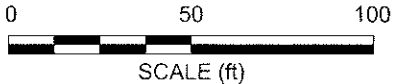
Signature: _____



LEGEND

- Monitoring well
- ◄ Vapor extraction well
- ⊗ Abandoned well
- Well Designation
- Sampling Frequency
- A(4) Sampled annually, 4th quarter
- SA(2,4) Semi-annual sampling, 2nd and 4th quarters
- GO Gauge Only
- Vault box
- - - Piping trench

NOTE: SITE MAP ADAPTED FROM CAMBRIA ENVIRONMENTAL FIGURES. SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED. STATION BUILDING LOCATION REVISED IN 2009 BASED ON WD PARTNERS DESIGN DRAWINGS FOR RAZE AND REBUILD.



BROADBENT & ASSOCIATES, INC.
 ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
 1324 Mangrove Ave, Suite 212, Chico, California 95926
 Project No.: 06-82-637 Date: 4/15/2009

Station #6113
 785 East Stanley Boulevard
 Livermore, California

Site Map

Drawing
2



Groundwater Sampling Data Sheet

Well I.D.: MW-4
 Project Name/Location: BP 6113 Project #: GG-08-637
 Sampler's Name: EFTG Date: 11/9/9
 Purging Equipment: None
 Sampling Equipment: Bailer

Casing Type: PVC

Casing Diameter: 4 inch

***UNIT CASING VOLUMES**

Total Well Depth: 26.68 feet

2" = 0.16 gal/lin ft.

Depth to Water: 22.73 feet

3" = 0.37 gal/lin ft.

Water Column Thickness: = _____ feet

4" = 0.65 gal/lin ft.

Unit Casing Volume*: x _____ gallon / foot

6" = 1.47 gal/lin ft.

Casing Water Volume: = _____ gallons

Casing Volume: x 3 each NO Purge

Estimated Purge Volume: = _____ gallons

Free product measurement (if present): _____

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: _____ gallons

Depth to Water at Sample Collection: _____ feet

Sample Collection Time: 13 SS Purged Dry? (Y / N)

Comments:



Groundwater Sampling Data Sheet

Well I.D.: VW-1
 Project Name/Location: BP 813 Project #: 06.08.633
 Sampler's Name: CR TG Date: 11/9/09
 Purging Equipment: Pump
 Sampling Equipment: Bar

Casing Type: PVC

Casing Diameter: 4 inch
 Total Well Depth: 44.34 feet
 Depth to Water: - 23.12 feet
 Water Column Thickness: = 23.22 feet
 Unit Casing Volume*: x 0.15 gallon / foot
 Casing Water Volume: = 15.09 gallons
 Casing Volume: x 3 each
 Estimated Purge Volume: = 45.27 gallons

***UNIT CASING VOLUMES**

2" = 0.16 gal/lin ft.
 3" = 0.37 gal/lin ft.
 4" = 0.65 gal/lin ft.
 6" = 1.47 gal/lin ft.

Free product measurement (if present): _____

Purged (gallons)	Time (24:00)	DO mg/L	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
<u>0</u>	<u>1320</u>	<u>2.28</u>	<u>-38</u>		<u>733.5</u>	<u>18.6</u>	<u>6.90</u>	
<u>7</u>	<u>1322</u>	X	X	X	<u>742.8</u>	<u>18.6</u>	<u>6.95</u>	
<u>16</u>	<u>1335</u>	X	X	X	<u>751.6</u>	<u>18.6</u>	<u>6.95</u>	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: 16 gallons
 Depth to Water at Sample Collection: 21.18 feet
 Sample Collection Time: 1335

Purged Dry? (Y / N)

Comments: _____

Groundwater Sampling Data Sheet

Well I.D.: MW-7
 Project Name/Location: BP 6113 Project #: 06-08-637
 Sampler's Name: EFTG Date: 11/09/09
 Purging Equipment: Pump
 Sampling Equipment: Baile

Casing Type: PVC

Casing Diameter: 4 inch
 Total Well Depth: 67.45 feet
 Depth to Water: - 22.15 feet
 Water Column Thickness: = 45.3 feet
 Unit Casing Volume*: x 0.65 gallon / foot
 Casing Water Volume: = 29.44 gallons
 Casing Volume: x 3 each
 Estimated Purge Volume: = 88.33 gallons

***UNIT CASING VOLUMES**

2" = 0.16 gal/lin ft.
 3" = 0.37 gal/lin ft.
 4" = 0.65 gal/lin ft.
 6" = 1.47 gal/lin ft.

Free product measurement (if present): _____

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
0	1247	1.3	62		542.2	15.6	6.6	
15	1253	X	X	X	548.4	18.7	6.8	
30	1258	X	X	X	550.7	15.8	6.8	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: 30 gallons

Depth to Water at Sample Collection: 22.28 feet

Sample Collection Time: 1307

Purged Dry? (Y/N) (N)

Comments: _____

Groundwater Sampling Data Sheet

Well I.D.: MW-9
 Project Name/Location: BP 6113 Project #: 06-08-637
 Sampler's Name: EP T6 Date: 11/08/08
 Purging Equipment: Pump
 Sampling Equipment: Bailer

Casing Type: PVC

Casing Diameter: 4 inch
 Total Well Depth: 67.92 feet
 Depth to Water: - 20.69 feet
 Water Column Thickness: = 47.23 feet
 Unit Casing Volume*: x 0.65 gallon / foot
 Casing Water Volume: = 30.69 gallons
 Casing Volume: x 3 each
 Estimated Purge Volume: = 92.09 gallons

***UNIT CASING VOLUMES**

2" = 0.16 gal/lin ft.
 3" = 0.37 gal/lin ft.
 4" = 0.65 gal/lin ft.
 6" = 1.47 gal/lin ft.

Free product measurement (if present): _____

Purged (gallons)	Time (24:00)	DO mg/L	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
0	1157	333	137	-	540.1	17.6	6.66	
15	1207	X	X	X	535.7	17.5	6.72	
30	1214	X	X	X	533.0	17.6	6.82	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: 30.0 gallons

Depth to Water at Sample Collection: 20.83 feet

Sample Collection Time: 1223 Purged Dry? (Y / N)

Comments: _____

Groundwater Sampling Data Sheet

Well I.D.: WW-11
 Project Name/Location: BP 613 Project #: 06-08-637
 Sampler's Name: EFTG Date: 1/9/09
 Purging Equipment: Bailer
 Sampling Equipment: Bailer

Casing Type: PVC
 Casing Diameter: 4.2 inch
 Total Well Depth: 45.00 feet
 Depth to Water: 22.99 feet
 Water Column Thickness: = 22.01 feet
 Unit Casing Volume*: x .16 gallon / foot
 Casing Water Volume: = 3.5 gallons
 Casing Volume: x 3 each
 Estimated Purge Volume: = 10.5 gallons

***UNIT CASING VOLUMES**

2" = 0.16 gal/lin ft.
 3" = 0.37 gal/lin ft.
 4" = 0.65 gal/lin ft.
 6" = 1.47 gal/lin ft.

Free product measurement (if present): _____

Purged (gallons)	Time (24:00)	DO (mg/L)	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
10	1411	0.72	-30		728.9	19.2	7.0	
3	1415	X	X	X	731.9	18.8	7.1	
5	1418	X	X	X	732.2	18.8	7.0	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: 5 gallons
 Depth to Water at Sample Collection: 24.82 feet
Sample Collection Time: 1428 Purged Dry? (Y/N)

Comments: Well pressurized - allowed to stabilize



Groundwater Sampling Data Sheet

Well I.D.: MW-12
 Project Name/Location: BP 6113 Project #: 06-08-637
 Sampler's Name: E.E.T.G. Date: 11/19/09
 Purging Equipment: _____
 Sampling Equipment: _____

Casing Type: PVC

Casing Diameter: 2 inch
 Total Well Depth: 45.00 feet
 Depth to Water: 23.74 feet
 Water Column Thickness: 21.26 feet
 Unit Casing Volume*: 0.16 gallon / foot
 Casing Water Volume: 3.4 gallons
 Casing Volume: 3 each
 Estimated Purge Volume: 10.2 gallons *no Purge*

***UNIT CASING VOLUMES**

2" = 0.16 gal/lin ft.
 3" = 0.37 gal/lin ft.
 4" = 0.65 gal/lin ft.
 6" = 1.47 gal/lin ft.

Free product measurement (if present): _____

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: _____ gallons

Depth to Water at Sample Collection: _____ feet

Sample Collection Time: _____ Purged Dry? (Y / N)

Comments: No Purge

FIELD PROCEDURES

A.1 QUALITY ASSURANCE/QUALITY CONTROL FIELD PROTOCOLS

Field protocols have been implemented to maximize the accuracy and reliability of data collection, ground-water sample collection, transportation and laboratory analysis. Discussion of these protocols is provided below.

A.1.1 Water Level & Free-Phase Product Measurement

Prior to ground-water sample collection from each monitor well, the presence of free-phase product and depth to ground water shall be measured. Depth to ground water will be measured with a standard M-Scope water level indicator (or equivalent) that has been decontaminated prior to its use in accordance with procedures discussed below. Depth to ground water will be gauged from a saw cut notch at the top of the well casing on each well head. Once depth to water has been measured, a new disposable bailer will be utilized to monitor for the presence and thickness of free-phase product.

A.1.2 Monitor Well Purging

Subsequent to measuring depth to ground water, a minimum of three casing volumes of water will be purged from each monitor well using a Geosquirt submersible pump (or equivalent) and disposable plastic tubing dedicated to each individual well. The well will be purged at a low flow rate to minimize the possibility of purging the well dry. To assure that the sample collected is representative of formation water, several field parameters will be monitored during the purging process and the sample will not be collected until these parameters have stabilized to within 10% of a measured value. These parameters will include temperature, pH, and conductivity. If a well is purged dry, the sample will not be collected until the well has recovered to a minimum 50% of its initial volume.

Ground-water sampling equipment (e.g., M-scope and the Geosquirt purge pump) will be thoroughly cleansed with a solution of Liquinox, rinsed with tap water, and finally rinsed with control water prior to use in each well. Pre-cleaned disposable bailers and disposable plastic tubing will be dedicated to each individual well.

A.1.3 Ground-Water Sample Collection

Once the wells are satisfactorily purged, water samples will be collected from each well. Water samples for organic analyses will be collected using a clean disposable bailer and transferred to laboratory-prepared 40 ml vials, in duplicate; such that no head space or air bubbles are present in the sample. The samples will be properly labeled (sample identification, sampler initials, date and time of collection, site location, and requested analyses), placed in an ice chest with blue ice, and delivered to an analytical laboratory.

A.1.4 Surface Water Sample Collection

Surface water samples will be collected from mid-depth in the central area of the associated stream. Water samples will be collected in laboratory-prepared 40 ml vials by dipping the vial into the stream water. Each vial will be inverted to check that no head space or bubbles are present. The samples will be properly labeled and transported as described above.

A.1.5 Chain of Custody Procedure

Sample identification documents will be carefully prepared so identification and chain of custody can be maintained and sample disposition can be controlled. The sample identification documents include Chain-of-Custody (COC) records and Daily Field Report forms. Chain of custody procedures are outlined below.

Field Custody Procedures

The field sampler is personally responsible for the care and custody of the samples collected until they are properly transferred.

Samples will have individual labels. The information on these labels will correspond to the COC which shows the identification of individual samples and the contents of the shipping container. The original COC will accompany the shipment and a copy will be retained by the sampler for the client.

The staff person conducting the sampling will determine whether proper custody procedures were followed during the field work.

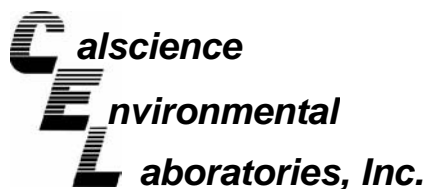
Transfer of Custody and Shipment

A COC will accompany samples during transfer and shipment. When transferring samples, the individual's relinquishing and receiving the samples will sign, date, and note the time on the COC. This COC documents the sample custody transfer.

Samples will be packaged properly for shipment and dispatched to the appropriate laboratory for analysis, with a separate COC accompanying each shipment. Shipments will be accompanied by the original COC. Samples will be delivered by BAI personnel to the laboratory, or shipped by courier.

A.1.6 Field Records

In addition to sample identification numbers and Chain-of Custody records, Daily Field Report records will be maintained by staff personnel to provide daily records of significant events, observations, and measurements during field investigations. These documents will contain information such as: personnel present, site conditions, sampling procedures, measurement procedures, calibration records, etc. Field measurements will be recorded on the appropriate forms. Entries on the data forms will be signed and dated. The data forms will be kept as permanent records.



November 24, 2009

Tom Venus
Broadbent & Associates, Inc.
1324 Mangrove Ave, Ste 212
Chico, CA 95926-2642

Subject: **CalScience Work Order No.: 09-11-0986**
Client Reference: BP 6113

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 11/12/2009 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard CalScience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

A handwritten signature in black ink, appearing to read 'Richard Villafania'.

CalScience Environmental
Laboratories, Inc.
Richard Villafania
Project Manager

Analytical Report



Broadbent & Associates, Inc.
1324 Mangrove Ave, Ste 212
Chico, CA 95926-2642

Date Received: 11/12/09
Work Order No: 09-11-0986
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: BP 6113

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-4	09-11-0986-1-C	11/09/09 13:55	Aqueous	GC 11	11/16/09	11/16/09 22:30	091116B01

Comment(s): -LW = Quantitation of unknown hydrocarbon(s) in sample based on gasoline.

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	270	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	60	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-7	09-11-0986-2-C	11/09/09 13:07	Aqueous	GC 11	11/16/09	11/17/09 00:45	091116B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	51	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-9	09-11-0986-3-C	11/09/09 12:23	Aqueous	GC 11	11/16/09	11/17/09 01:18	091116B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	54	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-11	09-11-0986-4-C	11/09/09 14:25	Aqueous	GC 11	11/16/09	11/17/09 01:52	091116B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	56	38-134			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Broadbent & Associates, Inc.
1324 Mangrove Ave, Ste 212
Chico, CA 95926-2642

Date Received: 11/12/09
Work Order No: 09-11-0986
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: BP 6113

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-12	09-11-0986-5-C	11/09/09 14:20	Aqueous	GC 11	11/16/09	11/17/09 02:26	091116B01

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	54	38-134			

VW-1	09-11-0986-6-C	11/09/09 13:35	Aqueous	GC 11	11/16/09	11/17/09 02:59	091116B01
------	----------------	-------------------	---------	-------	----------	-------------------	-----------

Comment(s): -LW = Quantitation of unknown hydrocarbon(s) in sample based on gasoline.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
Gasoline Range Organics (C6-C12)	230	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	63	38-134			

Method Blank	099-12-695-691	N/A	Aqueous	GC 11	11/16/09	11/16/09 20:49	091116B01
--------------	----------------	-----	---------	-------	----------	-------------------	-----------

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	43	38-134			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Broadbent & Associates, Inc.
 1324 Mangrove Ave, Ste 212
 Chico, CA 95926-2642

Date Received: 11/12/09
 Work Order No: 09-11-0986
 Preparation: EPA 5030B
 Method: EPA 8260B
 Units: ug/L

Project: BP 6113

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-4	09-11-0986-1-A	11/09/09 13:55	Aqueous	GC/MS BB	11/18/09	11/19/09 05:24	091118L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	4.6	0.50	1		Methyl-t-Butyl Ether (MTBE)	3.1	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	12	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	100	80-128			Dibromofluoromethane	102	80-127		
Toluene-d8	100	80-120			1,4-Bromofluorobenzene	99	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-7	09-11-0986-2-A	11/09/09 13:07	Aqueous	GC/MS BB	11/18/09	11/19/09 05:53	091118L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	103	80-128			Dibromofluoromethane	101	80-127		
Toluene-d8	100	80-120			1,4-Bromofluorobenzene	94	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-9	09-11-0986-3-A	11/09/09 12:23	Aqueous	GC/MS BB	11/18/09	11/19/09 06:22	091118L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	102	80-128			Dibromofluoromethane	102	80-127		
Toluene-d8	99	80-120			1,4-Bromofluorobenzene	95	68-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Broadbent & Associates, Inc.
1324 Mangrove Ave, Ste 212
Chico, CA 95926-2642

Date Received: 11/12/09
Work Order No: 09-11-0986
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BP 6113

Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-11	09-11-0986-4-A	11/09/09 14:25	Aqueous	GC/MS BB	11/18/09	11/19/09 06:51	091118L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	12	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	106	80-128			Dibromofluoromethane	102	80-127		
Toluene-d8	100	80-120			1,4-Bromofluorobenzene	97	68-120		

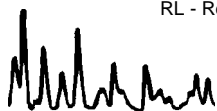
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-12	09-11-0986-5-A	11/09/09 14:20	Aqueous	GC/MS BB	11/18/09	11/19/09 07:20	091118L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	104	80-128			Dibromofluoromethane	103	80-127		
Toluene-d8	100	80-120			1,4-Bromofluorobenzene	96	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW-1	09-11-0986-6-B	11/09/09 13:35	Aqueous	GC/MS BB	11/19/09	11/19/09 15:01	091119L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	1.8	0.50	1		Methyl-t-Butyl Ether (MTBE)	1.1	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	103	80-128			Dibromofluoromethane	102	80-127		
Toluene-d8	101	80-120			1,4-Bromofluorobenzene	99	68-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Broadbent & Associates, Inc.
 1324 Mangrove Ave, Ste 212
 Chico, CA 95926-2642

Date Received: 11/12/09
 Work Order No: 09-11-0986
 Preparation: EPA 5030B
 Method: EPA 8260B
 Units: ug/L

Project: BP 6113

Page 3 of 3

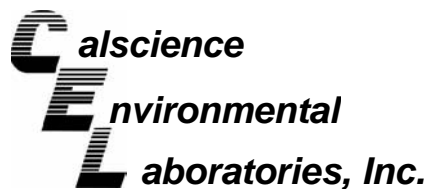
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-703-1,131	N/A	Aqueous	GC/MS BB	11/18/09	11/18/09 23:42	091118L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	111	80-128			Dibromofluoromethane	105	80-127		
Toluene-d8	100	80-120			1,4-Bromofluorobenzene	97	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-703-1,132	N/A	Aqueous	GC/MS BB	11/19/09	11/19/09 11:40	091119L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	102	80-128			Dibromofluoromethane	99	80-127		
Toluene-d8	100	80-120			1,4-Bromofluorobenzene	96	68-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Quality Control - Spike/Spike Duplicate



Broadbent & Associates, Inc.
1324 Mangrove Ave, Ste 212
Chico, CA 95926-2642

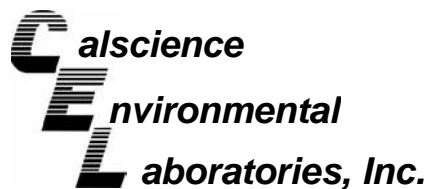
Date Received: 11/12/09
Work Order No: 09-11-0986
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-4	Aqueous	GC 11	11/16/09	11/16/09	091116S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	89	88	38-134	1	0-25	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



Broadbent & Associates, Inc.
1324 Mangrove Ave, Ste 212
Chico, CA 95926-2642

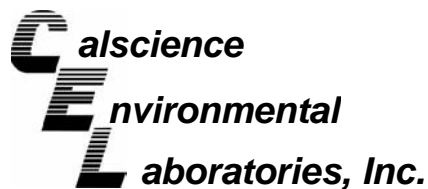
Date Received: 11/12/09
Work Order No: 09-11-0986
Preparation: EPA 5030B
Method: EPA 8260B

Project BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-11-0985-5	Aqueous	GC/MS BB	11/18/09	11/19/09	091118S02

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	104	103	76-124	1	0-20	
Carbon Tetrachloride	102	101	74-134	1	0-20	
Chlorobenzene	101	99	80-120	2	0-20	
1,2-Dibromoethane	97	98	80-120	1	0-20	
1,2-Dichlorobenzene	101	102	80-120	1	0-20	
1,1-Dichloroethene	83	61	73-127	30	0-20	LN,BA,AY
Ethylbenzene	98	92	78-126	7	0-20	
Toluene	101	98	80-120	3	0-20	
Trichloroethene	100	100	77-120	0	0-20	
Vinyl Chloride	91	89	72-126	3	0-20	
Methyl-t-Butyl Ether (MTBE)	118	110	67-121	3	0-49	
Tert-Butyl Alcohol (TBA)	108	96	36-162	11	0-30	
Diisopropyl Ether (DIPE)	102	100	60-138	3	0-45	
Ethyl-t-Butyl Ether (ETBE)	103	100	69-123	3	0-30	
Tert-Amyl-Methyl Ether (TAME)	101	98	65-120	2	0-20	
Ethanol	93	88	30-180	5	0-72	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



Broadbent & Associates, Inc.
1324 Mangrove Ave, Ste 212
Chico, CA 95926-2642

Date Received: 11/12/09
Work Order No: 09-11-0986
Preparation: EPA 5030B
Method: EPA 8260B

Project BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-11-0995-2	Aqueous	GC/MS BB	11/19/09	11/19/09	091119S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	103	105	76-124	2	0-20	
Carbon Tetrachloride	100	102	74-134	1	0-20	
Chlorobenzene	100	103	80-120	3	0-20	
1,2-Dibromoethane	97	100	80-120	2	0-20	
1,2-Dichlorobenzene	100	102	80-120	2	0-20	
1,1-Dichloroethene	99	96	73-127	3	0-20	
Ethylbenzene	99	103	78-126	4	0-20	
Toluene	100	101	80-120	2	0-20	
Trichloroethene	103	103	77-120	0	0-20	
Vinyl Chloride	100	100	72-126	0	0-20	
Methyl-t-Butyl Ether (MTBE)	71	16	67-121	13	0-49	LN,AY
Tert-Butyl Alcohol (TBA)	133	121	36-162	4	0-30	
Diisopropyl Ether (DIPE)	101	102	60-138	1	0-45	
Ethyl-t-Butyl Ether (ETBE)	98	99	69-123	1	0-30	
Tert-Amyl-Methyl Ether (TAME)	99	101	65-120	2	0-20	
Ethanol	99	94	30-180	5	0-72	

RPD - Relative Percent Difference , CL - Control Limit



Broadbent & Associates, Inc.
 1324 Mangrove Ave, Ste 212
 Chico, CA 95926-2642

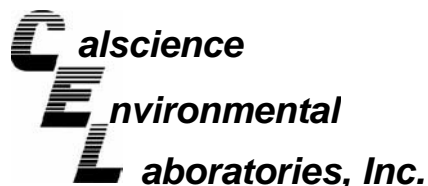
Date Received: N/A
 Work Order No: 09-11-0986
 Preparation: EPA 5030B
 Method: EPA 8015B (M)

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-12-695-691	Aqueous	GC 11	11/16/09	005F0501	091116B01

<u>Parameter</u>	<u>Conc Added</u>	<u>Conc Recovered</u>	<u>LCS %Rec</u>	<u>%Rec CL</u>	<u>Qualifiers</u>
Gasoline Range Organics (C6-C12)	2000	1590	79	78-120	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Broadbent & Associates, Inc.
1324 Mangrove Ave, Ste 212
Chico, CA 95926-2642

Date Received: N/A
Work Order No: 09-11-0986
Preparation: EPA 5030B
Method: EPA 8260B

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number		
099-12-703-1,131	Aqueous	GC/MS BB	11/18/09	11/18/09	091118L02		
Parameter	LCS %REC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	104	105	80-120	73-127	1	0-20	
Carbon Tetrachloride	103	104	74-134	64-144	1	0-20	
Chlorobenzene	102	101	80-120	73-127	1	0-20	
1,2-Dibromoethane	103	104	79-121	72-128	2	0-20	
1,2-Dichlorobenzene	103	104	80-120	73-127	1	0-20	
1,1-Dichloroethene	106	105	78-126	70-134	1	0-28	
Ethylbenzene	102	103	80-120	73-127	1	0-20	
Toluene	103	103	80-120	73-127	1	0-20	
Trichloroethene	102	103	79-127	71-135	1	0-20	
Vinyl Chloride	97	100	72-132	62-142	3	0-20	
Methyl-t-Butyl Ether (MTBE)	107	109	69-123	60-132	1	0-20	
Tert-Butyl Alcohol (TBA)	97	91	63-123	53-133	7	0-20	
Diisopropyl Ether (DIPE)	107	110	59-137	46-150	2	0-37	
Ethyl-t-Butyl Ether (ETBE)	106	110	69-123	60-132	4	0-20	
Tert-Amyl-Methyl Ether (TAME)	104	106	70-120	62-128	2	0-20	
Ethanol	89	91	28-160	6-182	2	0-57	

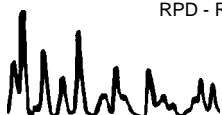
Total number of LCS compounds : 16

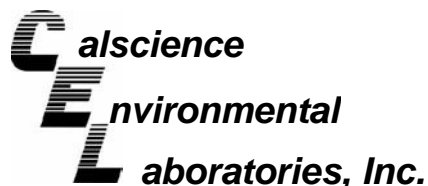
Total number of ME compounds : 0

Total number of ME compounds allowed : 1

LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Broadbent & Associates, Inc.
1324 Mangrove Ave, Ste 212
Chico, CA 95926-2642

Date Received: N/A
Work Order No: 09-11-0986
Preparation: EPA 5030B
Method: EPA 8260B

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number		
099-12-703-1,132	Aqueous	GC/MS BB	11/19/09	11/19/09	091119L01		
<u>Parameter</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>ME CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Benzene	101	106	80-120	73-127	5	0-20	
Carbon Tetrachloride	102	107	74-134	64-144	5	0-20	
Chlorobenzene	101	105	80-120	73-127	5	0-20	
1,2-Dibromoethane	98	105	79-121	72-128	7	0-20	
1,2-Dichlorobenzene	100	104	80-120	73-127	4	0-20	
1,1-Dichloroethene	103	107	78-126	70-134	3	0-28	
Ethylbenzene	103	107	80-120	73-127	4	0-20	
Toluene	100	106	80-120	73-127	5	0-20	
Trichloroethene	99	106	79-127	71-135	6	0-20	
Vinyl Chloride	102	107	72-132	62-142	5	0-20	
Methyl-t-Butyl Ether (MTBE)	98	104	69-123	60-132	6	0-20	
Tert-Butyl Alcohol (TBA)	95	94	63-123	53-133	1	0-20	
Diisopropyl Ether (DIPE)	102	107	59-137	46-150	5	0-37	
Ethyl-t-Butyl Ether (ETBE)	98	104	69-123	60-132	6	0-20	
Tert-Amyl-Methyl Ether (TAME)	95	105	70-120	62-128	10	0-20	
Ethanol	92	86	28-160	6-182	7	0-57	

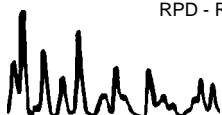
Total number of LCS compounds : 16

Total number of ME compounds : 0

Total number of ME compounds allowed : 1

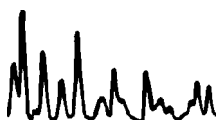
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

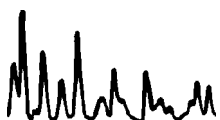


Work Order Number: 09-11-0986

<u>Qualifier</u>	<u>Definition</u>
AX	Sample too dilute to quantify surrogate.
BA	Relative percent difference out of control.
BA,AY	BA = Relative percent difference out of control. AY = Matrix interference suspected.
BB	Sample > 4x spike concentration.
BF	Reporting limits raised due to high hydrocarbon background.
BH	Reporting limits raised due to high level of non-target analytes.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
BY	Sample received at improper temperature.
BZ	Sample preserved improperly.
CL	Initial analysis within holding time but required dilution.
CQ	Analyte concentration greater than 10 times the blank concentration.
CU	Surrogate concentration diluted to not detectable during analysis.
DF	Reporting limits elevated due to matrix interferences.
DU	Insufficient sample quantity for matrix spike/dup matrix spike.
ET	Sample was extracted past end of recommended max. holding time.
EY	Result exceeds normal dynamic range; reported as a min est.
GR	Internal standard recovery is outside method recovery limit.
IB	CCV recovery above limit; analyte not detected.
IH	Calibrtn. verif. recov. below method CL for this analyte.
IJ	Calibrtn. verif. recov. above method CL for this analyte.
J,DX	J=EPA Flag -Estimated value; DX= Value < lowest standard (MQL), but > than MDL.
LA	Confirmatory analysis was past holding time.
LG,AY	LG= Surrogate recovery below the acceptance limit. AY= Matrix interference suspected.
LH,AY	LH= Surrogate recovery above the acceptance limit. AY= Matrix interference suspected.
LM,AY	LM= MS and/or MSD above acceptance limits. See Blank Spike (LCS). AY= Matrix interference suspected.
LN,AY	LN= MS and/or MSD below acceptance limits. See Blank Spike (LCS). AY= Matrix interference suspected.
LQ	LCS recovery above method control limits.



<u>Qualifier</u>	<u>Definition</u>
LR	LCS recovery below method control limits.
LW	Quantitation of unknown hydrocarbon(s) in sample based on gasoline.
LX	Quantitation of unknown hydrocarbon(s) in sample based on diesel.
MB	Analyte present in the method blank.
PC	Sample taken from VOA vial with air bubble > 6mm diameter.
PI	Primary and confirm results varied by > than 40% RPD.
RB	RPD exceeded method control limit; % recoveries within limits.
SG	A silica gel cleanup procedure was performed.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.



0986
Standard

BP/ARC Project Name: BP 6113

Req Due Date (mm/dd/yy):

Rush TAT: Yes ___ No X

BP/ARC Facility No: 6113

Lab Work Order Number:

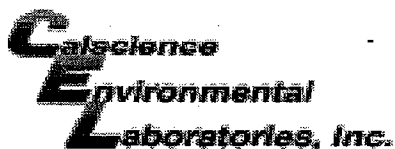
Lab Name: Calscience	BP/ARC Facility Address: 785 E. Stanley Boulevard	Consultant/Contractor: Broadbent & Associates, Inc.
Lab Address: 7440 Lincoln Way	City, State, ZIP Code: Livermore, CA	Consultant/Contractor Project No: 06-82-637-5-822
Lab PM: Richard Villafania	Lead Regulatory Agency: ACEH	Address: 1324 Mangrove Ave. Ste. 212, Chico, CA 95926
Lab Phone: 714-895-5494	California Global ID No.: T0600100111	Consultant/Contractor PM: Tom Venus
Lab Shipping Acct: 9225	Enfos Proposal No: 000TS-0006	Phone: 530-566-1400
Lab Bottle Order No:	Accounting Mode: Provision <u>X</u> OOC-BU ___ OOC-RM ___	Email EDD To: tvenus@broadbentinc.com
Other Info:	Stage: Operate (5) Activity: Monitoring/MNA (22)	Invoice To: BP/ARC <u>X</u> Contractor ___

BP/ARC EBM: Chuck Carmel				Matrix		No. Containers / Preservative						Requested Analyses						Report Type & QC Level		
EBM Phone:				Soil / Solid	Water / Liquid	Air / Vapor	Total Number of Containers	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	Methanol	GRO (8015)	BTEX (8260)	5 Oxys (8260)	EDB (8260)	1,2-DCA (8260)	Ethanol (8260)	Standard <u>X</u>	
EBM Email:																			Full Data Package ___	
Lab No.	Sample Description	Date	Time																Comments	
1	MW-4	11/9/09	1355	X								X	X	X	X	X	X			
2	MW-7		1307	X								X	X	X	X	X	X			
3	MW-9		1223	X								X	X	X	X	X	X			
4	MW-11		1425	X								X	X	X	X	X	X			
5	MW-12		1420	X								X	X	X	X	X	X			
6	VW-1		1335	X								X	X	X	X	X	X			
7	TRIP blank																		Hold trip blank	

Sampler's Name: Tracy Geddes	Relinquished By / Affiliation: R. T. Geddes / BAI	Date: 11/11/09	Time: 0800	Accepted By / Affiliation: [Signature]	Date: 11/12/09	Time: 1045
Sampler's Company: BAI						
Shipment Method: GSO	Ship Date: 11/11/09					
Shipment Tracking No: 106462457						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No Temp Blank: Yes / No Cooler Temp on Receipt: _____ °F/C Trip Blank: Yes / No MS/MSD Sample Submitted: Yes / No



WORK ORDER #: 09-11-0986

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Broadbent

DATE: 11/12/09

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen)

Temperature 5.3 °C - 0.8 °C (CF) = 4.5 °C Blank Sample

Sample(s) outside temperature criteria (PM/APM contacted by: _____).

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter Metals Only PCBs Only

Initial: JP

CUSTODY SEALS INTACT:

Cooler _____ No (Not Intact) Not Present N/A

Initial: JP

Sample _____ No (Not Intact) Not Present

Initial: JP

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
<input type="checkbox"/> COC not relinquished. <input type="checkbox"/> No date relinquished. <input type="checkbox"/> No time relinquished.			
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct containers and volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve EnCores® TerraCores® _____

Water: VOA VOAh VOAna₂ 125AGB 125AGBh 125AGBp 1AGB 1AGBna₂ 1AGBs

500AGB 500AGJ 500AGJs 250AGB 250CGB 250CGBs 1PB 500PB 500PBna

250PB 250PBn 125PB 125PBz₂na 100PJ 100PJna₂ _____ _____ _____

Air: Tedlar® Summa® Other: _____ Trip Blank Lot#: 091030B Checked by: JP

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelop Reviewed by: JP

Preservative: h: HCL n: HNO₃ na₂: Na₂S₂O₃ Na: NaOH p: H₃PO₄ s: H₂SO₄ z₂na: ZnAc₂+NaOH f: Field-filtered Scanned by: JP

APPENDIX B

GEOTRACKER UPLOAD CONFIRMATION RECEIPTS

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER ESI

UPLOADING A GEO_WELL FILE

SUCCESS

Processing is complete. No errors were found!
Your file has been successfully submitted!

<u>Submittal Type:</u>	GEO_WELL
<u>Submittal Title:</u>	4Q09 GEO_WELL 6113
<u>Facility Global ID:</u>	T0600100111
<u>Facility Name:</u>	ARCO #06113
<u>File Name:</u>	GEO_WELL.zip
<u>Organization Name:</u>	Broadbent & Associates, Inc.
<u>Username:</u>	BROADBENT-C
<u>IP Address:</u>	67.118.40.90
<u>Submittal Date/Time:</u>	12/23/2009 10:17:48 AM
<u>Confirmation Number:</u>	1367478728

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER ESI

UPLOADING A EDF FILE

SUCCESS

Processing is complete. No errors were found!
Your file has been successfully submitted!

<u>Submittal Type:</u>	EDF - Monitoring Report - Semi-Annually
<u>Submittal Title:</u>	4Q09 GW Monitoring
<u>Facility Global ID:</u>	T0600100111
<u>Facility Name:</u>	ARCO #06113
<u>File Name:</u>	09110986.zip
<u>Organization Name:</u>	Broadbent & Associates, Inc.
<u>Username:</u>	BROADBENT-C
<u>IP Address:</u>	67.118.40.90
<u>Submittal Date/Time:</u>	12/8/2009 2:04:24 PM
<u>Confirmation Number:</u>	2158377408

[VIEW QC REPORT](#)

[VIEW DETECTIONS REPORT](#)