



Atlantic Richfield Company
(a BP affiliated company)

P.O. Box 1257
San Ramon, CA 94583
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RECEIVED

11:04 am, Oct 31, 2008

Alameda County
Environmental Health



October 28, 2008

Re: Third Quarter, 2008 Semi-Annual Ground-Water Monitoring Report
Atlantic Richfield Company Station #771
899 Rincon Avenue
Livermore, California
ACEH Case RO0000200

"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:

A handwritten signature in black ink that reads "Paul Supple".

Paul Supple
Environmental Business Manager

Prepared for

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

**Third Quarter, 2008 Semi-Annual
Ground-Water Monitoring Report**
Atlantic Richfield Company Station #771
899 Rincon Avenue
Livermore, California

Prepared by

 **BROADBENT & ASSOCIATES, INC.**
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL

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

October 2008

Project No. 06-02-608

Broadbent & Associates, Inc.
1324 Mangrove Ave., Suite 212
Chico, CA 95926
Voice (530) 566-1400
Fax (530) 566-1401



October 28, 2008

Project No. 06-02-608

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

Attn.: Mr. Paul Supple

Re: Third Quarter, 2008 Semi-Annual Ground-Water Monitoring Report, Atlantic Richfield Company Station #771, 899 Rincon Avenue, Livermore California. ACEH Case RO0000200.

Dear Mr. Supple:

Attached is the *Third Quarter, 2008 Semi-Annual Ground-Water Monitoring Report* for Atlantic Richfield Company Station #771 (herein referred to as Station #771) located at 899 Rincon Avenue, Livermore, California (Property). This report presents a summary of Third Quarter, 2008 ground-water monitoring results.

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

Sincerely,

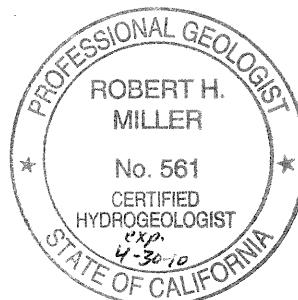
BROADBENT & ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read "Matthew G. Herrick".

Matthew G. Herrick, P.G., C.HG.
Senior Hydrogeologist

A handwritten signature in black ink, appearing to read "Robert H. Miller".

Robert H. Miller, P.G., C.HG.
Principal Hydrogeologist



Enclosures

cc: Mr. Paresh Khatri, Alameda County Environmental Health, 1131 Harbor Bay Parkway,
Suite 250, Alameda, CA, 94502 (Submitted via ACEH ftp Site)
Mr. Paul M. Smith, Livermore-Pleasanton Fire Department, 3560 Nevada St., Pleasanton,
CA 94566
Mr. Chuck Headlee, RWQCB, 1515 Clay St. Suite 1400, Oakland, CA 94612 (Submitted
via GeoTracker)
GeoTracker

STATION #771 SEMI-ANNUAL GROUND-WATER MONITORING REPORT

Facility: #771	Address: 899 Rincon Avenue, Livermore, CA
Station #771 Environmental Business Manager:	Mr. Paul Supple
Consulting Co./Contact Persons:	Broadbent & Associates, Inc. (BAI) / Rob Miller & Matt Herrick
Primary Agency/Regulatory ID No.:	Alameda County Environmental Health (ACEH)/ ACEH Case RO0000200
Consultant Project No.:	06-02-608
Facility Permits/Permitting Agency.:	NA

WORK PERFORMED THIS QUARTER (Third Quarter, 2008):

1. Submitted Second Quarter, 2008 Status Report. Work performed by BAI.
2. Conducted ground-water monitoring/sampling for Third Quarter, 2008. Work performed by Stratus Environmental, Inc. (Stratus).

WORK PROPOSED FOR NEXT QUARTER (Fourth Quarter, 2008):

1. Submit Third Quarter, 2008 Semi-Annual Ground-Water Monitoring Report (contained herein).
2. No environmental work activities are scheduled to be completed on the Property during the Fourth Quarter, 2008.

QUARTERLY RESULTS SUMMARY:

Current phase of project:	Monitoring
Frequency of ground-water sampling:	MW-4, MW-7, RW-1 = Semi-Annual (1Q and 3Q)
Frequency of ground-water monitoring:	MW-2, MW-5, MW-6, MW-11, VW-1, = Annual (3Q)
Is free product (FP) present on-site:	Semi-annual (1Q and 3Q)
FP recovered this quarter:	No
Cumulative FP recovered:	NA (FP last recovered in 1992)
	3.06 gallons, Wells MW-1, MW-2, and MW-5
Current remediation techniques:	Air Diffusion
Depth to ground water (below TOC):	23.70 (VW-1) to 36.32 (MW-8)
General ground-water flow direction:	North
Approximate hydraulic gradient:	0.03 feet per foot

DISCUSSION:

During Third Quarter, 2008 gasoline range organics (GRO) were detected in wells MW-2 and MW-7 at concentrations of 3,600 µg/L and 70 µg/L, respectively. Benzene was detected in wells MW-2, MW-4 and MW-7 at concentrations of 28 µg/L, 3.1 µg/L and 0.76 µg/L, respectively. Xylenes (total) were detected in MW-4 at a concentration of 0.66 µg/L. Methyl tert-butyl ether (MTBE) was detected in wells MW-2, MW-4, MW-7, and RW-1 with concentrations ranging from 0.53 µg/L to 19 µg/L in wells RW-1 and MW-2, respectively. Tert-Butyl alcohol (TBA) was detected in MW-4 at a concentration of 19 µg/L. No other analytes were detected in samples collected during Third Quarter, 2008.

Samples were not analyzed for ethanol and 1,2-Dibromoethane (EDB) during Third Quarter, 2008 as Stratus failed to request the analysis on the chain of custody. Stratus reported that a car was

parked over well MW-10 and therefore the well was not gauged for depth to water during Third Quarter, 2008.

Analytes detected during Third Quarter, 2008 were all within the historic minimum and maximum concentration ranges recorded for each well, with the following exceptions: TBA in MW-4 and GRO, benzene, and MTBE in MW-7 are the lowest concentrations historically detected in each well. Ground-water elevations measured during Third Quarter, 2008 were within historic minimum and maximum ranges for each well, with the following exceptions: ground-water elevations in MW-5 and VW-1 are the lowest levels historically measured in each well.

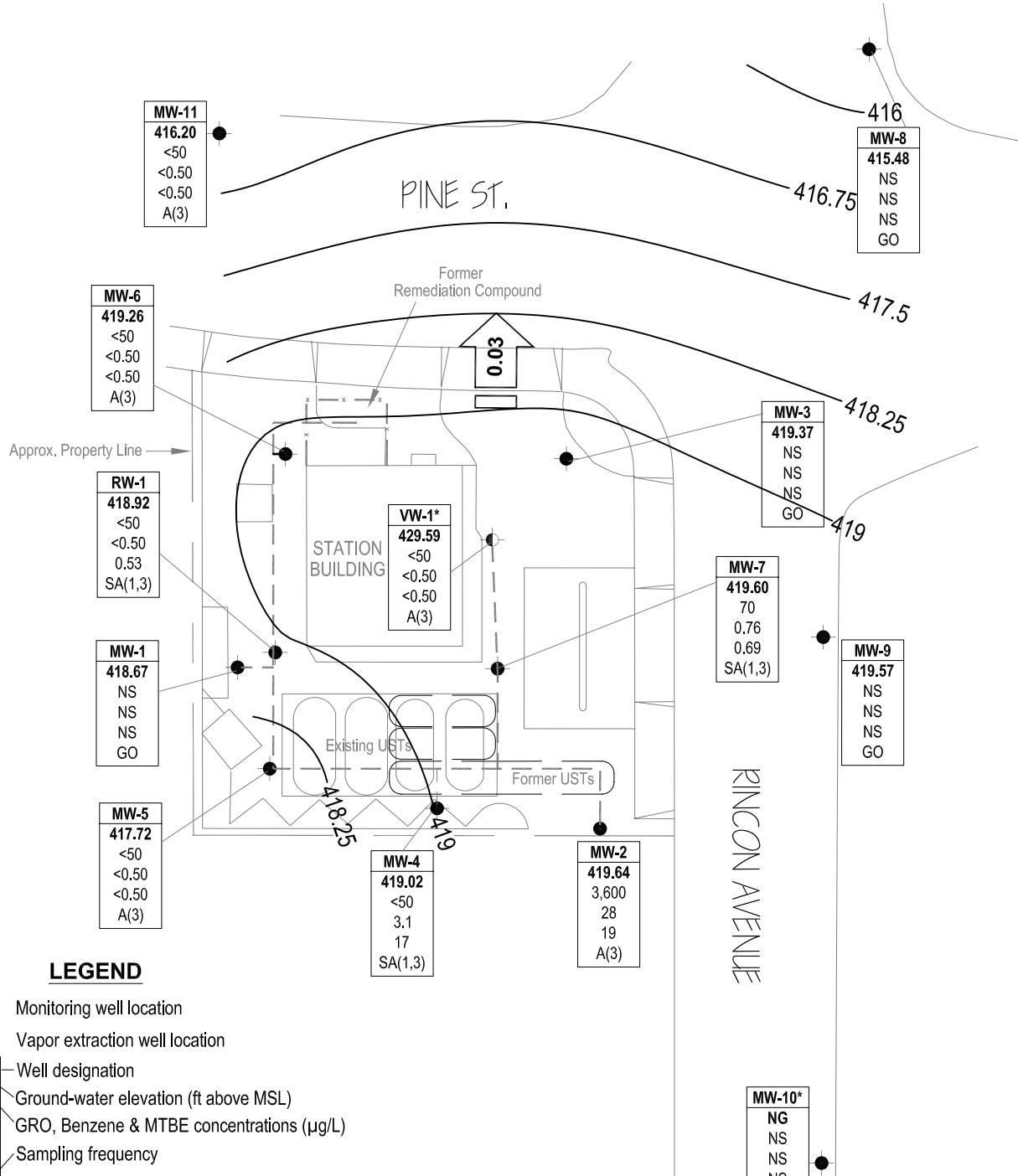
Drawing 1 depicts the ground-water elevation contour and an analytical summary map for the Third Quarter, 2008. Table 1 includes a summary of ground-water monitoring data including relative water elevations and laboratory analyses. Table 2 provides a summary of fuel additives analytical data. Table 3 lists historical ground-water flow direction and gradient data.

CLOSURE:

The findings presented in this report are based upon: observations of Stratus field personnel (see Appendix A), the points investigated, and results of laboratory tests performed by Calscience Environmental Laboratories, Inc. (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. Ground-Water Elevation Contour and Analytical Summary Map, Station #771, Livermore, CA
- Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses, Station #771, Livermore, CA
- Table 2. Summary of Fuel Additives Analytical Data, Station #771, Livermore, CA
- Table 3. Historical Ground-Water Flow Direction and Gradient, Station #771, Livermore, CA
- Appendix A. Stratus Environmental, Inc. Ground-Water Sampling Data Package (Includes Field Data Sheets, Non-Hazardous Waste Data Form, Certified Laboratory Analytical Results, Chain of Custody Documentation, and Field Procedures for Groundwater Sampling)
- Appendix B. GeoTracker Upload Confirmation



MW-10*

NG
NS
NS
NS
GO

0 40 80
SCALE (ft)

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



BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave, Suite 212, Chico, California
Project No.: 06-02-608 Date: 10/8/2008

Station #771
899 Rincon Avenue
Livermore, California

Ground-Water Elevation Contour
and Analytical Summary Map
July 7, 2008

Drawing

1

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

Station #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-1															
3/20/1995	--		451.73	32.00	41.00	24.50	427.23	90,000	1,800	1,100	1,000	5,600	--	--	--
6/2/1995	--		451.73	32.00	41.00	25.60	426.13	81,000	2,000	1,400	990	4,600	--	--	--
8/23/1995	--		451.73	32.00	41.00	29.04	422.69	44,000	2,400	1,900	670	3,800	<300	--	--
12/4/1995	--		451.73	32.00	41.00	31.31	420.42	22,000	870	660	390	2,200	--	--	--
2/20/1996	--		451.73	32.00	41.00	22.26	429.47	21,000	1,500	1,200	650	3,500	<300	--	--
5/15/1996	--		451.73	32.00	41.00	23.42	428.31	36,000	3,000	2,500	960	5,700	<250	--	--
8/13/1996	--		451.73	32.00	41.00	26.83	424.90	19,000	730	580	450	2,500	<200	--	--
11/13/1996	--		451.73	32.00	41.00	31.05	420.68	6,600	47	16	74	160	<30	--	--
3/26/1997	--		451.73	32.00	41.00	26.29	425.44	1,900	100	55	37	200	<30	--	--
5/15/1997	--		451.73	32.00	41.00	28.65	423.08	16,000	490	250	250	1,100	<120	--	--
8/26/1997	--		451.73	32.00	41.00	31.53	420.20	190	6.7	3	6.3	25	<3	--	--
11/5/1997	--		451.73	32.00	41.00	33.93	417.80	63	0.5	<0.5	0.8	2.4	29	--	--
2/18/1998	--		451.73	32.00	41.00	20.46	431.27	23,000	1,500	610	550	3,000	<120	--	--
5/20/1998	--		451.73	32.00	41.00	23.84	427.89	50,000	4,400	1,900	1,400	80,000	<300	--	--
7/30/1998	P		451.73	32.00	41.00	26.94	424.79	150	<0.5	<0.5	<0.5	1.6	<3	8.74	--
10/29/1998	NP		451.73	32.00	41.00	32.58	419.15	<50	<0.5	<0.5	<0.5	1.8	<3	2.0	--
3/16/1999	P		451.73	32.00	41.00	26.20	425.53	3,200	160	32	89	390	270	2.0	--
5/5/1999	P		451.73	32.00	41.00	27.57	424.16	3,600	140	46	76	290	170	11.65	--
8/26/1999	P		451.73	32.00	41.00	30.25	421.48	3,200	210	29	100	220	120	1.43	--
12/3/1999	NP		451.73	32.00	41.00	32.70	419.03	53	<0.5	<0.5	<0.5	1	<3	2.12	--
3/13/2000	P		451.73	32.00	41.00	24.45	427.28	<50	<0.5	<0.5	<0.5	<1	<3	5.81	--
6/20/2000	--	b	451.73	32.00	41.00	--	--	67.4	3.88	<0.500	1.78	1.48	<2.50	--	--
6/20/2000	P		451.73	32.00	41.00	27.79	423.94	356	40.1	7.17	11.9	22.7	<2.50	5.1	--
8/31/2000	--		451.73	32.00	41.00	30.35	421.38	--	--	--	--	--	--	--	--
2/9/2001	--		451.73	32.00	41.00	30.95	420.78	--	--	--	--	--	--	--	--
9/17/2001	--		451.73	32.00	41.00	30.85	420.88	--	--	--	--	--	--	--	--
1/21/2002	--		451.73	32.00	41.00	30.61	421.12	--	--	--	--	--	--	--	--
7/19/2002	--		451.73	32.00	41.00	31.55	420.18	--	--	--	--	--	--	--	--
1/15/2003	--		451.73	32.00	41.00	22.99	428.74	--	--	--	--	--	--	--	--
7/9/2003	--		451.73	32.00	41.00	30.35	421.38	--	--	--	--	--	--	--	--
02/19/2004	--		451.73	32.00	41.00	26.24	425.49	--	--	--	--	--	--	--	--

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

Station #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-1 Cont.															
08/04/2004	--		454.23	32.00	41.00	26.36	427.87	--	--	--	--	--	--	--	--
01/18/2005	--		454.23	32.00	41.00	24.47	429.76	--	--	--	--	--	--	--	--
07/15/2005	--		454.23	32.00	41.00	29.44	424.79	--	--	--	--	--	--	--	--
01/10/2006	--		454.23	32.00	41.00	22.58	431.65	--	--	--	--	--	--	--	--
7/21/2006	--		454.23	32.00	41.00	20.73	433.50	--	--	--	--	--	--	--	--
1/17/2007	--		454.23	32.00	41.00	31.88	422.35	--	--	--	--	--	--	--	--
7/18/2007	--		454.23	32.00	41.00	32.85	421.38	--	--	--	--	--	--	--	--
1/15/2008	--		454.23	32.00	41.00	28.76	425.47	--	--	--	--	--	--	--	--
7/7/2008	--		454.23	32.00	41.00	35.56	418.67	--	--	--	--	--	--	--	--
MW-2															
3/20/1995	--		449.49	30.00	38.00	20.27	429.22	54,000	2,600	1,600	1,200	7,600	--	--	--
6/2/1995	--		449.49	30.00	38.00	22.32	427.17	37,000	2,200	800	980	4,800	--	--	--
8/23/1995	--		449.49	30.00	38.00	25.69	423.80	65,000	1,100	310	840	3,000	<500	--	--
12/4/1995	--		449.49	30.00	38.00	28.52	420.97	19,000	680	150	410	1,600	--	--	--
2/20/1996	--		449.49	30.00	38.00	19.00	430.49	22,000	1,200	240	590	2,200	<300	--	--
5/15/1996	--		449.49	30.00	38.00	20.03	429.46	25,000	1,200	240	610	2,100	<300	--	--
8/13/1996	--		449.49	30.00	38.00	24.44	425.05	19,000	640	110	420	1,200	<300	--	--
11/13/1996	--		449.49	30.00	38.00	28.42	421.07	15,000	260	52	220	640	<200	--	--
3/26/1997	--		449.49	30.00	38.00	22.98	426.51	17,000	580	120	360	980	<120	--	--
5/15/1997	--		449.49	30.00	38.00	25.40	424.09	18,000	420	63	340	730	<120	--	--
8/26/1997	--		449.49	30.00	38.00	28.38	421.11	5,300	210	26	140	270	<120	--	--
11/5/1997	--		449.49	30.00	38.00	31.93	417.56	560	42	2.6	7	9	<40	--	--
2/18/1998	--		449.49	30.00	38.00	16.87	432.62	18,000	710	120	480	1,100	130	--	--
5/20/1998	--		449.49	30.00	38.00	20.29	429.20	16,000	480	72	440	1,100	<120	--	--
7/30/1998	P		449.49	30.00	38.00	23.51	425.98	9,700	240	33	210	490	<120	9.21	--
10/29/1998	NP		449.49	30.00	38.00	30.08	419.41	58	<0.5	<0.5	<0.5	1.2	<3	1.0	--
3/16/1999	P		449.49	30.00	38.00	23.22	426.27	4,700	120	13	90	220	60	2.0	--
5/5/1999	P		449.49	30.00	38.00	24.05	425.44	5,500	58	7.1	58	98	17	9.09	--
8/26/1999	P		449.49	30.00	38.00	26.44	423.05	3,700	55	11	60	64	26	1.9	--
12/3/1999	NP		449.49	30.00	38.00	30.15	419.34	130	<0.5	<0.5	0.7	1.8	<3	1.96	--

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

Station #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-2 Cont.															
3/13/2000	P		449.49	30.00	38.00	20.68	428.81	<50	<0.5	<0.5	<0.5	<1	<3	--	--
6/20/2000	P		449.49	30.00	38.00	23.08	426.41	226	2.2	<0.500	4.83	7.88	<2.50	4.9	--
8/31/2000	P		449.49	30.00	38.00	26.71	422.78	87.1	1.78	<0.500	1.33	1.15	<2.50	1.59	--
2/9/2001	--		449.49	30.00	38.00	29.65	419.84	--	--	--	--	--	--	--	--
9/17/2001	P		449.49	30.00	38.00	27.62	421.87	3,100	300	12	8.8	18	120	1.7	--
1/21/2002	--		449.49	30.00	38.00	27.09	422.40	--	--	--	--	--	--	--	--
7/19/2002	P	a	449.49	30.00	38.00	27.82	421.67	4,700	280	13	120	19	16	0.8	7.4
1/15/2003	--		449.49	30.00	38.00	22.18	427.31	--	--	--	--	--	--	--	--
7/9/2003	--		449.49	30.00	38.00	26.40	423.09	3,900	170	<5.0	100	19	39	2.5	7.0
02/19/2004	--		449.49	30.00	38.00	23.85	425.64	--	--	--	--	--	--	--	--
08/04/2004	P		452.05	30.00	38.00	24.71	427.34	5,400	650	21	160	56	78	0.8	7.2
01/18/2005	--		452.05	30.00	38.00	20.86	431.19	--	--	--	--	--	--	--	--
07/15/2005	P		452.05	30.00	38.00	25.92	426.13	5,200	160	5.3	56	10	46	3.1	6.9
01/10/2006	--		452.05	30.00	38.00	19.25	432.80	--	--	--	--	--	--	--	--
7/21/2006	P		452.05	30.00	38.00	25.73	426.32	120	0.90	<0.50	<0.50	<0.50	<0.50	6.08	8.3
1/17/2007	--		452.05	30.00	38.00	28.70	423.35	--	--	--	--	--	--	--	--
7/18/2007	P		452.05	30.00	38.00	29.07	422.98	2,300	58	2.4	9.5	3.5	45	1.19	7.51
1/15/2008	--		452.05	30.00	38.00	24.65	427.40	--	--	--	--	--	--	--	--
7/7/2008	NP		452.05	30.00	38.00	32.41	419.64	3,600	28	<5.0	<5.0	<5.0	19	2.81	7.24
MW-3															
3/20/1995	--		450.28	32.00	40.00	22.19	428.09	94	<0.5	<0.5	<0.5	<0.5	--	--	--
6/2/1995	--		450.28	32.00	40.00	23.28	427.00	72	<0.5	<0.5	<0.5	<0.5	--	--	--
8/23/1995	--		450.28	32.00	40.00	26.55	423.73	98	<0.5	<0.5	<0.6	0.5	<3	--	--
12/4/1995	--		450.28	32.00	40.00	29.52	420.76	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
2/20/1996	--		450.28	32.00	40.00	19.83	430.45	130	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/15/1996	--		450.28	32.00	40.00	21.03	429.25	120	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
8/13/1996	--		450.28	32.00	40.00	25.67	424.61	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/13/1996	--		450.28	32.00	40.00	21.57	428.71	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
3/26/1997	--		450.28	32.00	40.00	24.15	426.13	<50	1.1	<0.5	<0.5	<0.5	<3	--	--
5/15/1997	--		450.28	32.00	40.00	26.85	423.43	<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 #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-3 Cont.															
8/26/1997	--		450.28	32.00	40.00	30.07	420.21	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/5/1997	--		450.28	32.00	40.00	32.46	417.82	<50	<0.5	0.7	<0.5	<0.5	<3	--	--
2/18/1998	--		450.28	32.00	40.00	17.82	432.46	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/20/1998	--		450.28	32.00	40.00	21.41	428.87	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
7/30/1998	P		450.28	32.00	40.00	26.41	423.87	<50	<0.5	<0.5	<0.5	<0.5	<3	9.56	--
10/29/1998	P		450.28	32.00	40.00	31.33	418.95	<50	<0.5	<0.5	<0.5	<0.5	<3	1.0	--
3/16/1999	P		450.28	32.00	40.00	24.61	425.67	<50	<0.5	<0.5	<0.5	<0.5	<3	1.0	--
5/5/1999	P		450.28	32.00	40.00	25.75	424.53	140	<0.5	<0.5	0.6	<0.5	<3	4.43	--
8/26/1999	P		450.28	32.00	40.00	28.49	421.79	80	0.6	0.6	0.6	1	<3	1.69	--
12/3/1999	P		450.28	32.00	40.00	31.45	418.83	<50	<0.5	<0.5	<0.5	<1	<3	2.26	--
3/13/2000	P		450.28	32.00	40.00	22.18	428.10	<50	<0.5	<0.5	<0.5	<1	<3	4.41	--
6/20/2000	P		450.28	32.00	40.00	26.03	424.25	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	2.3	--
8/31/2000	--		450.28	32.00	40.00	28.75	421.53	--	--	--	--	--	--	--	--
2/9/2001	--		450.28	32.00	40.00	31.04	419.24	--	--	--	--	--	--	--	--
9/17/2001	--		450.28	32.00	40.00	29.04	421.24	--	--	--	--	--	--	--	--
1/21/2002	--		450.28	32.00	40.00	28.81	421.47	--	--	--	--	--	--	--	--
7/19/2002	--		450.28	32.00	40.00	28.92	421.36	--	--	--	--	--	--	--	--
1/15/2003	--		450.28	32.00	40.00	22.88	427.40	--	--	--	--	--	--	--	--
7/9/2003	--		450.28	32.00	40.00	28.00	422.28	--	--	--	--	--	--	--	--
02/19/2004	--		450.28	32.00	40.00	25.29	424.99	--	--	--	--	--	--	--	--
08/04/2004	--		452.75	32.00	40.00	27.40	425.35	--	--	--	--	--	--	--	--
01/18/2005	--		452.75	32.00	40.00	22.76	429.99	--	--	--	--	--	--	--	--
07/15/2005	--		452.75	32.00	40.00	25.95	426.80	--	--	--	--	--	--	--	--
01/10/2006	--		452.75	32.00	40.00	21.18	431.57	--	--	--	--	--	--	--	--
7/21/2006	--		452.75	32.00	40.00	25.73	427.02	--	--	--	--	--	--	--	--
1/17/2007	--		452.75	32.00	40.00	30.51	422.24	--	--	--	--	--	--	--	--
7/18/2007	--		452.75	32.00	40.00	29.53	423.22	--	--	--	--	--	--	--	--
1/15/2008	--		452.75	32.00	40.00	27.65	425.10	--	--	--	--	--	--	--	--
7/7/2008	--		452.75	32.00	40.00	33.38	419.37	--	--	--	--	--	--	--	--
MW-4															

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

Station #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH	
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-4 Cont.																
3/20/1995	--		451.09	26.00	42.00	22.68	428.41	12,000	1,000	100	450	700	--	--	--	
6/2/1995	--		451.09	26.00	42.00	24.41	426.68	9,000	850	56	380	430	--	--	--	
8/23/1995	--		451.09	26.00	42.00	27.72	423.37	5,300	400	25	240	170	<100	--	--	
12/4/1995	--		451.09	26.00	42.00	29.85	421.24	6,700	100	<10	90	38	--	--	--	
2/20/1996	--		451.09	26.00	42.00	21.16	429.93	7,000	360	22	180	160	<70	--	--	
5/15/1996	--		451.09	26.00	42.00	22.18	428.91	--	--	--	--	--	--	--	--	
8/13/1996	--		451.09	26.00	42.00	26.20	424.89	--	--	--	--	--	--	--	--	
11/13/1996	--		451.09	26.00	42.00	29.72	421.37	--	--	--	--	--	--	--	--	
3/26/1997	--		451.09	26.00	42.00	21.86	429.23	8,900	390	33	200	250	<70	--	--	
5/15/1997	--		451.09	26.00	42.00	26.92	424.17	--	--	--	--	--	--	--	--	
8/26/1997	--		451.09	26.00	42.00	29.30	421.79	--	--	--	--	--	--	--	--	
11/5/1997	--		451.09	26.00	42.00	32.14	418.95	--	--	--	--	--	--	--	--	
2/18/1998	--		451.09	26.00	42.00	19.30	431.79	5,300	220	19	160	130	120	--	--	
5/20/1998	--		451.09	26.00	42.00	22.40	428.69	--	--	--	--	--	--	--	--	
7/30/1998	--		451.09	26.00	42.00	25.74	425.35	--	--	--	--	--	--	--	--	
10/29/1998	--		451.09	26.00	42.00	31.26	419.83	--	--	--	--	--	--	--	--	
3/16/1999	P		451.09	26.00	42.00	25.05	426.04	1,900	49	<5	43	<5	82	1.5	--	
5/5/1999	--		451.09	26.00	42.00	26.15	424.94	--	--	--	--	--	--	--	--	
8/26/1999	--		451.09	26.00	42.00	28.60	422.49	--	--	--	--	--	--	1.43	--	
12/3/1999	--		451.09	26.00	42.00	31.53	419.56	--	--	--	--	--	--	--	--	
3/13/2000	P		451.09	26.00	42.00	23.61	427.48	<50	<0.5	<0.5	<0.5	<1	<3	3.82	--	
6/20/2000	--		451.09	26.00	42.00	26.38	424.71	--	--	--	--	--	--	0.4	--	
8/31/2000	NP		451.09	26.00	42.00	29.55	421.54	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	1.04	--
2/9/2001	NP		451.09	26.00	42.00	30.30	420.79	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	1.39	--
9/17/2001	NP	a	451.09	26.00	42.00	29.90	421.19	3,400	51	<5.0	16	23	360	0.92	--	
1/21/2002	NP		451.09	26.00	42.00	29.51	421.58	1,900	140	12	27	48	300	1.03	--	
7/19/2002	NP	a	451.09	26.00	42.00	30.77	420.32	2,700	150	9.9	<5.0	<5.0	130	1.0	7.3	
1/15/2003	--	a	451.09	26.00	42.00	23.56	427.53	4,800	150	5.3	28	46	150	1.3	7.0	
7/9/2003	--		451.09	26.00	42.00	29.50	421.59	3,000	210	9.4	6	20	150	2.0	6.9	
02/19/2004	P	c	451.09	26.00	42.00	26.35	424.74	4,800	270	11	25	19	180	1.8	6.2	
08/04/2004	NP		453.80	26.00	42.00	26.48	427.32	4,200	410	13	49	59	300	0.7	6.7	

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

Station #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-4 Cont.															
01/18/2005	P		453.80	26.00	42.00	23.15	430.65	4,500	250	9.5	62	22	160	1.2	6.9
07/15/2005	NP		453.80	26.00	42.00	28.13	425.67	3,500	230	6.1	19	15	230	0.5	7.0
01/10/2006	P		453.80	26.00	42.00	21.49	432.31	5,500	250	7.6	37	25	190	1.3	7.1
7/21/2006	NP		453.80	26.00	42.00	28.88	424.92	66	0.60	<0.50	0.52	0.82	3.1	4.75	8.3
1/17/2007	NP		453.80	26.00	42.00	30.80	423.00	<50	<0.50	<0.50	<0.50	<0.50	11	6.19	8.03
7/18/2007	NP		453.80	26.00	42.00	32.00	421.80	2,400	140	6.8	1.3	4.1	74	5.03	7.12
1/15/2008	NP	f (MTBE)	453.80	26.00	42.00	27.30	426.50	220	1.2	<0.50	<0.50	0.50	61	3.29	6.94
7/7/2008	NP		453.80	26.00	42.00	34.78	419.02	<50	3.1	<0.50	<0.50	0.66	17	4.03	7.26
MW-5															
3/20/1995	--		451.40	31.50	41.00	23.20	428.20	26,000	1,300	180	890	2,900	--	--	--
6/2/1995	--		451.40	31.50	41.00	24.80	426.60	39,000	940	160	740	1,900	--	--	--
8/23/1995	--		451.40	31.50	41.00	28.10	423.30	14,000	490	74	250	890	<300	--	--
12/4/1995	--		451.40	31.50	41.00	29.83	421.57	7,600	230	13	61	80	--	--	--
2/20/1996	--		451.40	31.50	41.00	21.63	429.77	4,300	220	12	45	130	<50	--	--
5/15/1996	--		451.40	31.50	41.00	22.87	428.53	2,200	380	17	58	84	<40	--	--
8/13/1996	--		451.40	31.50	41.00	26.48	424.92	1,700	150	16	24	35	47	--	--
11/13/1996	--		451.40	31.50	41.00	29.68	421.72	850	150	11	19	37	66	--	--
3/26/1997	--		451.40	31.50	41.00	25.14	426.26	2,400	440	21	79	210	68	--	--
5/15/1997	--		451.40	31.50	41.00	27.38	424.02	3,900	510	19	140	240	48	--	--
8/26/1997	--		451.40	31.50	41.00	29.89	421.51	76	4.9	<0.5	1.5	2	9	--	--
11/5/1997	--		451.40	31.50	41.00	32.57	418.83	63	0.8	<0.5	<0.5	1.2	34	--	--
2/18/1998	--		451.40	31.50	41.00	19.99	431.41	6,200	630	70	320	640	320	--	--
5/20/1998	--		451.40	31.50	41.00	23.21	428.19	2,300	340	21	110	140	62	--	--
7/30/1998	P		451.40	31.50	41.00	26.19	425.21	<50	0.8	<0.5	0.6	0.9	<3	8.83	--
10/29/1998	NP		451.40	31.50	41.00	31.92	419.48	<50	<0.5	<0.5	<0.5	<0.5	<3	2.0	--
3/16/1999	P		451.40	31.50	41.00	25.80	425.60	1,300	170	8	59	65	120	2.0	--
5/5/1999	P		451.40	31.50	41.00	27.09	424.31	320	31	1.1	13	13	19	12.09	--
8/26/1999	P		451.40	31.50	41.00	29.67	421.73	260	13	1.7	4.2	6.3	150	1.31	--
12/3/1999	--	d	451.40	31.50	41.00	--	--	--	--	--	--	--	--	--	--
3/13/2000	P		451.40	31.50	41.00	24.51	426.89	<50	<0.5	<0.5	<0.5	<1	<3	4.41	--

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

Station #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-5 Cont.															
6/20/2000	P		451.40	31.50	41.00	27.37	424.03	60.8	4.84	<0.500	1.9	1.59	<2.50	5.3	--
8/31/2000	P		451.40	31.50	41.00	30.21	421.19	<50.0	1.18	<0.500	<0.500	<0.500	3.83	0.97	--
2/9/2001	--		451.40	31.50	41.00	30.19	421.21	--	--	--	--	--	--	--	--
9/17/2001	P		451.40	31.50	41.00	30.71	420.69	2,700	120	10	90	77	330	0.81	--
1/21/2002	--		451.40	31.50	41.00	30.40	421.00	--	--	--	--	--	--	--	--
7/19/2002	P	a	451.40	31.50	41.00	31.93	419.47	1,600	170	7	120	<5.0	180	1.7	7.2
1/15/2003	--		451.40	31.50	41.00	23.12	428.28	--	--	--	--	--	--	--	--
7/9/2003	--		451.40	31.50	41.00	30.95	420.45	2,000	160	5.7	67	27	260	1.5	6.9
02/19/2004	--		451.40	31.50	41.00	26.73	424.67	--	--	--	--	--	--	--	--
08/04/2004	P		453.52	31.50	41.00	26.61	426.91	2,100	250	5.3	73	22	250	2.7	7.0
01/18/2005	--		453.52	31.50	41.00	24.10	429.42	--	--	--	--	--	--	--	--
07/15/2005	P		453.52	31.50	41.00	29.27	424.25	1,600	61	<5.0	8.7	<5.0	270	2.1	6.9
01/10/2006	--		453.52	31.50	41.00	22.19	431.33	--	--	--	--	--	--	--	--
7/21/2006	P		453.52	31.50	41.00	30.36	423.16	2,100	29	<5.0	7.5	11	14	2.98	7.1
1/17/2007	--		453.52	31.50	41.00	31.77	421.75	--	--	--	--	--	--	--	--
7/18/2007	NP		453.52	31.50	41.00	33.42	420.10	470	36	0.84	0.97	2.2	110	1.73	7.50
1/15/2008	--		453.52	31.50	41.00	28.60	424.92	--	--	--	--	--	--	--	--
7/7/2008	NP		453.52	31.50	41.00	35.80	417.72	<50	<0.50	<0.50	<0.50	<0.50	<0.50	7.55	7.79
MW-6															
3/20/1995	--		451.37	32.00	42.00	25.19	426.18	2,600	210	87	82	140	--	--	--
6/2/1995	--		451.37	32.00	42.00	25.75	425.62	1,600	55	7.9	40	26	--	--	--
8/23/1995	--		451.37	32.00	42.00	29.53	421.84	1,400	42	2.5	36	13	<20	--	--
12/4/1995	--		451.37	32.00	42.00	32.28	419.09	2,500	52	5.8	59	13	--	--	--
2/20/1996	--		451.37	32.00	42.00	22.27	429.10	2,500	120	16	73	12	<30	--	--
5/15/1996	--		451.37	32.00	42.00	23.86	427.51	2,000	71	6.4	47	25	<15	--	--
8/13/1996	--		451.37	32.00	42.00	28.55	422.82	3,800	91	8.2	69	25	<20	--	--
11/13/1996	--		451.37	32.00	42.00	32.04	419.33	1,900	55	3.3	55	8.5	16	--	--
3/26/1997	--		451.37	32.00	42.00	26.84	424.53	1,800	51	5	32	15	<30	--	--
5/15/1997	--		451.37	32.00	42.00	29.58	421.79	2,400	46	3	29	9	<12	--	--
8/26/1997	--		451.37	32.00	42.00	32.67	418.70	1,400	61	6	33	10	<12	--	--

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Station #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH	
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-6 Cont.																
11/5/1997	--		451.37	32.00	42.00	34.62	416.75	690	29	2.7	18	3.4	9	--	--	
2/18/1998	--		451.37	32.00	42.00	20.09	431.28	1,800	74	5	24	12	19	--	--	
5/20/1998	--		451.37	32.00	42.00	24.05	427.32	1,900	280	4	31	16	9	--	--	
7/30/1998	P		451.37	32.00	42.00	28.72	422.65	2,300	110	7	36	20	<15	--	--	
10/29/1998	P		451.37	32.00	42.00	32.77	418.60	2,500	14	13	17	12	<12	1.0	--	
3/16/1999	P		451.37	32.00	42.00	26.45	424.92	1,200	65	4	27	13	18	0.5	--	
5/5/1999	P		451.37	32.00	42.00	27.86	423.51	2,200	53	4	26	6	25	5.59	--	
8/26/1999	P		451.37	32.00	42.00	30.49	420.88	1,100	11	6	10	4	13	2.35	--	
12/3/1999	P		451.37	32.00	42.00	32.35	419.02	370	<0.5	<0.5	0.8	<1	4	2.36	--	
3/13/2000	P		451.37	32.00	42.00	28.36	423.01	54	2.1	0.5	0.9	1.4	<3	4.22	--	
6/20/2000	P		451.37	32.00	42.00	28.35	423.02	195	1.83	<0.500	0.528	<0.500	<2.50	3.5	--	
8/31/2000	P		451.37	32.00	42.00	30.20	421.17	276	3.52	0.788	1.15	0.621	8.73	7.0	--	
2/9/2001	P		451.37	32.00	42.00	30.70	420.67	253	5.44	2.93	0.924	0.977	48.9	0.59	--	
2/9/2001	--	b	451.37	32.00	42.00	--	--	222	4.49	2.73	0.579	0.523	57.1	--	--	
9/17/2001	--	b	451.37	32.00	42.00	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	
9/17/2001	P		451.37	32.00	42.00	30.94	420.43	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.79	--	
1/21/2002	P		451.37	32.00	42.00	30.55	420.82	<50	<0.50	<0.50	<0.50	<0.50	<5.0	1.9	--	
7/19/2002	P	a	451.37	32.00	42.00	30.27	421.10	60	2	<0.50	<0.50	<0.50	<0.50	<0.50	3.5	7.9
1/15/2003	--	a	451.37	32.00	42.00	22.86	428.51	83	9.1	<0.50	3.4	4.6	1	2.5	7.2	
7/9/2003	P		451.37	32.00	42.00	29.41	421.96	110	<0.50	<0.50	<0.50	<0.50	0.98	2.6	7.1	
02/19/2004	--		451.37	32.00	42.00	43.25	408.12	--	--	--	--	--	--	--	--	
08/04/2004	P		453.83	32.00	42.00	27.71	426.12	540	36	3.8	17	24	5.2	3.5	7.1	
01/18/2005	--		453.83	32.00	42.00	24.56	429.27	--	--	--	--	--	--	--	--	
07/15/2005	P		453.83	32.00	42.00	27.61	426.22	4,600	210	44	150	670	32	3.5	7.1	
01/10/2006	--		453.83	32.00	42.00	23.75	430.08	--	--	--	--	--	--	--	--	
7/21/2006	P		453.83	32.00	42.00	27.96	425.87	260	<0.50	<0.50	<0.50	<0.50	0.86	5.1	2.60	
1/17/2007	--		453.83	32.00	42.00	30.57	423.26	--	--	--	--	--	--	--	--	
7/18/2007	P		453.83	32.00	42.00	30.96	422.87	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.95	7.57	
1/15/2008	--		453.83	32.00	42.00	28.89	424.94	--	--	--	--	--	--	--	--	
7/7/2008	NP		453.83	32.00	42.00	34.57	419.26	<50	<0.50	<0.50	<0.50	<0.50	<0.50	6.00	7.19	

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

Station #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-7															
3/20/1995	--		450.33	30.00	40.00	22.07	428.26	31,000	2,300	400	620	2,900	--	--	--
6/2/1995	--		450.33	30.00	40.00	23.42	426.91	40,000	1,400	280	610	2,400	--	--	--
8/23/1995	--		450.33	30.00	40.00	27.13	423.20	25,000	1,400	200	600	1,600	350	--	--
12/4/1995	--		450.33	30.00	40.00	29.45	420.88	23,000	1,100	74	490	720	--	--	--
2/20/1996	--		450.33	30.00	40.00	20.25	430.08	39,000	1,200	140	640	1,800	<400	--	--
5/15/1996	--		450.33	30.00	40.00	21.38	428.95	--	--	--	--	--	--	--	--
8/13/1996	--		450.33	30.00	40.00	25.52	424.81	--	--	--	--	--	--	--	--
11/13/1996	--		450.33	30.00	40.00	29.38	420.95	--	--	--	--	--	--	--	--
3/26/1997	--		450.33	30.00	40.00	24.36	425.97	35,000	1,100	180	460	1,700	<300	--	--
5/15/1997	--		450.33	30.00	40.00	26.90	423.43	--	--	--	--	--	--	--	--
8/26/1997	--		450.33	30.00	40.00	30.21	420.12	--	--	--	--	--	--	--	--
11/5/1997	--		450.33	30.00	40.00	32.49	417.84	--	--	--	--	--	--	--	--
2/18/1998	--		450.33	30.00	40.00	18.10	432.23	19,000	1,100	120	460	1,700	240	--	--
5/20/1998	--		450.33	30.00	40.00	21.68	428.65	--	--	--	--	--	--	--	--
7/30/1998	--		450.33	30.00	40.00	26.07	424.26	--	--	--	--	--	--	--	--
10/29/1998	--		450.33	30.00	40.00	31.13	419.20	--	--	--	--	--	--	--	--
3/16/1999	P		450.33	30.00	40.00	24.45	425.88	8,600	430	51	200	680	<120	1.5	--
5/5/1999	--		450.33	30.00	40.00	25.84	424.49	--	--	--	--	--	--	--	--
8/26/1999	--		450.33	30.00	40.00	28.28	422.05	--	--	--	--	--	--	1.51	--
12/3/1999	--		450.33	30.00	40.00	31.57	418.76	--	--	--	--	--	--	--	--
3/13/2000	--	d	450.33	30.00	40.00	--	--	--	--	--	--	--	--	--	--
6/20/2000	--		450.33	30.00	40.00	25.91	424.42	--	--	--	--	--	--	5.4	--
8/31/2000	--		450.33	30.00	40.00	28.40	421.93	8,410	344	58.9	276	581	202	0.09	--
2/9/2001	--		450.33	30.00	40.00	30.04	420.29	2,030	203	12	17.9	49.4	128	1.55	--
9/17/2001	P		450.33	30.00	40.00	29.03	421.30	4,800	200	14	9.9	27	160	0.29	--
1/21/2002	--	b	450.33	30.00	40.00	--	--	2,600	280	17	41	50	97	--	--
1/21/2002	P		450.33	30.00	40.00	28.98	421.35	4,200	350	20	52	63	99	0.81	--
7/19/2002	P	a	450.33	30.00	40.00	28.70	421.63	5,700	630	31	330	160	64	0.7	7.3
1/15/2003	--	a	450.33	30.00	40.00	21.91	428.42	12,000	470	19	340	310	91	1.5	7.0
7/9/2003	P		450.33	30.00	40.00	27.88	422.45	6,700	590	23	280	92	110	1.0	6.9
02/19/2004	P	c	450.33	30.00	40.00	25.12	425.21	8,900	670	24	470	120	100	0.8	6.6

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

Station #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-7 Cont.															
08/04/2004	P		452.70	30.00	40.00	25.92	426.78	9,100	930	29	460	130	140	0.6	7.2
01/18/2005	P		452.70	30.00	40.00	22.31	430.39	16,000	770	33	590	220	87	1.0	6.9
07/15/2005	P		452.70	30.00	40.00	27.20	425.50	12,000	1,000	38	490	220	150	1.5	6.9
01/10/2006	P		452.70	30.00	40.00	20.61	432.09	13,000	1,200	50	760	330	120	0.8	7.1
7/21/2006	P		452.70	30.00	40.00	28.10	424.60	8,000	110	<50	380	180	54	3.20	7.8
1/17/2007	P		452.70	30.00	40.00	29.70	423.00	5,600	16	<2.5	26	12	3.1	1.08	7.83
7/18/2007	P		452.70	30.00	40.00	29.73	422.97	2,400	140	2.8	9.1	7.3	67	4.86	7.67
1/15/2008	P		452.70	30.00	40.00	26.18	426.52	3,500	120	3.6	9.0	29	26	3.16	7.07
7/7/2008	NP		452.70	30.00	40.00	33.10	419.60	70	0.76	<0.50	<0.50	<0.50	0.69	7.81	8.24
MW-8															
3/20/1995	--		449.43	27.50	42.50	24.75	424.68	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
6/2/1995	--		449.43	27.50	42.50	24.95	424.48	--	--	--	--	--	--	--	--
8/23/1995	--		449.43	27.50	42.50	30.94	418.49	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
12/4/1995	--		449.43	27.50	42.50	31.99	417.44	--	--	--	--	--	--	--	--
2/20/1996	--		449.43	27.50	42.50	21.13	428.30	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/15/1996	--		449.43	27.50	42.50	21.96	427.47	--	--	--	--	--	--	--	--
8/13/1996	--		449.43	27.50	42.50	30.20	419.23	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/13/1996	--		449.43	27.50	42.50	33.24	416.19	--	--	--	--	--	--	--	--
3/26/1997	--		449.43	27.50	42.50	26.85	422.58	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/15/1997	--		449.43	27.50	42.50	29.69	419.74	--	--	--	--	--	--	--	--
8/26/1997	--		449.43	27.50	42.50	34.00	415.43	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/5/1997	--		449.43	27.50	42.50	35.94	413.49	--	--	--	--	--	--	--	--
2/18/1998	--		449.43	27.50	42.50	18.18	431.25	<50	0.6	0.6	<0.5	1.1	<3	--	--
5/20/1998	--		449.43	27.50	42.50	22.85	426.58	--	--	--	--	--	--	--	--
7/30/1998	NP		449.43	27.50	42.50	30.31	419.12	<50	<0.5	<0.5	<0.5	<0.5	<3	8.21	--
10/29/1998	--		449.43	27.50	42.50	35.88	413.55	--	--	--	--	--	--	--	--
3/16/1999	NP		449.43	27.50	42.50	28.50	420.93	<50	<0.5	<0.5	<0.5	<0.5	<3	1.0	--
5/5/1999	--		449.43	27.50	42.50	29.76	419.67	--	--	--	--	--	--	--	--
8/26/1999	P		449.43	27.50	42.50	33.51	415.92	<50	<0.5	<0.5	<0.5	<0.5	<3	4.93	--
12/3/1999	--		449.43	27.50	42.50	35.83	413.60	--	--	--	--	--	--	--	--

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

Station #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-8 Cont.															
3/13/2000	P		449.43	27.50	42.50	26.12	423.31	<50	<0.5	<0.5	<0.5	<1	<3	2.81	--
6/20/2000	--		449.43	27.50	42.50	30.91	418.52	--	--	--	--	--	--	5.8	--
8/31/2000	--		449.43	27.50	42.50	33.70	415.73	--	--	--	--	--	--	--	--
2/9/2001	--		449.43	27.50	42.50	30.90	418.53	--	--	--	--	--	--	--	--
9/17/2001	--		449.43	27.50	42.50	33.95	415.48	--	--	--	--	--	--	--	--
1/21/2002	--		449.43	27.50	42.50	33.71	415.72	--	--	--	--	--	--	--	--
7/19/2002	--		449.43	27.50	42.50	35.30	414.13	--	--	--	--	--	--	--	--
1/15/2003	--		449.43	27.50	42.50	27.10	422.33	--	--	--	--	--	--	--	--
7/9/2003	--		449.43	27.50	42.50	33.10	416.33	--	--	--	--	--	--	--	--
02/19/2004	--		449.43	27.50	42.50	28.92	420.51	--	--	--	--	--	--	--	--
08/04/2004	--		451.80	27.50	42.50	34.28	417.52	--	--	--	--	--	--	--	--
01/18/2005	--		451.80	27.50	42.50	26.76	425.04	--	--	--	--	--	--	--	--
07/15/2005	--		451.80	27.50	42.50	31.14	420.66	--	--	--	--	--	--	--	--
01/10/2006	--		451.80	27.50	42.50	22.88	428.92	--	--	--	--	--	--	--	--
7/21/2006	--		451.80	27.50	42.50	30.84	420.96	--	--	--	--	--	--	--	--
1/17/2007	--		451.80	27.50	42.50	33.20	418.60	--	--	--	--	--	--	--	--
7/18/2007	--		451.80	27.50	42.50	31.92	419.88	--	--	--	--	--	--	--	--
1/15/2008	--		451.80	27.50	42.50	31.52	420.28	--	--	--	--	--	--	--	--
7/7/2008	--		451.80	27.50	42.50	36.32	415.48	--	--	--	--	--	--	--	--
MW-9															
3/20/1995	--		449.21	29.50	39.50	19.11	430.10	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
6/2/1995	--		449.21	29.50	39.50	21.23	427.98	--	--	--	--	--	--	--	--
8/23/1995	--		449.21	29.50	39.50	24.33	424.88	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
12/4/1995	--		449.21	29.50	39.50	27.90	421.31	--	--	--	--	--	--	--	--
2/20/1996	--		449.21	29.50	39.50	17.86	431.35	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/15/1996	--		449.21	29.50	39.50	18.69	430.52	--	--	--	--	--	--	--	--
8/13/1996	--		449.21	29.50	39.50	24.17	425.04	--	--	--	--	--	--	--	--
11/13/1996	--		449.21	29.50	39.50	28.01	421.20	--	--	--	--	--	--	--	--
3/26/1997	--		449.21	29.50	39.50	22.58	426.63	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/15/1997	--		449.21	29.50	39.50	25.12	424.09	--	--	--	--	--	--	--	--

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

Station #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-9 Cont.															
8/26/1997	--		449.21	29.50	39.50	28.28	420.93	--	--	--	--	--	--	--	--
11/5/1997	--		449.21	29.50	39.50	31.18	418.03	--	--	--	--	--	--	--	--
2/18/1998	--		449.21	29.50	39.50	16.03	433.18	<50	0.6	0.5	<0.5	1	<3	--	--
5/20/1998	--		449.21	29.50	39.50	19.31	429.90	--	--	--	--	--	--	--	--
7/30/1998	--		449.21	29.50	39.50	24.90	424.31	--	--	--	--	--	--	--	--
10/29/1998	--		449.21	29.50	39.50	30.08	419.13	--	--	--	--	--	--	--	--
3/16/1999	P		449.21	29.50	39.50	22.68	426.53	<50	<0.5	<0.5	<0.5	<0.5	<3	1.0	--
5/5/1999	--		449.21	29.50	39.50	23.82	425.39	--	--	--	--	--	--	--	--
8/26/1999	--		449.21	29.50	39.50	26.57	422.64	--	--	--	--	--	--	5.08	--
12/3/1999	--	d	449.21	29.50	39.50	--	--	--	--	--	--	--	--	--	--
3/13/2000	P		449.21	29.50	39.50	25.62	423.59	<50	<0.5	<0.5	<0.5	<1	<3	5.43	--
6/20/2000	--		449.21	29.50	39.50	23.55	425.66	--	--	--	--	--	--	6.2	--
8/31/2000	--		449.21	29.50	39.50	27.39	421.82	--	--	--	--	--	--	--	--
2/9/2001	--		449.21	29.50	39.50	28.65	420.56	--	--	--	--	--	--	--	--
9/17/2001	--		449.21	29.50	39.50	27.51	421.70	--	--	--	--	--	--	--	--
1/21/2002	--		449.21	29.50	39.50	27.09	422.12	--	--	--	--	--	--	--	--
7/19/2002	--		449.21	29.50	39.50	27.06	422.15	--	--	--	--	--	--	--	--
1/15/2003	--		449.21	29.50	39.50	21.78	427.43	--	--	--	--	--	--	--	--
7/9/2003	--		449.21	29.50	39.50	26.18	423.03	--	--	--	--	--	--	--	--
02/19/2004	--		449.21	29.50	39.50	23.45	425.76	--	--	--	--	--	--	--	--
08/04/2004	--		451.63	29.50	39.50	29.24	422.39	--	--	--	--	--	--	--	--
01/18/2005	--		451.63	29.50	39.50	20.64	430.99	--	--	--	--	--	--	--	--
07/15/2005	--		451.63	29.50	39.50	25.72	425.91	--	--	--	--	--	--	--	--
01/10/2006	--		451.63	29.50	39.50	18.86	432.77	--	--	--	--	--	--	--	--
7/21/2006	--		451.63	29.50	39.50	25.58	426.05	--	--	--	--	--	--	--	--
1/17/2007	--		451.63	29.50	39.50	29.11	422.52	--	--	--	--	--	--	--	--
7/18/2007	--	d	451.63	29.50	39.50	--	--	--	--	--	--	--	--	--	--
1/15/2008	--		451.63	29.50	39.50	24.89	426.74	--	--	--	--	--	--	--	--
7/7/2008	--		451.63	29.50	39.50	32.06	419.57	--	--	--	--	--	--	--	--
MW-10															

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

Station #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-10 Cont.															
3/20/1995	--		449.22	29.00	37.00	20.96	428.26	--	--	--	--	--	--	--	--
6/2/1995	--		449.22	29.00	37.00	22.15	427.07	--	--	--	--	--	--	--	--
8/23/1995	--		449.22	29.00	37.00	24.47	424.75	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
12/4/1995	--		449.22	29.00	37.00	26.97	422.25	--	--	--	--	--	--	--	--
2/20/1996	--		449.22	29.00	37.00	18.40	430.82	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/15/1996	--	d	449.22	29.00	37.00	--	--	--	--	--	--	--	--	--	--
8/13/1996	--		449.22	29.00	37.00	23.70	425.52	--	--	--	--	--	--	--	--
11/13/1996	--		449.22	29.00	37.00	27.15	422.07	--	--	--	--	--	--	--	--
3/26/1997	--		449.22	29.00	37.00	22.23	426.99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/15/1997	--		449.22	29.00	37.00	24.57	424.65	--	--	--	--	--	--	--	--
8/26/1997	--		449.22	29.00	37.00	27.62	421.60	--	--	--	--	--	--	--	--
11/5/1997	--		449.22	29.00	37.00	30.79	418.43	--	--	--	--	--	--	--	--
2/18/1998	--	d	449.22	29.00	37.00	--	--	--	--	--	--	--	--	--	--
5/20/1998	--		449.22	29.00	37.00	--	--	--	--	--	--	--	--	--	--
7/30/1998	--		449.22	29.00	37.00	23.90	425.32	--	--	--	--	--	--	--	--
10/29/1998	--		449.22	29.00	37.00	30.55	418.67	--	--	--	--	--	--	--	--
3/16/1999	P		449.22	29.00	37.00	23.05	426.17	<50	<0.5	<0.5	<0.5	<0.5	<3	1.0	--
5/5/1999	--		449.22	29.00	37.00	24.00	425.22	--	--	--	--	--	--	--	--
8/26/1999	--		449.22	29.00	37.00	26.50	422.72	--	--	--	--	--	--	5.15	--
12/3/1999	--		449.22	29.00	37.00	30.80	418.42	--	--	--	--	--	--	--	--
3/13/2000	--	d	449.22	29.00	37.00	26.21	423.01	--	--	--	--	--	--	--	--
6/20/2000	--		449.22	29.00	37.00	23.52	425.70	--	--	--	--	--	--	5.5	--
8/31/2000	--		449.22	29.00	37.00	27.52	421.70	--	--	--	--	--	--	--	--
2/9/2001	--		449.22	29.00	37.00	28.71	420.51	--	--	--	--	--	--	--	--
9/17/2001	--		449.22	29.00	37.00	27.94	421.28	--	--	--	--	--	--	--	--
1/21/2002	--		449.22	29.00	37.00	27.44	421.78	--	--	--	--	--	--	--	--
7/19/2002	--		449.22	29.00	37.00	27.80	421.42	--	--	--	--	--	--	--	--
1/15/2003	--		449.22	29.00	37.00	23.09	426.13	--	--	--	--	--	--	--	--
7/9/2003	--		449.22	29.00	37.00	26.87	422.35	--	--	--	--	--	--	--	--
02/19/2004	--		449.22	29.00	37.00	23.39	425.83	--	--	--	--	--	--	--	--
01/18/2005	--		451.65	29.00	37.00	21.40	430.25	--	--	--	--	--	--	--	--

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

Station #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-10 Cont.															
07/15/2005	--		451.65	29.00	37.00	25.37	426.28	--	--	--	--	--	--	--	--
01/10/2006	--		451.65	29.00	37.00	19.81	431.84	--	--	--	--	--	--	--	--
7/21/2006	--		451.65	29.00	37.00	25.16	426.49	--	--	--	--	--	--	--	--
1/17/2007	--		451.65	29.00	37.00	28.95	422.70	--	--	--	--	--	--	--	--
7/18/2007	--	d	451.65	29.00	37.00	--	--	--	--	--	--	--	--	--	--
1/15/2008	--		451.65	29.00	37.00	24.62	427.03	--	--	--	--	--	--	--	--
7/7/2008	--	d	451.65	29.00	37.00	--	--	--	--	--	--	--	--	--	--
MW-11															
3/20/1995	--		448.02	29.00	39.00	25.02	423.00	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
6/2/1995	--		448.02	29.00	39.00	23.82	424.20	--	--	--	--	--	--	--	--
8/23/1995	--		448.02	29.00	39.00	30.15	417.87	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
12/4/1995	--		448.02	29.00	39.00	31.63	416.39	--	--	--	--	--	--	--	--
2/20/1996	--		448.02	29.00	39.00	20.94	427.08	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/15/1996	--		448.02	29.00	39.00	23.03	424.99	--	--	--	--	--	--	--	--
8/13/1996	--		448.02	29.00	39.00	29.19	418.83	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/13/1996	--		448.02	29.00	39.00	31.96	416.06	--	--	--	--	--	--	--	--
3/26/1997	--		448.02	29.00	39.00	26.61	421.41	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/15/1997	--		448.02	29.00	39.00	29.39	418.63	--	--	--	--	--	--	--	--
8/26/1997	--		448.02	29.00	39.00	33.47	414.55	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/5/1997	--		448.02	29.00	39.00	35.12	412.90	--	--	--	--	--	--	--	--
2/18/1998	--		448.02	29.00	39.00	18.03	429.99	<50	<0.5	<0.5	<0.5	1	<3	--	--
5/20/1998	--		448.02	29.00	39.00	23.00	425.02	--	--	--	--	--	--	--	--
7/30/1998	P		448.02	29.00	39.00	29.30	418.72	<50	<0.5	<0.5	<0.5	<0.5	<3	5.59	--
10/29/1998	--		448.02	29.00	39.00	34.47	413.55	--	--	--	--	--	--	--	--
3/16/1999	P		448.02	29.00	39.00	27.88	420.14	<50	<0.5	<0.5	<0.5	<0.5	<3	1.0	--
5/5/1999	--		448.02	29.00	39.00	26.85	421.17	--	--	--	--	--	--	--	--
8/26/1999	P		448.02	29.00	39.00	32.74	415.28	<50	<0.5	<0.5	<0.5	<0.5	<3	4.59	--
12/3/1999	--		448.02	29.00	39.00	34.70	413.32	--	--	--	--	--	--	--	--
3/13/2000	P		448.02	29.00	39.00	25.94	422.08	<50	<0.5	<0.5	<0.5	<1	<3	3.21	--
6/20/2000	--		448.02	29.00	39.00	30.40	417.62	--	--	--	--	--	--	3.3	--

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

Station #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-11 Cont.															
8/31/2000	NP		448.02	29.00	39.00	32.68	415.34	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	0.4	--
8/31/2000	--	b	448.02	29.00	39.00	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--	--
2/9/2001	--		448.02	29.00	39.00	31.17	416.85	--	--	--	--	--	--	--	--
9/17/2001	NP		448.02	29.00	39.00	32.98	415.04	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.62	--
1/21/2002	--		448.02	29.00	39.00	31.05	416.97	--	--	--	--	--	--	--	--
7/19/2002	P		448.02	29.00	39.00	31.67	416.35	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.7	7.7
1/15/2003	--		448.02	29.00	39.00	23.75	424.27	--	--	--	--	--	--	--	--
7/9/2003	P		448.02	29.00	39.00	31.06	416.96	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.4	6.6
02/19/2004	--		448.02	29.00	39.00	27.21	420.81	--	--	--	--	--	--	--	--
08/04/2004	P		450.41	29.00	39.00	31.71	418.70	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.3	7.1
01/18/2005	--		450.41	29.00	39.00	24.80	425.61	--	--	--	--	--	--	--	--
07/15/2005	P		450.41	29.00	39.00	29.15	421.26	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.7	7.1
01/10/2006	--		450.41	29.00	39.00	20.87	429.54	--	--	--	--	--	--	--	--
7/21/2006	P		450.41	29.00	39.00	29.30	421.11	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.7	7.2
1/17/2007	--		450.41	29.00	39.00	31.59	418.82	--	--	--	--	--	--	--	--
7/18/2007	NP		450.41	29.00	39.00	29.22	421.19	<50	<0.50	<0.50	<0.50	<0.50	<0.50	5.35	7.12
1/15/2008	--		450.41	29.00	39.00	29.12	421.29	--	--	--	--	--	--	--	--
7/7/2008	NP		450.41	29.00	39.00	34.21	416.20	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.08	7.94
RW-1															
3/20/1995	--		451.67	25.50	40.50	23.76	427.91	15,000	1,000	140	310	950	--	--	--
6/2/1995	--		451.67	25.50	40.50	25.12	426.55	12,000	1,300	280	420	1,100	--	--	--
8/23/1995	--		451.67	25.50	40.50	28.80	422.87	8,200	520	190	240	610	<50	--	--
12/4/1995	--		451.67	25.50	40.50	31.15	420.52	2,600	140	59	83	210	--	--	--
2/20/1996	--		451.67	25.50	40.50	21.45	430.22	6,300	410	160	180	650	<40	--	--
5/15/1996	--		451.67	25.50	40.50	22.97	428.70	--	--	--	--	--	--	--	--
8/13/1996	--		451.67	25.50	40.50	24.74	426.93	--	--	--	--	--	--	--	--
11/13/1996	--		451.67	25.50	40.50	30.69	420.98	--	--	--	--	--	--	--	--
3/26/1997	--		451.67	25.50	40.50	25.69	425.98	500	57	3	6.4	18	54	--	--
5/15/1997	--		451.67	25.50	40.50	28.19	423.48	--	--	--	--	--	--	--	--
8/26/1997	--		451.67	25.50	40.50	31.21	420.46	--	--	--	--	--	--	--	--

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

Station #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH	
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
RW-1 Cont.																
11/5/1997	--		451.67	25.50	40.50	33.67	418.00	--	--	--	--	--	--	--	--	
2/18/1998	--		451.67	25.50	40.50	20.14	431.53	9,400	200	70	190	710	<60	--	--	
5/20/1998	--		451.67	25.50	40.50	23.43	428.24	--	--	--	--	--	--	--	--	
7/30/1998	--		451.67	25.50	40.50	27.42	424.25	--	--	--	--	--	--	--	--	
10/29/1998	--		451.67	25.50	40.50	32.47	419.20	--	--	--	--	--	--	--	--	
3/16/1999	NP		451.67	25.50	40.50	25.45	426.22	1,100	140	19	45	83	530	1.0	--	
5/5/1999	--		451.67	25.50	40.50	27.23	424.44	--	--	--	--	--	--	--	--	
8/26/1999	--		451.67	25.50	40.50	29.98	421.69	--	--	--	--	--	--	1.39	--	
12/3/1999	--		451.67	25.50	40.50	32.38	419.29	--	--	--	--	--	--	--	--	
3/13/2000	NP		451.67	25.50	40.50	25.53	426.14	1,100	130	3.5	0.7	95	230	4.43	--	
6/20/2000	--		451.67	25.50	40.50	28.31	423.36	--	--	--	--	--	--	1.9	--	
8/31/2000	NP		451.67	25.50	40.50	30.61	421.06	<50.0	<0.500	<0.500	<0.500	<0.500	82.5	3.21	--	
2/9/2001	NP		451.67	25.50	40.50	31.14	420.53	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	0.84	--	
9/17/2001	NP		451.67	25.50	40.50	31.70	419.97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.51	--	
1/21/2002	NP		451.67	25.50	40.50	30.15	421.52	<50	7.7	<0.50	<0.50	1.5	18	0.63	--	
7/19/2002	NP		451.67	25.50	40.50	31.15	420.52	<50	<0.50	<0.50	<0.50	<0.50	13	1.4	6.6	
1/15/2003	--	a	451.67	25.50	40.50	22.20	429.47	860	9	1.6	17	42	1.5	2.8	7.2	
7/9/2003	--		451.67	25.50	40.50	29.56	422.11	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.8	7.1	
02/19/2004	NP	c	451.67	25.50	40.50	23.53	428.14	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.4	6.7	
08/04/2004	P		454.11	25.50	40.50	22.45	431.66	600	<0.50	<0.50	3.3	3.4	<0.50	4.4	7.2	
01/18/2005	P		454.11	25.50	40.50	23.57	430.54	1,400	8.0	1.9	22	68	<0.50	3.6	6.9	
07/15/2005	NP		454.11	25.50	40.50	29.02	425.09	<50	<0.50	<0.50	<0.50	<0.50	2.0	1.1	7.8	
01/10/2006	P		454.11	25.50	40.50	21.88	432.23	480	4.3	0.67	8.3	18	0.54	4.4	7.1	
7/21/2006	--	d	454.11	25.50	40.50	--	--	--	--	--	--	--	--	--	--	
1/17/2007	P		454.11	25.50	40.50	31.48	422.63	6,900	17	2.8	22	31	2.6	4.08	7.74	
7/18/2007	NP		454.11	25.50	40.50	32.45	421.66	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.33	7.48	
1/15/2008	NP		454.11	25.50	40.50	28.39	425.72	<50	<0.50	<0.50	<0.50	<0.50	<0.50	8.3	2.73	6.87
7/7/2008	NP		454.11	25.50	40.50	35.19	418.92	<50	<0.50	<0.50	<0.50	<0.50	0.53	2.51	7.05	
VW-1																
8/31/2000	P		--	18.50	28.50	20.61	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	10.08	--	

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

Station #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
VW-1 Cont.															
2/9/2001	P		--	18.50	28.50	22.10	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	0.53	--
9/17/2001	P		--	18.50	28.50	21.99	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	6.59	--
1/21/2002	P		--	18.50	28.50	21.50	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0	0.7	--
7/19/2002	P		--	18.50	28.50	22.42	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.9	7.1
1/15/2003	--		--	18.50	28.50	22.59	--	<50	<0.50	<0.50	0.63	1.7	<0.50	5.4	7.2
7/9/2003	--		--	18.50	28.50	22.50	--	<50	<0.50	<0.50	<0.50	0.61	<0.50	2.0	7.0
02/19/2004	--		--	18.50	28.50	21.04	--	--	--	--	--	--	--	--	--
08/04/2004	P		453.29	18.50	28.50	20.48	432.81	<50	<0.50	<0.50	<0.50	<0.50	<0.50	5.7	7.0
01/18/2005	--		453.29	18.50	28.50	21.72	431.57	--	--	--	--	--	--	--	--
07/15/2005	P		453.29	18.50	28.50	22.50	430.79	<50	<0.50	<0.50	<0.50	<0.50	<0.50	5.1	7.4
01/10/2006	--		453.29	18.50	28.50	20.17	433.12	--	--	--	--	--	--	--	--
7/21/2006	P	e	453.29	18.50	28.50	22.50	430.79	220	<0.50	<0.50	<0.50	<0.50	<0.50	5.91	7.3
1/17/2007	--		453.29	18.50	28.50	21.67	431.62	--	--	--	--	--	--	--	--
7/18/2007	NP		453.29	18.50	28.50	23.58	429.71	<50	<0.50	<0.50	<0.50	<0.50	<0.50	6.45	8.52
1/15/2008	--		453.29	18.50	28.50	21.87	431.42	--	--	--	--	--	--	--	--
7/7/2008	NP		453.29	18.50	28.50	23.70	429.59	<50	<0.50	<0.50	<0.50	<0.50	<0.50	7.54	8.46

SYMBOLS AND ABBREVIATIONS:

--/- = Not analyzed/applicable/sampled/measured
< = Not detected at or above specified laboratory reporting limit
DO = Dissolved oxygen
DTW = Depth to water in ft bgs
ft bgs = Feet below ground surface
ft MSL = Feet above mean sea level
GRO = Gasoline range organics, range C4-C12
GWE = Groundwater elevation in ft MSL
g/L = Micrograms per liter
mg/L = Milligrams per liter
MTBE = Methyl tert-butyl ether
NP = Not purged before sampling
P = Purged before sampling
TPH-g = Total petroleum hydrocarbons as gasoline
TOC = Top of casing elevation in ft MSL

FOOTNOTES:

a = Chromatogram Pattern: Gasoline C6-C10
b = Duplicate sample
c = GRO analyzed by EPA Method 8015B modified
d = Well inaccessible
e = Hydrocarbon result partly due to individ. peak(s) in quant. range.
f = Sample > 4x spike concentration.

NOTES:

For previous historical GWE and analytical data please refer to Fourth Quarter 1995 Groundwater Monitoring Program Results and Remediation System Performance Evaluation Report, ARCO Service Station 771, Livermore, California, (EMCON, March 1, 1996).

Please note that 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 inclusion of non-TPH-g analytes within the requested fuel range resulting in a higher concentration being reported.

All analytes unless otherwise noted utilized EPA Method 8260B, EPA method 8015B modified prior to 1/15/03, and EPA method 8020 prior to 12/03/99.

Site wells were resurveyed to NAVD '88 datum on March 8, 2004.

Top of screen and bottom of screen depths for MW-3 and MW-6 are estimated from cross-sections.

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 #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-1									
02/19/2004	--	--	--	--	--	--	--	--	
08/04/2004	--	--	--	--	--	--	--	--	
01/18/2005	--	--	--	--	--	--	--	--	
07/15/2005	--	--	--	--	--	--	--	--	
01/10/2006	--	--	--	--	--	--	--	--	
MW-2									
7/9/2003	<1,000	<200	39	<5.0	<5.0	<5.0	<5.0	<5.0	
02/19/2004	--	--	--	--	--	--	--	--	
08/04/2004	<2,000	<400	78	<10	<10	<10	<10	<10	
01/18/2005	--	--	--	--	--	--	--	--	
07/15/2005	<500	120	46	<2.5	<2.5	<2.5	<2.5	<2.5	
01/10/2006	--	--	--	--	--	--	--	--	
7/21/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
7/18/2007	<600	89	45	<1.0	<1.0	<1.0	<1.0	<1.0	
7/7/2008	--	<100	19	<5.0	<5.0	<5.0	<5.0	--	
MW-3									
02/19/2004	--	--	--	--	--	--	--	--	
08/04/2004	--	--	--	--	--	--	--	--	
01/18/2005	--	--	--	--	--	--	--	--	
07/15/2005	--	--	--	--	--	--	--	--	
01/10/2006	--	--	--	--	--	--	--	--	
MW-4									
7/9/2003	<1,000	750	150	<5.0	<5.0	<5.0	<5.0	<5.0	
02/19/2004	<1,000	630	180	<10	<10	<10	<5.0	<5.0	
08/04/2004	<2,000	1,300	300	<10	<10	<10	<10	<10	
01/18/2005	<1,000	630	160	<5.0	<5.0	<5.0	<5.0	<5.0	a
07/15/2005	<1,000	850	230	<5.0	<5.0	<5.0	<5.0	<5.0	
01/10/2006	<1,500	810	190	<2.5	<2.5	<2.5	<2.5	<2.5	
7/21/2006	<300	35	3.1	<0.50	<0.50	<0.50	<0.50	<0.50	
1/17/2007	<300	<20	11	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 2. Summary of Fuel Additives Analytical Data

Station #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-4 Cont.									
7/18/2007	<300	830	74	<0.50	<0.50	<0.50	0.76	<0.50	
1/15/2008	<300	280	61	<0.50	<0.50	<0.50	<0.50	<0.50	b (MTBE)
7/7/2008	--	19	17	<0.50	<0.50	<0.50	<0.50	--	
MW-5									
7/9/2003	<1,000	1,100	260	<5.0	<5.0	<5.0	<5.0	<5.0	
02/19/2004	--	--	--	--	--	--	--	--	
08/04/2004	<1,000	850	250	<5.0	<5.0	<5.0	<5.0	<5.0	
01/18/2005	--	--	--	--	--	--	--	--	
07/15/2005	<1,000	720	270	<5.0	<5.0	<5.0	<5.0	<5.0	
01/10/2006	--	--	--	--	--	--	--	--	
7/21/2006	<3,000	<200	14	<5.0	<5.0	<5.0	<5.0	<5.0	
7/18/2007	<300	260	110	<0.50	<0.50	<0.50	<0.50	<0.50	
7/7/2008	--	<10	<0.50	<0.50	<0.50	<0.50	<0.50	--	
MW-6									
7/9/2003	<100	<20	0.98	<0.50	<0.50	<0.50	<0.50	<0.50	
02/19/2004	--	--	--	--	--	--	--	--	
08/04/2004	<100	<20	5.2	<0.50	<0.50	<0.50	<0.50	<0.50	
01/18/2005	--	--	--	--	--	--	--	--	
07/15/2005	<500	110	32	<2.5	<2.5	<2.5	<2.5	<2.5	
01/10/2006	--	--	--	--	--	--	--	--	
7/21/2006	<300	<20	5.1	<0.50	<0.50	<0.50	<0.50	<0.50	
7/18/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
7/7/2008	--	<10	<0.50	<0.50	<0.50	<0.50	<0.50	--	
MW-7									
7/9/2003	<1,000	350	110	<5.0	<5.0	<5.0	<5.0	<5.0	
02/19/2004	<1,000	420	100	<10	<10	<10	<5.0	<5.0	
08/04/2004	<5,000	<1,000	140	<25	<25	<25	<25	<25	
01/18/2005	<1,000	260	87	<5.0	<5.0	<5.0	<5.0	<5.0	a
07/15/2005	<5,000	<1,000	150	<25	<25	<25	<25	<25	
01/10/2006	<30,000	<2,000	120	<50	<50	<50	<50	<50	

Table 2. Summary of Fuel Additives Analytical Data

Station #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-7 Cont.									
7/21/2006	<30,000	<2,000	54	<50	<50	<50	<50	<50	
1/17/2007	<1,500	<100	3.1	<2.5	<2.5	<2.5	<2.5	<2.5	
7/18/2007	<600	220	67	<1.0	<1.0	<1.0	<1.0	<1.0	
1/15/2008	<1,500	<100	26	<2.5	<2.5	<2.5	<2.5	<2.5	
7/7/2008	--	<10	0.69	<0.50	<0.50	<0.50	<0.50	--	
MW-8									
02/19/2004	--	--	--	--	--	--	--	--	
08/04/2004	--	--	--	--	--	--	--	--	
01/18/2005	--	--	--	--	--	--	--	--	
07/15/2005	--	--	--	--	--	--	--	--	
01/10/2006	--	--	--	--	--	--	--	--	
MW-9									
02/19/2004	--	--	--	--	--	--	--	--	
08/04/2004	--	--	--	--	--	--	--	--	
01/18/2005	--	--	--	--	--	--	--	--	
07/15/2005	--	--	--	--	--	--	--	--	
01/10/2006	--	--	--	--	--	--	--	--	
MW-10									
02/19/2004	--	--	--	--	--	--	--	--	
01/18/2005	--	--	--	--	--	--	--	--	
07/15/2005	--	--	--	--	--	--	--	--	
01/10/2006	--	--	--	--	--	--	--	--	
MW-11									
7/9/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
02/19/2004	--	--	--	--	--	--	--	--	
08/04/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
01/18/2005	--	--	--	--	--	--	--	--	
07/15/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
01/10/2006	--	--	--	--	--	--	--	--	

Table 2. Summary of Fuel Additives Analytical Data

Station #771, 899 Rincon Ave., Livermore, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-11 Cont.									
7/21/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
7/18/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
7/7/2008	--	<10	<0.50	<0.50	<0.50	<0.50	<0.50	--	
RW-1									
7/9/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
02/19/2004	<100	<20	<0.50	<1.0	<1.0	<1.0	<0.50	<0.50	
08/04/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
01/18/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a
07/15/2005	<100	<20	2.0	<0.50	<0.50	<0.50	<0.50	<0.50	
01/10/2006	<300	<20	0.54	<0.50	<0.50	<0.50	<0.50	<0.50	
1/17/2007	<1,500	<100	2.6	<2.5	<2.5	<2.5	<2.5	<2.5	
7/18/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1/15/2008	<300	<20	8.3	<0.50	<0.50	<0.50	<0.50	<0.50	
7/7/2008	--	<10	0.53	<0.50	<0.50	<0.50	<0.50	--	
VW-1									
7/9/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
02/19/2004	--	--	--	--	--	--	--	--	
08/04/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
01/18/2005	--	--	--	--	--	--	--	--	
07/15/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
01/10/2006	--	--	--	--	--	--	--	--	
7/21/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
7/18/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
7/7/2008	--	<10	<0.50	<0.50	<0.50	<0.50	<0.50	--	

SYMBOLS AND ABBREVIATIONS:

-- = Not analyzed/sampled

< = 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

µg/L = Micrograms per liter

TAME = tert-Amyl methyl ether

TBA = tert-Butyl alcohol

FOOTNOTES:

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

b = Sample >4x spike concentration.

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 #771, 899 Rincon Ave., Livermore, CA

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
3/20/1995	Northwest	0.030
6/2/1995	North-Northwest	0.014
8/23/1995	North-Northwest	0.030
12/4/1995	North-Northwest	0.030
2/20/1996	Northwest	0.016
5/15/1996	Northwest	0.024
8/13/1996	North-Northwest	0.030
11/13/1996	North-Northwest	0.031
3/26/1997	North-Northwest	0.044
5/15/1997	North-Northwest	0.031
8/26/1997	North-Northwest	0.042
11/5/1997	North-Northwest	0.030
2/18/1998	Northwest	0.010
5/20/1998	Northwest	0.030
7/30/1998	North	0.040
10/29/1998	North	0.005
3/16/1999	North-Northwest	0.030
5/5/1999	North	0.040
8/26/1999	North-Northwest	0.050
12/3/1999	North-Northeast	0.060
3/13/2000	North-Northwest	0.066
6/20/2000	North-Northwest	0.050
8/31/2000	North-Northwest	0.062
2/9/2001	North-Northeast	0.014
9/17/2001	North-Northwest	0.061
1/21/2002	North-Northwest	0.050
7/19/2002	North-Northwest	0.044
1/15/2003	Northeast to Southeast	0.038 - 0.016
7/9/2003	Northwest to North-Northwest	0.009 - 0.063
2/19/2004	North	0.044
8/4/2004	Northeast	0.071
1/18/2005	North-Northeast	0.04
7/15/2005	Northeast and Southwest	0.05 and 0.02
1/10/2006	North	0.02
7/21/2006	North and Southwest	0.05 and 0.02
1/17/2007	North-Northeast and Southwest	0.03 and 0.02
7/18/2007	North-Northeast to Southwest	0.03 and 0.04
1/15/2008	North	0.04
7/7/2008	North	0.03

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

**STRATUS ENVIRONMENTAL, INC. GROUND-WATER SAMPLING DATA PACKAGE
(INCLUDES, FIELD DATA SHEETS, NON-HAZARDOUS WASTE DATA FORM,
CERTIFIED LABORATORY ANALYTICAL RESULTS AND CHAIN OF CUSTODY
DOCUMENTATION, AND FIELD PROCEDURES FOR GROUNDWATER SAMPLING)**



3330 Cameron Park Drive, Ste 550
Cameron Park, California 95682
(530) 676-6004 ~ Fax: (530) 676-6005

July 25, 2008

Mr. Rob Miller
Broadbent & Associates
2000 Kirman Ave.
Reno, NV 89502

Re: Groundwater Sampling Data Package, BP Service Station No. 771, located at
899 Rincon Avenue, Livermore, California

General Information

Data Submittal Prepared / Reviewed by: Becky Carroll / Jay Johnson

Phone Number: (530) 676-6000

On-Site Supplier Representatives: Tony Hill

Sampling Date: July 7, 2008

Arrival: 17:15 *Departure:* 20:30

Weather Conditions: Not noted.

Unusual Field Conditions: Clear / Sunny

Scope of Work Performed: Quarterly monitoring and sampling.

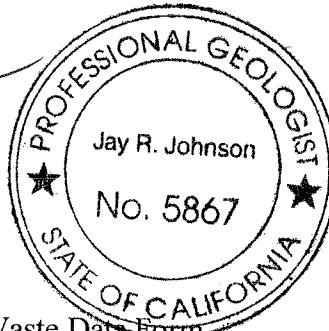
Variations from Work Scope: A car was parked over Well MW-10 and therefore could not be gauged during this event.

This submittal presents the tabulation of data collected in association with routine groundwater monitoring. The attachments include field data sheets, non-hazardous waste data form, chain of custody documentation, certified analytical results, and field procedures for groundwater sampling documentation. The information is being provided to BP-ARCO's Scoping Supplier for use in preparing a report for regulatory submittal. This submittal is limited to presentation of collected data and does not include data interpretation or conclusions or recommendations. Any questions concerning this submittal should be addressed to the Preparer/Reviewer identified above.

Sincerely,

STRATUS ENVIRONMENTAL, INC.

Jay R. Johnson, P.G.
Project Manager



Attachments:

- Field Data Sheets
- Non-Hazardous Waste Data Form
- Chain of Custody Documentation
- Certified Analytical Results
- Field Procedures for Groundwater Sampling

cc: Mr. Paul Supple, BP/ARCO



Site Address 899 Rincon Ave
 City Livermore, CA
 Sampled by: JH
 Signature AO5 1.11

ORIGINAL

Site Number A-60
 Project Number E-771
 Project PM Say Johnson
 DATE 7/7/08

Water Level Data					Purge Volume Calculations				Purge Method				Sample Record		Field D		
Well ID	Time	Depth to Product (feet)	Depth to Water (feet)	Total Depth (feet)	Water column (feet)	Diameter (inches)	Multiplier	3 casing volumes (gallons)	Actual water purged (gallons)	No Purge Sample	Bailer	Pump	other	DTW at sample time (feet)	Sample I.D.	Sample Time	DO (mg/L)
MW-2	1840		32.41	34.03	-	4	2	-	-	X				32.41	MW-2	1850	2.81
4	1827		34.78	41.02	-	4	2	-	-	X				34.78	4	1835	4.03
5	1812		35.9	40.02	-	4	2	-	-	X				35.8	5	1825	7.55
6	1736		34.57	43.05	-	4	2	-	-	X				34.57	6	1748	6.00
7	1885		33.10	39.47	-	4	2	-	-	X				33.10	7	1905	7.81
MW-11	1950		34.21	38.45	-	2	.5	-	-	X				34.21	MW-11	2000	4.08
VN-1	1908		23.70	28.04	-	4	2	-	-	X				23.70	VN-1	1925	7.54
RW-1	1750		35.19	39.57	-	6	4.4	-	-	X				35.19	RW-1	1810	8.51
MW-1	1745		35.56	36.57													
3	1928		33.38	39.48													
8	1946		36.32	41.33													
9	1940		32.06	38.87													
MW-10	Car on Well																
Multiplier	* NO Water Purged																
2" = 0.5 3" = 1.0 4" = 2.0 6" = 4.4																	

Multiplier * NO Water Purged
 2" = 0.5 3" = 1.0 4" = 2.0 6" = 4.4

Please refer to groundwater sampling field procedures
 pH/Conductivity/temperature Meter - Oakton Model PC-10
 DO Meter - Oakton 300 Series (DO is always measured before purge)

CALIBRATION DATE

pH	ATI	7/7
Conductivity		
DO		

STRATUS

ENVIRONMENTAL, INC.

Site Address 899 Bacon Ave
 City Livermore
 Site Sampled by TH

Site Number Arc 6 771
 Project No. E-771
 Project PM Say Johnson
 Date Sampled 7/7/08

Well ID	MW-6	1740	Well ID	RW-1	1805
purge start time	bailer	No odor	purge start time	bailer	No odor
time	Temp C	pH	cond	gallons	
time	25.7	7.19	931	Ø	
time					
time					
purge stop time					
Well ID	MW-5	1805	Well ID	MW-4	1835
purge start time	bailer	No odor	purge start time	bailer	No odor
time	Temp C	pH	cond	gallons	
time	24	7.79	864	Ø	
time					
time					
purge stop time					
Well ID	MW-2	1850	Well ID	MW-7	1905
purge start time	bailer	No odor	purge start time	bailer	odor
time	Temp C	pH	cond	gallons	
time	24.7	7.24	1229	Ø	
time					
time					
purge stop time					
Well ID	VW-1	1925	Well ID	MW-11	2220
purge start time	bailer	No odor	purge start time	bailer	No odor
time	Temp C	pH	cond	gallons	
time	24	8.46	777	Ø	
time					
time					
purge stop time					

ORIGINAL

WELLHEAD OBSERVATION FORM

Site Name/Number: ACO 771

Date: 7/7/08

Technician: TH.



Well I.D.	Box in Good Condition?	Lock Missing?	Water in Wellbox?	Water Level Relative to Cap?	Well Cap?	Bolts Missing?	Bolts Stripped?	Bolt Holes Stripped?	Cracked or Broken Lid?	Cracked or Broken Box?	Grout Level more than 1ft below TOC?	Additional Comments (such as missing lid, concrete needs replacement, or other - explain)
	X = Yes Blank = No	X = Yes (replaced) Blank = No	X = Yes Blank = No	A = Above cap B = Below cap L = Level w/cap	I = Intact M = Missing or Compromised (replaced)	X = Yes Blank = No	X = Yes Blank = No	X = Yes Blank = No	X = Yes Blank = No	X = Yes Blank = No	X = Yes Blank = No	
1	X											
3	X											
4												
5	X											
7	X											
9	X											
10	X											
11												
12	X				X broken not replaced							Top of well + close to well cap. Any cap put on will be damaged
13	X											
14	X											
15	X											
16	X											
17	X											
18												
19	X											

DRUM INVENTORY

Drums on site? Yes No (circle)
Type and # Steel: a Plastic:

Note whether drums are full or empty, solids or liquids:

Drum label info (description, date, contact info):

(updated 3-28-08, SS)

GENERAL SITE CONDITIONS

Make notes on housekeeping conditions (such as trash around remediation system enclosure/compound, bent or missing bollards, signs missing from compound fences, grafitti on compound, etc.)

MW-8 - good
MW-20 - good
MW-21 - good
EX-1 - good
EX-2 - good
EX-3 missing lock - repaired
EX-4 - good
EX-5 - good
EX-6 - good



A BP affiliated company

Chain of Custody Record

Project Name: ARCO 771

BP BU/AR Region/Enfos Segment:

BP > Americas > West > Retail > Alameda > 771

State or Lead Regulatory Agency:

Requested Due Date (mm/dd/yy): 5TD-TAT

ORIGINAL

Page 1 of 1

On-site Time:	1715	Temp: 80's
Off-site Time:	2030	Temp: 80's
Sky Conditions:	Clear Sunny	
Meteorological Events:	- Smokey air conditions	
Wind Speed:	-	Direction: -

Lab Name: Cal Science
 Address: 7440 Lincoln Way
 Garden Grove Ca. 92841-1427
 Lab PM: Linda Sharpenberg
 Tele/Fax: 408-782-8156 408-782-6308 (fax)
 BP/AR PM Contact: Paul Supple
 Address: 2010 Crow Canyon Place, Suite 150
 San Ramon, CA
 Tele/Fax: 925-275-3506

BP/AR Facility No.: 771
 BP/AR Facility Address: 899 Rincon Ave., Livermore
 Site Lat/Long:
 California Global ID No.: T0600100113
 Enfos Project No.: G0C1M-0025
 Provision or OOC (circle one) Provision
 Phase/WBS: 04-Monitoring
 Sub Phase/Task: 03-Analytical
 Cost Element: 01-Contractor labor

Consultant/Contractor: Stratus Environmental, Inc.
 Address: 3330 Cameron Park Drive, Suite 550
 Cameron Park, CA 95682
 Consultant/Contractor Project No.:
 Consultant/Contractor PM: Jay Johnson
 Tele/Fax: (530) 676-6000 / (530) 676-6005
 Report Type & QC Level: Level 1 with EDF
 E-mail EDD To: cjewitt@stratusinc.net
 Invoice to: Atlantic Richfield Co.

Lab Bottle Order No:

Matrix

Item No.	Sample Description	Time	Date	Soil/Solid	Water/Liquid	Air	Laboratory No.	No. of Containers	Preservative				Requested Analysis				Sample Point Lat/Long and Comments *Oxy = MTBE,TAME,ETBE,DIPE,TBA	
									Unpreserved	H ₂ SO ₄	HNO ₃	HCl	Methanol	GQD	BTEX	5 Oxy's	1a DCA	
1	MW-2	1850	7/7	X				6			X		X	X	X	X		* All by 8/6/0
2	MW-4	1835																
3	MW-5	1825																
4	MW-6	1740																
5	MW-7	1905																
6	MW-11	2000																
7	VW-1	1925																
8	RW-1	1810																
9																		
10	TP-0711-07072008		7/7/08					2										HOLD

Sampler's Name: Anthony T. Miller

Sampler's Company: Stratus

Shipment Date: 7/8/08

Shipment Method: GS

Shipment Tracking No:

Special Instructions:

Please cc results to rmiller@broadbentinc.com

Relinquished By / Affiliation

CJ 7/11

Date

7/8/08

Time

1330

Accepted By / Affiliation

Date

Time

Custody Seals In Place: Yes / No

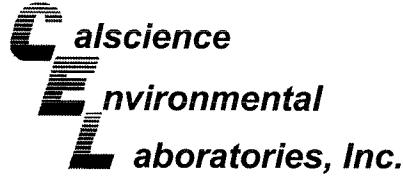
Temp Blank: Yes / No

Cooler Temp on Receipt:

°F/C

Trip Blank: Yes / No

MS/MSD Sample Submitted: Yes / No



July 21, 2008

Jay Johnson
Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Subject: **Calscience Work Order No.: 08-07-0709**
Client Reference: Arco 771

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 7/9/2008 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.

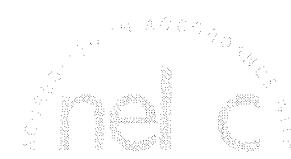
Sincerely,

A handwritten signature in black ink that reads "Linda Scharpenberg". The signature is fluid and cursive, with a horizontal line underneath it.

Calscience Environmental
Laboratories, Inc.
Linda Scharpenberg
Project Manager



Analytical Report



Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 07/09/08
Work Order No: 08-07-0709
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: Arco 771

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-2	08-07-0709-1-E	07/07/08 18:50	Aqueous	GC 4	07/10/08	07/10/08 22:22	080710B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	3600	1000	20		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	68	38-134			

MW-4	08-07-0709-2-E	07/07/08 18:35	Aqueous	GC 4	07/10/08	07/10/08 22:55	080710B01
------	----------------	----------------	---------	------	----------	----------------	-----------

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	70	38-134			

MW-5	08-07-0709-3-E	07/07/08 18:25	Aqueous	GC 4	07/10/08	07/11/08 00:01	080710B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	62	38-134			

MW-6	08-07-0709-4-E	07/07/08 17:40	Aqueous	GC 4	07/10/08	07/11/08 00:33	080710B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	64	38-134			

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



Analytical Report

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 07/09/08
Work Order No: 08-07-0709
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: Arco 771

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-7	08-07-0709-5-E	07/07/08 19:05	Aqueous	GC 4	07/10/08	07/11/08 01:06	080710B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	70	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	68	38-134			

MW-11	08-07-0709-6-D	07/07/08 20:00	Aqueous	GC 4	07/11/08	07/11/08 20:00	080711B01
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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	59	38-134			

VW-1	08-07-0709-7-E	07/07/08 19:25	Aqueous	GC 4	07/10/08	07/11/08 02:12	080710B01
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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	62	38-134			

RW-1	08-07-0709-8-E	07/07/08 18:10	Aqueous	GC 4	07/10/08	07/11/08 02:45	080710B01
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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	65	38-134			

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

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Analytical Report

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 07/09/08
Work Order No: 08-07-0709
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: Arco 771

Page 3 of 3

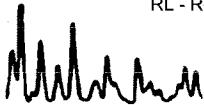
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-695-192	N/A	Aqueous	GC 4	07/10/08	07/10/08 15:15	080710B01

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	68	38-134			

Method Blank	099-12-695-193	N/A	Aqueous	GC 4	07/11/08	07/11/08 18:21	080711B01
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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	63	38-134			

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





Analytical Report

Stratus Environmental, inc.
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Date Received: 07/09/08
Work Order No: 08-07-0709
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: Arco 771

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-2	08-07-0709-1-B	07/07/08 18:50	Aqueous	GC/MS BB	07/14/08	07/14/08 15:55	080714L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	28	5.0	10		Methyl-t-Butyl Ether (MTBE)	19	5.0	10	
1,2-Dichloroethane	ND	5.0	10		Tert-Butyl Alcohol (TBA)	ND	100	10	
Ethylbenzene	ND	5.0	10		Diisopropyl Ether (DIPE)	ND	5.0	10	
Toluene	ND	5.0	10		Ethyl-t-Butyl Ether (ETBE)	ND	5.0	10	
Xylenes (total)	ND	5.0	10		Tert-Amyl-Methyl Ether (TAME)	ND	5.0	10	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	111	73-157			Dibromofluoromethane	98	82-142		
Toluene-d8	105	82-112			1,4-Bromofluorobenzene	105	75-105		

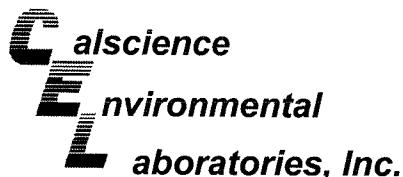
MW-4	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
	08-07-0709-2-B	07/07/08 18:35	Aqueous	GC/MS BB	07/14/08	07/14/08 13:47	080714L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	3.1	0.50	1		Methyl-t-Butyl Ether (MTBE)	17	0.50	1	
1,2-Dichloroethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	19	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	0.66	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	111	73-157			Dibromofluoromethane	95	82-142		
Toluene-d8	100	82-112			1,4-Bromofluorobenzene	104	75-105		

MW-5	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
	08-07-0709-3-B	07/07/08 18:25	Aqueous	GC/MS BB	07/14/08	07/14/08 14:19	080714L01

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-Dichloroethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	114	73-157			Dibromofluoromethane	98	82-142		
Toluene-d8	98	82-112			1,4-Bromofluorobenzene	102	75-105		

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



Analytical Report

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 07/09/08
Work Order No: 08-07-0709
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: Arco 771

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-6	08-07-0709-4-B	07/07/08 17:40	Aqueous	GC/MS BB	07/14/08	07/14/08 16:27	080714L01

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-Dichloroethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Surrogates:	REC (%)	Control		Qual	Surrogates:	REC (%)	Control		Qual
1,2-Dichloroethane-d4	111	73-157			Dibromofluoromethane	98	82-142		
Toluene-d8	100	82-112			1,4-Bromofluorobenzene	102	75-105		

MW-7	08-07-0709-5-B	07/07/08 19:05	Aqueous	GC/MS BB	07/14/08	07/14/08 16:59	080714L01
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.76	0.50	1		Methyl-t-Butyl Ether (MTBE)	0.69	0.50	1	
1,2-Dichloroethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Surrogates:	REC (%)	Control		Qual	Surrogates:	REC (%)	Control		Qual
1,2-Dichloroethane-d4	117	73-157			Dibromofluoromethane	99	82-142		
Toluene-d8	102	82-112			1,4-Bromofluorobenzene	105	75-105		

MW-11	08-07-0709-6-B	07/07/08 20:00	Aqueous	GC/MS BB	07/14/08	07/14/08 17:32	080714L01
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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-Dichloroethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Surrogates:	REC (%)	Control		Qual	Surrogates:	REC (%)	Control		Qual
1,2-Dichloroethane-d4	115	73-157			Dibromofluoromethane	99	82-142		
Toluene-d8	99	82-112			1,4-Bromofluorobenzene	104	75-105		

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



Analytical Report

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 07/09/08
Work Order No: 08-07-0709
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: Arco 771

Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW-1	08-07-0709-7-C	07/07/08 19:25	Aqueous	GC/MS BB	07/14/08	07/14/08 18:04	080714L01

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-Dichloroethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Surrogates:	REC (%)	Control		Qual	Surrogates:	REC (%)	Control		Qual
1,2-Dichloroethane-d4	119	73-157			Dibromofluoromethane	104	82-142		
Toluene-d8	98	82-112			1,4-Bromofluorobenzene	102	75-105		

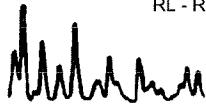
RW-1	08-07-0709-8-B	07/07/08 18:10	Aqueous	GC/MS BB	07/14/08	07/14/08 18:36	080714L01
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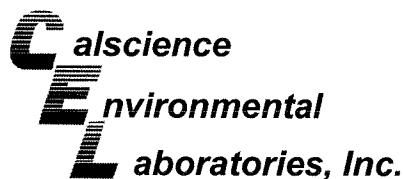
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	0.53	0.50	1	
1,2-Dichloroethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Surrogates:	REC (%)	Control		Qual	Surrogates:	REC (%)	Control		Qual
1,2-Dichloroethane-d4	115	73-157			Dibromofluoromethane	101	82-142		
Toluene-d8	99	82-112			1,4-Bromofluorobenzene	103	75-105		

Method Blank	099-12-703-317	N/A	Aqueous	GC/MS BB	07/14/08	07/14/08 12:43	080714L01
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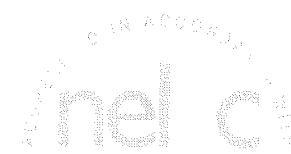
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Surrogates:	REC (%)	Control		Qual	Surrogates:	REC (%)	Control		Qual
1,2-Dichloroethane-d4	105	73-157			Dibromofluoromethane	93	82-142		
Toluene-d8	97	82-112			1,4-Bromofluorobenzene	101	75-105		

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





Quality Control - Spike/Spike Duplicate



Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 07/09/08
Work Order No: 08-07-0709
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project Arco 771

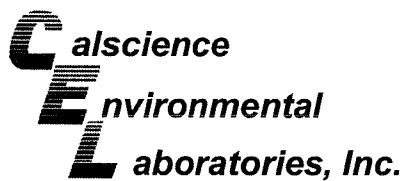
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-07-0703-1	Aqueous	GC 4	07/10/08	07/10/08	080710S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	81	84	38-134	4	0-25	

RPD - Relative Percent Difference , CL - Control Limit



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Date Received: 07/09/08
Work Order No: 08-07-0709
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project Arco 771

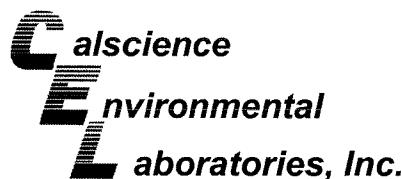
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-11	Aqueous	GC 4	07/11/08	07/11/08	080711S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	77	76	38-134	1	0-25	

RPD - Relative Percent Difference , CL - Control Limit



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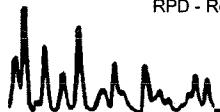
Date Received: 07/09/08
Work Order No: 08-07-0709
Preparation: EPA 5030B
Method: EPA 8260B

Project Arco 771

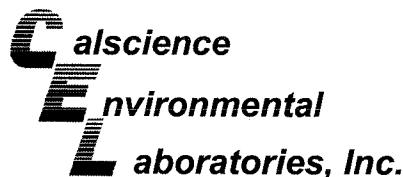
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-5	Aqueous	GC/MS BB	07/14/08	07/14/08	080714S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	90	90	86-122	0	0-8	
Carbon Tetrachloride	123	124	78-138	0	0-9	
Chlorobenzene	99	98	90-120	1	0-9	
1,2-Dibromoethane	105	94	70-130	11	0-30	
1,2-Dichlorobenzene	95	98	89-119	3	0-10	
1,1-Dichloroethene	102	104	52-142	2	0-23	
Ethylbenzene	102	99	70-130	4	0-30	
Toluene	94	92	85-127	1	0-12	
Trichloroethene	103	101	78-126	1	0-10	
Vinyl Chloride	80	86	56-140	8	0-21	
Methyl-t-Butyl Ether (MTBE)	92	104	64-136	11	0-28	
Tert-Butyl Alcohol (TBA)	95	102	27-183	7	0-60	
Diisopropyl Ether (DIPE)	92	94	78-126	2	0-16	
Ethyl-t-Butyl Ether (ETBE)	98	100	67-133	2	0-21	
Tert-Amyl-Methyl Ether (TAME)	104	100	63-141	3	0-21	
Ethanol	78	85	11-167	9	0-64	

RPD - Relative Percent Difference , CL - Control Limit



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Quality Control - LCS/LCS Duplicate

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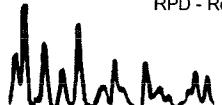
Date Received: N/A
Work Order No: 08-07-0709
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: Arco 771

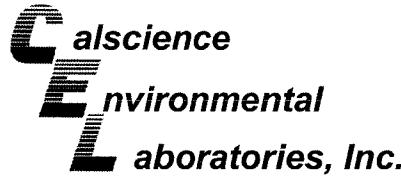
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-192	Aqueous	GC 4	07/10/08	07/10/08	080710B01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	81	83	78-120	2	0-20	

RPD - Relative Percent Difference , CL - Control Limit



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Quality Control - LCS/LCS Duplicate



Stratus Environmental, inc.
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Cameron Park, CA 95682-8861

Date Received: N/A
Work Order No: 08-07-0709
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: Arco 771

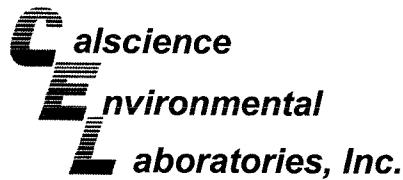
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-193	Aqueous	GC 4	07/11/08	07/11/08	080711B01

Parameter	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Gasoline Range Organics (C6-C12)	89	93	78-120	5	0-20	

RPD - Relative Percent Difference , CL - Control Limit



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Quality Control - LCS/LCS Duplicate

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Anel C

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

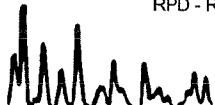
Date Received:	N/A
Work Order No:	08-07-0709
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Arco 771

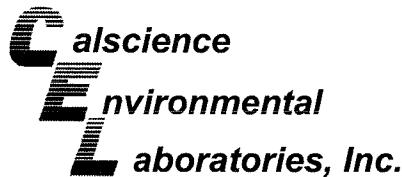
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-317	Aqueous	GC/MS BB	07/14/08	07/14/08	080714L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	88	89	87-117	1	0-7	
Carbon Tetrachloride	115	116	78-132	0	0-8	
Chlorobenzene	94	96	88-118	2	0-8	
1,2-Dibromoethane	91	98	80-120	7	0-20	
1,2-Dichlorobenzene	95	93	88-118	3	0-8	
1,1-Dichloroethene	103	102	71-131	1	0-14	
Ethylbenzene	97	98	80-120	1	0-20	
Toluene	93	91	85-127	2	0-7	
Trichloroethene	98	96	85-121	2	0-11	
Vinyl Chloride	81	84	64-136	3	0-10	
Methyl-t-Butyl Ether (MTBE)	97	99	67-133	2	0-16	
Tert-Butyl Alcohol (TBA)	98	86	34-154	13	0-19	
Diisopropyl Ether (DIPE)	94	90	80-122	4	0-8	
Ethyl-t-Butyl Ether (ETBE)	93	94	73-127	1	0-11	
Tert-Amyl-Methyl Ether (TAME)	96	96	69-135	0	0-12	
Ethanol	86	106	34-124	21	0-44	

RPD - Relative Percent Difference , CL - Control Limit



7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501



Glossary of Terms and Qualifiers

Work Order Number: 08-07-0709

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	A Marginal Exceedance (ME) is defined as a LCS percent recovery beyond the normal 3 standard deviation Control Limits but still within the marginal exceedance limits (set at 4 standard deviations from the mean)
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.



Atlantic Richfield Company

A BP affiliated company

Chain of Custody Record

Project Name: ARCO 771

BP BU/AR Region/Envos Segment: BP > Americas > West > Retail > Alameda > 771

State or Lead Regulatory Agency:

Requested Due Date (mm/dd/yy): 5TD-TAT

0709

Page 1 of 1

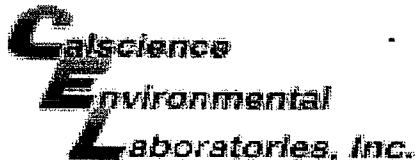
On-site Time:	1715	Temp: 80's
Off-site Time:	2030	Temp: 80's
Sky Conditions:	Clear Sunny	
Meteorological Events:	- Smokey air conditions	
Wind Speed:	-	Direction: -

Lab Name: Cal Science	BP/AR Facility No.: 771	Consultant/Contractor: Stratus Environmental, Inc.
Address: 7440 Lincoln Way	BP/AR Facility Address: 899 Rincon Ave., Livermore	Address: 3330 Cameron Park Drive, Suite 550
Garden Grove Ca. 92841-1427	Site Lat/Long:	Cameron Park, CA 95682
Lab PM: Linda Sharpenberg	California Global ID No.: T0600100113	Consultant/Contractor Project No.:
Tele/Fax: 408-782-8156 408-782-6308 (fax)	Envos Project No.: G0C1M-0025	Consultant/Contractor PM: Jay Johnson
BP/AR PM Contact: Paul Supple	Provision or OOC (circle one) Provision	Tele/Fax: (530) 676-6000 / (530) 676-6005
Address: 2010 Crow Canyon Place, Suite 150	Phase/WBS: 04-Monitoring	Report Type & QC Level: Level 1 with EDF
San Ramon, CA	Sub Phase/Task: 03-Analytical	E-mail EDD To: ciewitt@stratusinc.net
Tele/Fax: 925-275-3506	Cost Element: 01-Contractor labor	Invoice to: Atlantic Richfield Co.

Item No.	Sample Description	Time	Date	Matrix	Laboratory No.	No. of Containers	Preservative					Requested Analysis					Sample Point Lat/Long and Comments *Oxy = MTBE,TAME,ETBE,DIPE,TBA
							Unpreserved	H ₂ SO ₄	HNO ₃	HCl	Methanol	GRO	BTEX	OXY'S	DCA		
1	MW-2	1850	7/7	X		6			X			X	X	X	X		* All by 8/6/0
2	MW-4	1835															
3	MW-5	1825															
4	MW-6	1740															
5	MW-7	1905															
6	MW-11	2000															
7	VW-1	1925															
8	RW-1	1810		/	/												
9	TB-0711-07072008		7/11/08			2											HOLD

Sampler's Name: Anthony T. Hill	Relinquished By / Affiliation: CTS T. L.	Date: 7/8/08	Time: 1330	Accepted By / Affiliation: Michael C.	Date: 7/9/08	Time: 1030
Sampler's Company: SMC						
Shipment Date: 7/8/08						
Shipment Method: GSO						
Shipment Tracking No: 9255021745	GSO	7/9/08	1030	Michael C.	7/9/08	1030

Special Instructions: Please cc results to rmiller@broadbentinc.com	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 #: 08 - 0 7 - 0 7 0 9Cooler 1 of 1**SAMPLE RECEIPT FORM**CLIENT: STRATUSDATE: 7-9-08**TEMPERATURE – SAMPLES RECEIVED BY:****CALSCIENCE COURIER:**

- Chilled, cooler with temperature blank provided.
 Chilled, cooler without temperature blank.
 Chilled and placed in cooler with wet ice.
 Ambient and placed in cooler with wet ice.
 Ambient temperature (For Air & Filter only).

 °C Temperature blank.

LABORATORY (Other than Calscience Courier):

- 3.7 °C Temperature blank.
 °C IR thermometer.
 Ambient temperature (For Air & Filter only).

Initial: WB**CUSTODY SEAL INTACT:**

Sample(s): _____

Cooler: /

No (Not Intact) : _____

Not Present: _____

Initial: WB**SAMPLE CONDITION:**

Yes

No

N/A

- Chain-Of-Custody document(s) received with samples..... / _____
 Sampler's name indicated on COC..... / _____
 Sample container label(s) consistent with custody papers..... / _____
 Sample container(s) intact and good condition..... / _____
 Correct containers and volume for analyses requested..... / _____
 Proper preservation noted on sample label(s)..... / _____
 VOA vial(s) free of headspace. / _____
 Tedlar bag(s) free of condensation..... / _____

Initial: WB**COMMENTS:**

ATTACHMENT

FIELD PROCEDURES FOR GROUNDWATER SAMPLING

The sampling procedures for groundwater monitoring events are contained in this appendix.

Equipment Calibration

Standard groundwater sampling equipment – pH/Conductivity/Temperature meter, and dissolved oxygen (DO) meters are calibrated prior to all field work. All calibration is conducted in accordance with equipment manufacturer's recommended procedure and buffer solutions. MSDS for all buffer solutions are maintained in Stratus vehicles. Calibration is completed everyday prior to field work and also once a week. The pH probe is calibrated for a pH of 7.0 daily and for 4.0, 7.0 and 10.0 weekly. The conductivity probe is calibrated for 1413 μs daily and 1413 μs and 447 μs weekly. The temperature probe is calibrated weekly with a NIST-traceable thermometer. The DO probe is calibrated for 100% oxygen daily and 0% and 100% oxygen weekly. All calibration logs are maintained in the Stratus office.

Groundwater and Liquid-Phase Petroleum Hydrocarbon Depth Assessment

Prior to measuring the depth to liquid in the well, the well caps are removed and the liquid level allowed to stabilize. A water/hydrocarbon interface probe is used to assess the liquid-phase petroleum hydrocarbon (LPH) thickness, if present, and a water level indicator is used to measure the groundwater depth in monitoring wells that do not contain LPH. Depth to groundwater or LPH is measured from a datum point at the top of each monitoring well casing. The datum point is typically a notch cut in the north side of the casing edge. If a water level indicator is used, the tip is subjectively analyzed for hydrocarbon sheen.

Subjective Analysis of Groundwater

Prior to purging, a water sample is collected from the monitoring well for subjective assessment. The sample is retrieved by gently lowering a clean, disposable bailer to approximately one-half the bailer length past the air/liquid interface. The bailer is then retrieved, and the sample contained within the bailer is examined for floating LPH and the appearance of a LPH sheen.

Monitoring Well Sampling

In many cases, determining whether to purge or not to purge wells prior to sample collection is made in the field and is often based on depth to water relative to the screen interval of the well. Site-specific field data sheets present details associated with the purge method and equipment used.

Monitoring wells, when purged, use a pump or bailer until pH, temperature, and conductivity of the purge water has stabilized and a minimum of three well volumes of water has been removed. Field measuring equipment is calibrated and maintained according to the manufacturer's instructions. If three well volumes cannot be removed in one half hour's time the well is allowed to recharge to 80% of original level. After recharging, a groundwater sample is then collected from each of the wells using disposable bailers.

A Teflon bailer, electric submersible or bladder pump will be the only equipment used for well sampling. When samples for volatile organic analysis are being collected, the pump flow will be regulated at approximately 100 milliliters per minute to minimize pump effluent turbulence and aeration. Glass bottles of at least 40-milliliters volume and fitted with Teflon-lined septa will be used in sampling for volatile organics. These bottles will be filled completely to prevent air accumulation in the bottle. A positive meniscus forms when the bottle is completely full. A convex Teflon septum will be placed over the positive meniscus to eliminate air. After the bottle is capped, it is inverted and tapped to verify that it contains no air bubbles. The sample containers for other parameters will be filled, filtered as required, and capped. Glass and plastic bottles used by Stratus to collect groundwater samples are supplied by the laboratory.

Groundwater Sample Labeling and Preservation

Samples are collected in appropriate containers supplied by the laboratory. All required chemical preservation is added to the bottles prior to delivery to Stratus. Sample label information includes a unique sample identification number, job identification number, date, and time. After labeling, all groundwater samples are placed in a Ziploc® type bag and placed in an ice chest cooled to approximately 4° Celsius. Upon arriving at Stratus' office the samples are transferred to a locked refrigerator cooled to approximately 4° Celsius. Chemical preservation is controlled by the required analysis and is noted on the chain-of-custody form. Trip and temperature blanks supplied by the laboratory accompany the groundwater sample containers and groundwater samples.

Sample Identification and Chain-of-Custody Procedures

Sample identification and chain-of-custody procedures document sample possession from the time of collection to ultimate disposal. Each sample container submitted for analysis has a label affixed to identify the job number, sampler, date and time of sample collection, and a sample number unique to that sample. This information, in addition to a description of the sample, field measurements made, sampling methodology, names of on-site personnel, and any other pertinent field observations, is recorded in the field records. The samples are analyzed by a California-certified laboratory.

A chain-of-custody form is used to record possession of the sample from time of collection to its arrival at the laboratory. When the samples are shipped, the person in custody of them relinquishes the samples by signing the chain-of-custody form and noting the time. The sample-control officer at the laboratory verifies sample integrity and confirms that the samples are collected in the proper containers, preserved correctly, and

contain adequate volumes for analysis. These conditions are noted on a Laboratory Sample Receipt Checklist that becomes part of the laboratory report upon request.

If these conditions are met, each sample is assigned a unique log number for identification throughout analysis and reporting. The log number is recorded on the chain-of-custody form and in the legally-required log book maintained by the laboratory. The sample description, date received, client's name, and other relevant information is also recorded.

Equipment Cleaning

All reusable sampling equipments are cleaned using phosphate-free detergents and rinsed with de-ionized water.

APPENDIX B

GEOTRACKER UPLOAD CONFIRMATION

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>	3Q08 GEO_WELL 771
<u>Facility Global ID:</u>	T0600100113
<u>Facility Name:</u>	ARCO #00771
<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>	10/8/2008 2:09:39 PM
<u>Confirmation Number:</u>	5840489268

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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!

Submittal Type: GWM_R
Submittal Title: 3Q08 GW Monitoring
Facility Global ID: T0600100113
Facility Name: ARCO #00771
File Name: 08070709.zip
Organization Name: Broadbent & Associates, Inc.
Username: BROADBENT-C
IP Address: 67.118.40.90
Submittal Date/Time: 10/8/2008 2:11:11 PM
Confirmation Number: **3789760768**

[VIEW QC REPORT](#)

[VIEW DETECTIONS REPORT](#)

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