Atlantic Richfield Company

Chuck Carmel
Environmental Business Manager

PO Box 1257
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May 14, 2010

Re: Replacement Well Installation and Second Quarter 2010 Ground-Water Monitoring Report
Atlantic Richfield Company Station #6113
785 East Stanley Boulevard, Livermore, California
ACEH Case #RO0000393

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

Submitted by,

Chuck Carmel
Environmental Business Manager

Attachment

REPLACEMENT WELL INSTALLATION AND SECOND QUARTER 2010 GROUND-WATER MONITORING REPORT

Atlantic Richfield Company Station No. 6113
785 East Stanley Boulevard, Livermore, California
ACEH Case No. RO0000393

Prepared for:

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

Prepared by:

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

1324 Mangrove Ave., Suite 212
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May 14, 2010

Project No. 06-82-637

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May 14, 2010

Project No. 06-82-637

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

Attn.: Mr. Chuck Carmel

Re: Replacement Well Installation and Second Quarter 2010 Ground-Water Monitoring Report, Atlantic Richfield Company Station No.6113, 785 East Stanley Boulevard, Livermore, California; ACEH Case No.RO0000393

Dear Mr. Carmel:

Broadbent & Associates, Inc. (BAI) is pleased to submit this *Replacement Well and Second Quarter 2010 Ground-Water Monitoring Report* for Atlantic Richfield Company Station No.6113 (herein referred to as Station No.6113) located at 785 East Stanley Boulevard, Livermore, California (Site). The replacement well installation was conducted in accordance with the Alameda County Environmental Health (ACEH) approval letter dated October 22, 2009. This report presents a description of field activities conducted and analytical results obtained during the installation of one replacement ground-water monitoring well. This report also presents a summary of results from ground-water monitoring and sampling conducted during the Second Quarter of 2010.

Should you have questions or require additional information, please do not hesitate to contact us at (530) 566-1400.

Sincerely,
BROADBENT & ASSOCIATES, INC.

Jason Duda
Project Scientist

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

Enclosures

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

REPLACEMENT WELL INSTALLATION AND
SECOND QUARTER 2010 GROUND-WATER MONITORING REPORT
Atlantic Richfield Company Station No. 6113
785 East Stanley Boulevard, Livermore, California

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APPENDICES

REPLACEMENT WELL INSTALLATION AND
SECOND QUARTER 2010 GROUND-WATER MONITORING REPORT
Atlantic Richfield Company Station No. 6113
785 East Stanley Boulevard, Livermore, California

1.0 INTRODUCTION

On behalf of the Atlantic Richfield Company, RM – a BP affiliated company, Broadbent & Associates, Inc. (BAI) has prepared this *Replacement Well Installation and Second Quarter 2010 Ground-Water Monitoring Report* for monitoring well installation and semi-annual ground-water monitoring and sampling activities at the Atlantic Richfield Company Station No. 6113, located at 785 East Stanley Boulevard, Livermore, California (Site). Wells MW-6 and MW-13 was originally abandoned in September 2008 due to station raze and rebuild activities. Replacement well RMW-13 installation activities were conducted on March 11, 2010 in accordance with the BAI *Replacement Well Work Plan* dated September 4, 2009, as approved by ACEH in their response letter dated October 22, 2009. Semi-annual ground-water monitoring was conducted according to the sampling schedule currently in place. Replacement well installation activities and semi-annual ground-water monitoring and sampling results are discussed below.

2.0 REPLACEMENT WELL INSTALLATION

2.1 Preliminary Field Activities

Prior to initiating field activities, BAI obtained the necessary well drilling permit from the Zone 7 Water Agency (See Appendix A). BAI also prepared a site health and safety plan specific to the scope of work and cleared the Site for subsurface utilities. The utility clearance included notifying Underground Service Alert of the work a minimum of 48 hours prior to initiating the field investigation, and additionally securing the services of Cruz Brothers, a private utility locating company to confirm the absence of underground utilities at the boring location. The borehole was physically cleared to approximately 6.5 feet below ground surface (bgs) using an air knife rig.

2.2 Soil Boring Advancement and Sampling Activities

The soil boring for replacement monitoring well RMW-13 was drilled on March 11, 2010 by Cascade Drilling, Inc., a California-licensed drilling contractor, using a CME 75 drill rig equipped with an eight-inch diameter hollow-stem auger. RMW-13 was drilled to a total depth of approximately 36.5 feet bgs. The location of RMW-13 is depicted in Drawing 2. During drilling activities, soil was described by the on-site BAI geologist using the Universal Soil Classification System (USCS). Field notes and the lithologic boring and well construction log are provided in Appendix A. Boring logs were uploaded to the GeoTracker AB2886 database. Copies of the upload confirmation reports (GEO_BORE files) are provided in Appendix C.

Four soil samples were collected from the boring for well RMW-13 between approximately 14.5 and 15.0 feet, 21.0 and 21.5 feet, 25.5 and 26.0 feet and 31.0 and 31.5 feet bgs. Screening of soil samples with a photo-ionization detector (PID) was conducted during well installation activities. Cobbles and silty sand with gravel were observed from the surface to approximately 20 feet bgs. Silty clay with a small amount of gravel was encountered from approximately 20 feet bgs to 25.5

feet bgs. Silty clay was observed from approximately 25.5 feet bgs to 30 feet bgs. Silt with some clay was observed from approximately 30 feet bgs to 35 feet bgs. Silty sand was encountered from approximately 35 feet bgs to 36.5 feet bgs, the total depth explored. Monitoring well installation activities proceeded following completion of soil boring advancement and collection of soil samples.

Soil samples were delivered to Calscience Environmental Laboratories, Inc. (Garden Grove), a California State-certified laboratory, under chain-of-custody protocol. Samples were analyzed for Gasoline Range Organics (GRO, hydrocarbon chain lengths between C6-C12) by EPA Method 8015B; and for Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX), Methyl Tert-Butyl Ether (MTBE), Ethyl Tert-Butyl Ether (ETBE), Tert-Amyl Methyl Ether (TAME), Di-Isopropyl Ether (DIPE), Tert-Butyl Alcohol (TBA), 1,2-Dichloroethane (1,2-DCA), 1,2-Dibromoethane (EDB), and Ethanol using EPA Method 8260B. No significant irregularities were reported during laboratory analysis of the samples.

Gasoline Range Organics (GRO) were detected above the laboratory reporting limit in three of the four soil samples collected at concentrations up to 1,900 milligrams per kilogram (mg/kg) in sample RMW13@21.0-21.5. Benzene, Ethylbenzene, and Total Xylenes were detected above the laboratory reporting limits in each of the four soil samples collected at concentrations up to 2.1 mg/kg, 22 mg/kg, and 52 mg/kg, respectively, in sample RMW13@21.0-21.5. Toluene was detected above the laboratory reporting limit in soil sample RMW13@21.0-21.5 at a concentration of 0.13 mg/kg. MTBE was detected above the laboratory reporting limit in three of the four soil samples collected at concentrations up to 0.28 mg/kg in sample RMW13@25.5-26.0. TBA was detected above the laboratory reporting limit in soil sample RMW13@14.5-15.0 at a concentration of 0.12 mg/kg. The remaining fuel additives and oxygenates were not detected above their laboratory reporting limits in the four soil samples collected during well installation activities. Soil laboratory analytical results are summarized in Table 1. A copy of the laboratory analytical report with chain-of-custody documentation is provided in Appendix A. Laboratory analytical results (EDF) were uploaded to the GeoTracker AB2886 database. Upload confirmation pages are provided in Appendix C.

2.3 Replacement Well Construction

Replacement monitoring well RMW-13 was constructed using flush-threaded, four-inch diameter, 0.020-inch factory-slotted Schedule 40 PVC pipe. The screen interval in RMW-13 extends from approximately 15 feet bgs to 35 feet bgs. The filter pack surrounding the screen intervals consists of No.3 silica sand from the bottom of the well boring to approximately 13 feet bgs. A sanitary seal of bentonite was placed above the sand from approximately 13 feet bgs to 11 feet bgs. Neat cement grout extends from approximately 11 feet bgs to the surface. The wellhead was secured with a locking well cap and protected by a traffic-rated well vault set flush with the local ground surface. Additional details of well construction are provided in the field notes and lithologic boring and well construction log provided in Appendix A. Well construction information was uploaded to the GeoTracker AB2886 database. Copies of GeoTracker upload confirmation reports are provided within Appendix C.

2.4 Well Surveying and Development

Replacement well RMW-13 was developed on March 25, 2010. Well development activities consisted of surging the well with a surge block and pumping the well with a submersible ground-water pump until relatively silt-free water was removed. Well RMW-13 purged dry before the targeted volume of three wetted casings were removed. Well RMW-13 ran dry after approximately 29 gallons of the targeted 48 gallons were purged. The well was allowed to recharge for approximately one hour before another round of surging and pumping. RMW-13 once again ran dry after approximately 40 gallons were removed. Relatively silt-free water was observed prior to purging dry the second time and well development was considered complete. After development, the well was left to hydraulically equilibrate prior to water level measurement and sampling.

Replacement well RMW-13 was surveyed by Wood Rodgers of Sacramento, California on April 23, 2010. The well survey information was uploaded to the GeoTracker AB2886 database. Copies of the GeoTracker upload confirmation reports (GEO_MAP, GEO_XY, and GEO_Z files) are provided within Appendix C.

2.5 Installation-derived Residuals Management

Residual solids and liquids generated during the replacement monitoring well installation were stored temporarily onsite in 55-gallon drums pending analytical results and profiling. Following characterization and profiling, Belshire Environmental Services transported one-55 gallon drum of decon water to Demenno Kerdoon located in Compton, California and six-55 gallon drums of soil cuttings to TPST Soil Recyclers of California located in Adelanto, California for treatment or disposal. Copies of the waste manifests are provided in Appendix A.

3.0 GROUND-WATER MONITORING AND SAMPLING

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

3.1 Work Performed This Quarter (Second Quarter 2010)

1. Prepared and submitted *First Quarter 2010 Status Report* (BAI, 04/20/2010)
2. Conducted ground-water monitoring/sampling for Second Quarter 2010. Work performed by BAI on April 12, 2010.
3. Prepared and submitted *Replacement Well Installation and Second Quarter 2010 Ground-Water Monitoring Report* (contained herein).

3.2 Work Proposed for Next Quarter (Third Quarter 2010)

1. Prepare and submit *Third Quarter 2010 Status Report*.
2. No environmental work is currently scheduled at the Site during the Third Quarter of 2010.

3.3 Quarterly Results Summary

Current phase of project:	**Ground-water monitoring/sampling**
Frequency of ground-water monitoring:	**Semi-Annually (2Q and 4Q): Wells MW-2, MW-4, MW-7, MW-9, MW-11, MW-12, RMW-13, VW-1, VW-2, VW-4**
Frequency of ground-water sampling:	**Semi-Annually (2Q and 4Q): Wells MW-4, MW-7, MW-11, MW-12, RMW-13, VW-1** **Annually (4Q): Well MW-9**
Is free product (FP) present on-site:	**No**
FP recovered this quarter:	**None**
Bulk Soil Removed to Date:	**288 cubic yards TPH impacted soil**
Current remediation techniques:	**Air Diffusion (discontinued in September 2008 as a result of station raze and rebuild activities)**
Depth to ground water (below TOC):	**17.27 (VW-1) to 21.14 (MW-11)**
General ground-water flow direction:	**North-Northeast**
Approximate hydraulic gradient:	**0.03 ft/ft**

3.4 Discussion

Second Quarter 2010 ground-water monitoring and sampling was conducted at Station No. 6113 on April 12, 2010 by BAI. Water levels were gauged in the ten wells associated with the Site. No irregularities were noted during water level gauging. Depth to water measurements ranged from 17.27 ft at well VW-1 to 21.14 ft at well MW-11. Resulting ground-water surface elevations ranged from 441.54 ft above datum in well MW-2 to 436.26 ft at well MW-11. Water level elevations are summarized in Table 1. Water level elevations yielded a potentiometric ground-water flow direction and gradient to the north-northeast at approximately 0.03 ft/ft. Ground-water monitoring field data sheets are provided within Appendix B. Measured depths to ground-water and respective ground-water elevations are summarized in Table 2. Current and historic ground-water flow directions and gradients are provided in Table 4. A Site Location Map is presented as Drawing 1. Potentiometric ground-water elevation contours are presented in Drawing 2.

Consistent with the current ground-water sampling schedule, water samples were collected from wells MW-4, MW-7, MW-11, MW-12, RMW-13, and VW-1 on April 12, 2010. No irregularities were reported during sampling. Samples were submitted under chain-of-custody protocol to Calscience Environmental Laboratories, Inc. (Garden Grove, California), for analysis of Gasoline Range Organics (GRO, C6-C12) by EPA Method 8015B and for BTEX, MTBE, ETBE, TAME, DIPE, TBA, 1,2-DCA, EDB and Ethanol by EPA Method 8260B. No significant irregularities were encountered during laboratory analysis of the samples. Ground-water

sampling field data sheets and the laboratory analytical report, including chain-of-custody documentation, are provided in Appendix B.

Gasoline Range Organics (GRO) were detected above laboratory reporting limits in three of the six wells sampled at concentrations up to 63,000 micrograms per liter (µg/L) in well RMW-13. Benzene was detected above the laboratory reporting limit in three of the six wells sampled at concentrations up to 7,800 µg/L in well RMW-13. Toluene, Ethylbenzene, and Total Xylenes were detected above laboratory reporting limits in well RMW-13 at concentrations of 200 µg/L, 1,600 µg/L, and 6,400 µg/L, respectively. MTBE was detected above the laboratory reporting limit in three of the six wells sampled at concentrations up to 1,500 µg/L in well RMW-13. The remaining fuel additives and oxygenates were not detected above their respective laboratory reporting limits in the six wells sampled this quarter. Historic laboratory analytical results are summarized in Table 2 and Table 3. The most recent GRO, Benzene, and MTBE concentrations are also presented in Drawing 2. A copy of the laboratory analytical report, including chain-of-custody documentation is provided in Appendix B. Ground-water monitoring data (GEO_WELL) and laboratory analytical results (EDF) were uploaded to the GeoTracker AB2886 database. Upload confirmation receipts are provided in Appendix C.

4.0 CONCLUSIONS AND RECOMMENDATIONS

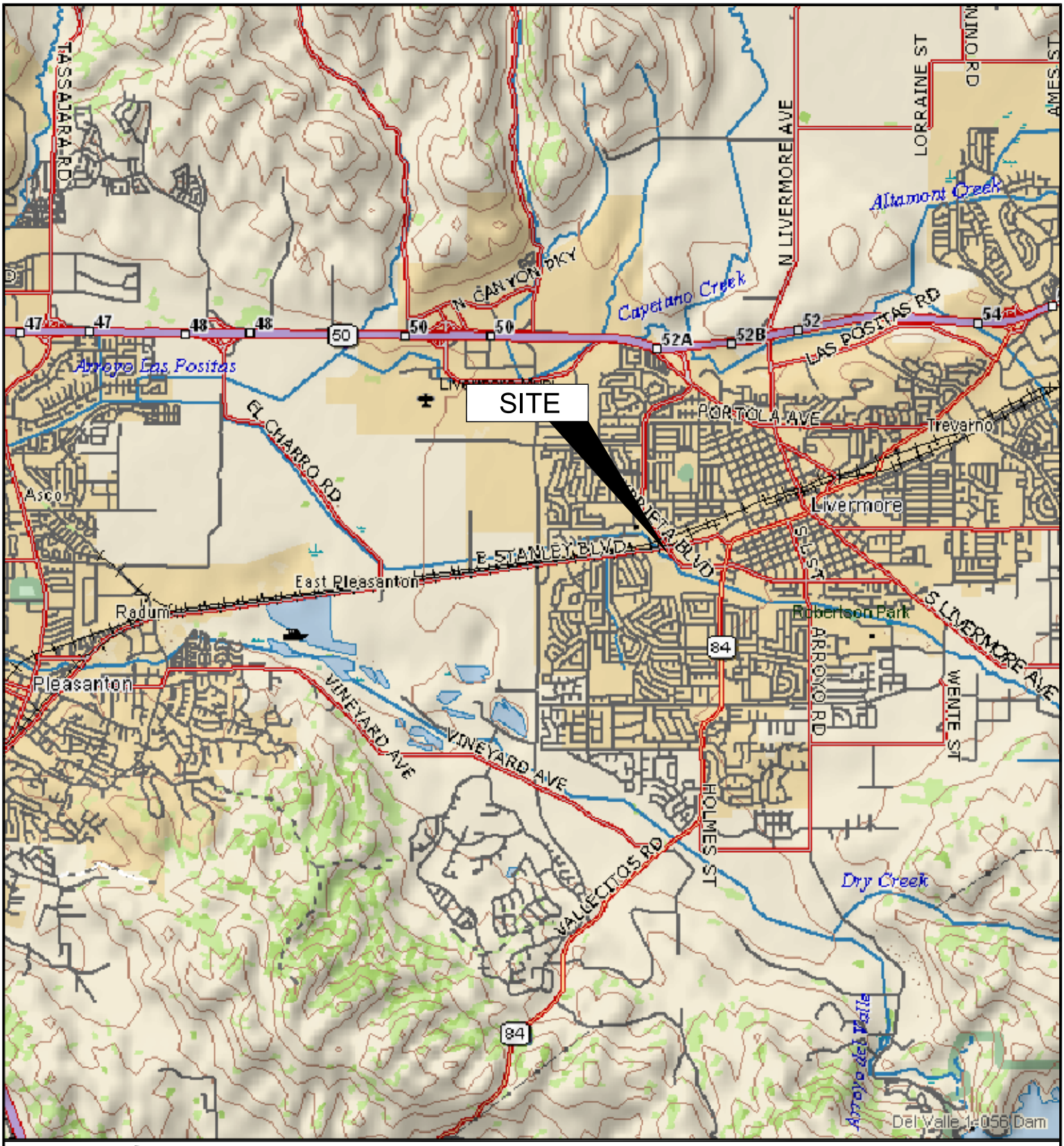
The Second Quarter 2010 water level elevations were within historic minimum and maximum elevation ranges for each well, excluding replacement well RMW-13. The current ground-water flow direction (north-northeast) and gradient magnitude (0.03 ft/ft) were generally consistent with recent historical data. Detected analyte concentrations were within the historic minimum and maximum ranges recorded for each well with the exception of GRO, which reached a historic maximum concentration in well MW-4. Well RMW-13 is not included in this analysis as the well has only been sampled once. No environmental work is currently scheduled at the Site during Third Quarter 2010. The next semi-annual ground-water monitoring and sampling event is scheduled to occur during the Fourth Quarter of 2010.

Ground-water analytical data for previously abandoned wells MW-6 and MW-13 have been consistently collected since 1995 in MW-6 and 2002 in MW-13. Well RMW-13 was installed as a replacement well for wells MW-6 and MW-13. Based on this information, it is recommended that RMW-13 retain a semi-annual ground-water monitoring/sampling schedule to be conducted during the second and fourth quarters each calendar year, consistent with the historic schedule. Unless otherwise directed by ACEH, well RMW-13 will be monitored and sampled on a semi-annual basis.

5.0 CLOSURE

The findings presented in this document are based upon: observations of BAI field personnel (see Appendices A and B), the points investigated, and results of laboratory tests performed by Calscience Environmental Laboratories, Inc. (Garden Grove, California). Our services were

performed in accordance with the generally accepted standard of practice at the time this document was written. No other warranty, expressed on 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.



N

0 1 2

APPROXIMATE SCALE (mi)

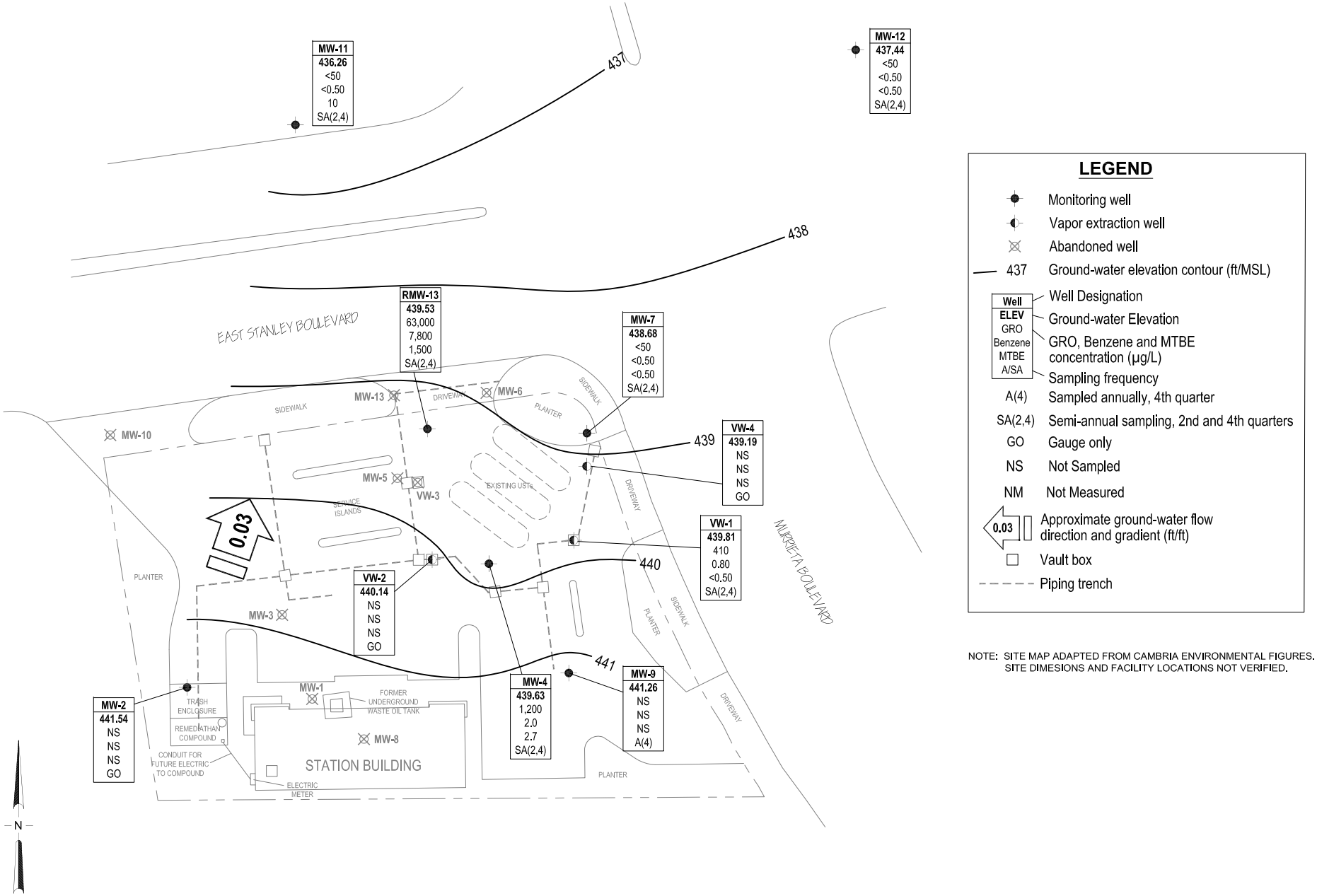
IMAGE SOURCE: DELORME

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave. Suite 212, Chico, California 95926
Project No.: 06-82-637 Date: 7/27/2009

Station #6113
785 East Stanley Boulevard
Livermore, California

Site Location Map

Drawing
1



LEGEND

- Monitoring well
- Vapor extraction well
- Abandoned well
- 437 — Ground-water elevation contour (ft/MSL)
- Well Designation
- ELEV — Ground-water Elevation
- GRO, Benzene, MTBE — GRO, Benzene and MTBE concentration (µg/L)
- A/SA — Sampling frequency
- A(4) — Sampled annually, 4th quarter
- SA(2,4) — Semi-annual sampling, 2nd and 4th quarters
- GO — Gauge only
- NS — Not Sampled
- NM — Not Measured
- 0.03 — Approximate ground-water flow direction and gradient (ft/ft)
- Vault box
- Piping trench

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

0 50 100
SCALE (ft)

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave, Suite 212, Chico, California 95926
Project No.: 06-82-637 Date: 5/12/2010

Station #6113
785 East Stanley Boulevard
Livermore, California

Ground-Water Elevation Contour and Analytical Summary Map
April 12, 2010

Drawing
2

Table 1. Summary of Soil Sample Analytical Data
Station #6113, 785 East Stanley Boulevard, Livermore, CA

Soil Boring Identification*	Sample ID	Date Collected	GRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	Comments
RMW-13										
	RMW13@14.5-15.0	3/11/2010	<0.50	0.001	<0.0010	0.0037	0.0054	0.0018	0.12	
	RMW13@21.0-21.5	3/11/2010	1,900	2.1	0.13	22	52	0.15	<1.0	
	RMW13@25.5-26.0	3/11/2010	160	0.98	<0.1	2.0	3.3	0.28	<1.0	
	RMW13@31.0-31.5	3/11/2010	63	0.54	<0.1	0.32	0.25	<0.1	<1.0	

Abbreviations & Symbols:

* = See Drawing 2 for soil boring location

GRO: Gasoline range organics

Calscience Environmental Laboratories, Inc.: GRO(C6-C12)

GRO analyzed using EPA method 8015B

MTBE: Methyl tert-butyl ether

TBA: Tert-butyl alcohol

Benzene, toluene, ethylbenzene, total xylenes, MTBE, and TBA analyzed using EPA method 8260B

mg/kg = Milligrams per kilogram

Notes:

1,2-dibromoethane (EDB), 1,2-dichloroethane (1,2 DCA), Di-isopropyl ether (DIPE), ethyl tert-butyl ether (ETBE), ter-amyl methyl ether (TAME), and ethanol were not detected at or above their respective laboratory reporting limit.

The number after @ in Sample ID denotes the depth range at which the sample was collected in feet bgs (i.e., RMW13@14.5-15.0 was collected between 14.5 and 15.0 feet bgs.

Table 2. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

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

Table 2. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

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

Table 2. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-2 Cont.															
4/24/2008	--		460.07	28.0	38.0	26.38	433.69	--	--	--	--	--	--	--	--
10/15/2008	--		460.07	28.0	38.0	37.21	422.86	--	--	--	--	--	--	--	--
4/28/2009	--		460.07	28.0	38.0	33.30	426.77	--	--	--	--	--	--	--	--
11/9/2009	--		460.07	28.0	38.0	21.87	438.20	--	--	--	--	--	--	--	--
4/12/2010	--		**460.07**	**28.0**	**38.0**	**18.53**	**441.54**	--	--	--	--	--	--	--	--
MW-3															
3/23/1995	--	e	456.97	28.5	38.5	14.13	442.84	--	--	--	--	--	--	--	--
5/31/1995	--	e	456.97	28.5	38.5	14.46	442.51	--	--	--	--	--	--	--	--
8/31/1995	--	e	456.97	28.5	38.5	17.06	439.91	--	--	--	--	--	--	--	--
11/28/1995	--		456.97	28.5	38.5	16.27	440.70	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/22/1996	--	e	456.97	28.5	38.5	13.14	443.83	--	--	--	--	--	--	--	--
5/23/1996	--	e	456.97	28.5	38.5	13.95	443.02	--	--	--	--	--	--	--	--
8/8/1996	--	e	456.97	28.5	38.5	16.03	440.94	--	--	--	--	--	--	--	--
11/7/1996	--		456.97	28.5	38.5	17.26	439.71	<50	<0.5	0.9	<0.5	1.5	<3	--	--
3/27/1997	--	e	456.97	28.5	38.5	14.85	442.12	--	--	--	--	--	--	--	--
5/19/1997	--	e	456.97	28.5	38.5	16.40	440.57	--	--	--	--	--	--	--	--
5/18/1998	--	e	456.97	28.5	38.5	14.66	442.31	--	--	--	--	--	--	--	--
11/2/1998	--		456.97	28.5	38.5	25.85	431.12	<1,000	<10	<10	<10	<10	1,700	--	--
6/4/1999	--	e	456.97	28.5	38.5	17.35	439.62	--	--	--	--	--	--	--	--
11/11/1999	P		456.97	28.5	38.5	18.58	438.39	<50	<0.5	<0.5	<0.5	<1	<3	0.79	--
6/20/2000	--	e	456.97	28.5	38.5	17.03	439.94	--	--	--	--	--	--	2.8	--
8/29/2000	--	e	456.97	28.5	38.5	18.25	438.72	--	--	--	--	--	--	3.39	--
11/29/2000	--		456.97	28.5	38.5	20.27	436.70	<50.0	<0.500	<0.500	1.08	3.34	<2.50	0.67	--
5/2/2001	--	e	456.97	28.5	38.5	22.33	434.64	--	--	--	--	--	--	--	--
8/15/2001	--	e	456.97	28.5	38.5	25.03	431.94	--	--	--	--	--	--	--	--
10/5/2001	P		456.97	28.5	38.5	25.17	431.80	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.79	--
1/21/2002	--	e	456.97	28.5	38.5	24.79	432.18	--	--	--	--	--	--	--	--
4/26/2002	--	e	456.97	28.5	38.5	24.27	432.70	--	--	--	--	--	--	--	--
10/7/2002	--		456.97	28.5	38.5	20.20	436.77	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	--
05/01/2003	--	c, e	456.97	28.5	38.5	18.27	438.70	--	--	--	--	--	--	--	--

Table 2. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-3 Cont.															
10/03/2003	P	d	456.97	28.5	38.5	20.07	436.90	<50	<0.50	<0.50	<0.50	<0.50	<0.50	5.2	7.3
04/06/2004	--	e	459.32	28.5	38.5	17.24	442.08	--	--	--	--	--	--	--	--
10/28/2004	P		459.32	28.5	38.5	19.38	439.94	<50	<0.50	<0.50	<0.50	<0.50	<0.50	8.1	7.3
04/13/2005	--		459.32	28.5	38.5	16.02	443.30	--	--	--	--	--	--	--	--
10/27/2005	--	t	459.32	28.5	38.5	--	--	--	--	--	--	--	--	--	--
04/12/2006	--		459.32	28.5	38.5	15.12	444.20	--	--	--	--	--	--	--	--
10/31/2006	P		459.32	28.5	38.5	19.14	440.18	400	5.5	<0.50	5.5	9.6	22	--	7.64
4/19/2007	--		459.32	28.5	38.5	23.07	436.25	--	--	--	--	--	--	--	--
10/16/2007	--	f	459.32	28.5	38.5	--	--	--	--	--	--	--	--	--	--
4/24/2008	--		459.32	28.5	38.5	25.65	433.67	--	--	--	--	--	--	--	--
9/10/2008	--	k	459.32	28.5	38.5	--	--	--	--	--	--	--	--	--	--
MW-4															
3/23/1995	--		456.55	21.0	**27.0**	15.39	441.16	210	2.1	0.6	0.8	2.1	--	--	--
5/31/1995	--		456.55	21.0	**27.0**	15.32	441.23	190	1.6	<0.5	0.7	0.9	--	--	--
8/31/1995	--		456.55	21.0	**27.0**	17.86	438.69	160	1.2	0.7	<0.5	<2	<3	--	--
11/28/1995	--		456.55	21.0	**27.0**	17.18	439.37	150	0.7	<0.5	0.7	1.4	<3	--	--
2/22/1996	--		456.55	21.0	**27.0**	14.80	441.75	100	<0.5	<0.5	<0.6	0.8	<3	--	--
5/23/1996	--		456.55	21.0	**27.0**	14.43	442.12	86	<0.5	<0.5	<0.5	<0.7	<3	--	--
8/8/1996	--		456.55	21.0	**27.0**	16.80	439.75	98	<0.5	<0.5	<0.5	1.3	<3	--	--
11/7/1996	--		456.55	21.0	**27.0**	17.90	438.65	140	<0.5	<0.5	<0.9	1.3	<3	--	--
3/27/1997	--		456.55	21.0	**27.0**	15.22	441.33	<50	1.1	<0.5	<0.5	1.6	<3	--	--
5/19/1997	--		456.55	21.0	**27.0**	16.98	439.57	62	<0.5	<0.5	<0.5	0.6	<3	--	--
5/18/1998	--		456.55	21.0	**27.0**	14.99	441.56	<50	<0.5	<0.5	<0.5	<0.5	64	--	--
11/2/1998	--		456.55	21.0	**27.0**	25.29	431.26	74	<0.5	<0.5	<0.5	<0.5	96	--	--
6/4/1999	P		456.55	21.0	**27.0**	17.95	438.60	100	<0.5	<0.5	<0.5	<0.5	38	--	--
11/11/1999	P		456.55	21.0	**27.0**	19.25	437.30	88	<0.5	<0.5	<0.5	<1	10	0.77	--
6/20/2000	--	q	456.55	21.0	**27.0**	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	62.3	--	--
6/20/2000	P		456.55	21.0	**27.0**	17.79	438.76	<50.0	<0.500	<0.500	<0.500	<0.500	82.4	1.3	--
8/29/2000	P		456.55	21.0	**27.0**	18.90	437.65	56	<0.500	<0.500	<0.500	<0.500	47.9	0.97	--
11/29/2000	P	s	456.55	21.0	**27.0**	20.50	436.05	<50.0	<0.500	<0.500	<0.500	<0.500	9.88/10.4	0.59	--

Table 2. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-4 Cont.															
5/2/2001	P	q, s	456.55	21.0	**27.0**	22.65	433.90	<50.0	<0.500	<0.500	<0.500	<0.500	61.1/70.9	0.74	--
5/2/2001	--	s	456.55	21.0	**27.0**	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	59.4/68.4	--	--
8/15/2001	--	f	456.55	21.0	**27.0**	--	--	--	--	--	--	--	--	--	--
10/5/2001	--	f	456.55	21.0	**27.0**	--	--	--	--	--	--	--	--	--	--
1/21/2002	--	f	456.55	21.0	**27.0**	--	--	--	--	--	--	--	--	--	--
4/26/2002	P		456.55	21.0	**27.0**	20.15	436.40	110	<0.50	<0.50	<0.50	<0.50	150	0.21	--
10/7/2002	P	a	456.55	21.0	**27.0**	20.76	435.79	96	<0.50	<0.50	0.54	<0.50	260	1.0	--
05/01/2003	P	c	456.55	21.0	**27.0**	19.67	436.88	120	1.3	<0.50	<0.50	<0.50	86	1.7	--
10/03/2003	P	d	456.55	21.0	27.0	20.23	436.32	<50	<0.50	<0.50	<0.50	<0.50	22	13.5	6.8
04/06/2004	P		458.88	21.0	27.0	18.13	440.75	96	<0.50	<0.50	<0.50	<0.50	17	1.6	6.8
10/28/2004	P		458.88	21.0	27.0	20.02	438.86	<50	<0.50	<0.50	<0.50	<0.50	4.5	1.2	6.7
04/13/2005	P		458.88	21.0	27.0	16.68	442.20	<50	<0.50	<0.50	<0.50	<0.50	2.8	0.8	6.7
10/27/2005	P		458.88	21.0	27.0	19.05	439.83	400	14	<0.50	11	1.8	22	1.0	6.9
04/12/2006	P		458.88	21.0	27.0	15.47	443.41	100	<0.50	<0.50	<0.50	<0.50	1.9	1.6	7.2
10/31/2006	P		458.88	21.0	27.0	19.67	439.21	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	7.63
4/19/2007	NP		458.88	21.0	27.0	22.72	436.16	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.92	7.36
10/16/2007	--	f	458.88	21.0	27.0	--	--	--	--	--	--	--	--	--	--
4/24/2008	--	f	458.88	21.0	27.0	--	--	--	--	--	--	--	--	--	--
10/15/2008	--	f	458.88	21.0	27.0	--	--	--	--	--	--	--	--	--	--
4/28/2009	--	f	458.88	21.0	27.0	--	--	--	--	--	--	--	--	--	--
11/9/2009	NP	x (GRO)	458.88	21.0	27.0	22.73	436.15	270	4.6	<0.50	<0.50	<0.50	3.1	--	--
4/12/2010	**P**		**458.88**	**21.0**	**27.0**	**19.25**	**439.63**	**1,200**	**2.0**	**<0.50**	**<0.50**	**<0.50**	**2.7**	**0.81**	**6.87**
MW-5															
3/23/1995	--		455.84	43.0	**63.0**	13.97	441.87	68	4.2	3.4	2.3	12	--	--	--
5/31/1995	--	g	455.84	43.0	**63.0**	--	--	--	--	--	--	--	--	--	--
8/31/1995	--	g	455.84	43.0	**63.0**	--	--	--	--	--	--	--	--	--	--
11/28/1995	--		455.84	43.0	**63.0**	16.46	439.38	960	41	24	38	210	<5	--	--
2/22/1996	--	f	455.84	43.0	**63.0**	13.34	442.50	--	--	--	--	--	--	--	--
5/23/1996	--		455.84	43.0	**63.0**	14.36	441.48	7,100	440	180	270	1,700	<50	--	--
8/8/1996	--	f	455.84	43.0	**63.0**	16.38	439.46	--	--	--	--	--	--	--	--

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

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-5 Cont.															
11/7/1996	--		455.84	43.0	63.0	17.26	438.58	5,600	230	86	210	1,100	<80	--	--
3/27/1997	--	f	455.84	43.0	63.0	15.95	439.89	--	--	--	--	--	--	--	--
5/19/1997	--		455.84	43.0	63.0	16.64	439.20	7,600	480	140	400	1,200	<40	--	--
5/18/1998	--		455.84	43.0	63.0	14.75	441.09	990	46	13	45	180	4	--	--
11/2/1998	--		455.84	43.0	63.0	27.83	428.01	14,000	690	140	550	2,200	100	--	--
6/4/1999	P		455.84	43.0	63.0	17.47	438.37	8,300	690	370	90	440	1,400	--	--
11/11/1999	P		455.84	43.0	63.0	18.80	437.04	18,000	900	190	1,100	3,200	72	0.86	--
6/20/2000	P		455.84	43.0	63.0	17.14	438.70	10,200	618	122	832	2,020	<50.0	1.6	--
8/29/2000	P		455.84	43.0	63.0	18.60	437.24	12,300	436	166	711	2,120	517	0.79	--
11/29/2000	P	s	455.84	43.0	63.0	20.57	435.27	26,000	491	149	1,090	3,810	671/<20.0	0.51	--
5/2/2001	--	k	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6															
3/23/1995	--		454.93	48.0	68.0	13.38	441.55	<50	1.5	<0.5	<0.5	0.9	--	--	--
5/31/1995	--		454.93	48.0	68.0	13.96	440.97	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/31/1995	--		454.93	48.0	68.0	16.71	438.22	150	9	1.8	4	12	<3	--	--
11/28/1995	--		454.93	48.0	68.0	15.65	439.28	<50	0.6	<0.5	<0.5	0.8	<3	--	--
2/22/1996	--		454.93	48.0	68.0	12.53	442.40	<50	1.9	<0.5	0.8	2.1	<3	--	--
5/23/1996	--		454.93	48.0	68.0	13.24	441.69	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
8/8/1996	--		454.93	48.0	68.0	16.65	438.28	<50	0.5	<0.5	<0.5	0.5	<3	--	--
11/7/1996	--		454.93	48.0	68.0	16.65	438.28	110	5.3	1.3	3.1	6.6	<3	--	--
3/27/1997	--		454.93	48.0	68.0	14.25	440.68	<50	2.3	<0.5	0.9	3.5	4	--	--
5/19/1997	--		454.93	48.0	68.0	15.87	439.06	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/18/1998	--		454.93	48.0	68.0	14.00	440.93	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/2/1998	--		454.93	48.0	68.0	24.95	429.98	<50	1.2	<0.5	<0.5	<0.5	3	--	--
6/4/1999	P		454.93	48.0	68.0	16.68	438.25	310	41	3.8	11	19	33	--	--
11/11/1999	P		454.93	48.0	68.0	16.12	438.81	<50	0.5	<0.5	<0.5	<1	<3	0.92	--
6/20/2000	P		454.93	48.0	68.0	16.63	438.30	<50.0	<0.500	<0.500	<0.500	<0.500	17.3	1.9	--
8/29/2000	--	q	454.93	48.0	68.0	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--	--
8/29/2000	P		454.93	48.0	68.0	17.91	437.02	<50.0	<0.500	0.551	<0.500	<0.500	<2.50	1.67	--
11/29/2000	P		454.93	48.0	68.0	20.30	434.63	<50.0	<0.500	<0.500	<0.500	1.03	<2.50	0.79	--

Table 2. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-6 Cont.															
5/2/2001	P	s	454.93	48.0	**68.0**	22.20	432.73	3,230	1,300	33.6	89.4	136	1,810/2,310	0.95	--
8/15/2001	P	s	454.93	48.0	**68.0**	27.95	426.98	<50	<0.50	<0.50	<0.50	<0.50	21/25	0.63	--
10/5/2001	P		454.93	48.0	**68.0**	28.05	426.88	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.85	--
1/21/2002	P		454.93	48.0	**68.0**	26.81	428.12	<50	<0.50	<0.50	<0.50	<0.50	<5.0	0.91	--
4/26/2002	P		454.93	48.0	**68.0**	26.27	428.66	<50	<0.50	<0.50	<0.50	<0.50	17	0.75	--
10/7/2002	P	a	454.93	48.0	**68.0**	20.05	434.88	60	13	1.7	1.7	3.5	8	2.8	--
05/01/2003	P	c	454.93	48.0	**68.0**	17.62	437.31	<50	5.4	<0.50	0.63	1.3	12	1.6	--
10/03/2003	P	d	454.93	48.0	68.0	19.62	435.31	80	2.6	<2.5	<2.5	<2.5	120	5.1	6.9
04/06/2004	P		457.24	48.0	68.0	16.88	440.36	<2,500	<25	<25	<25	<25	1,700	4.1	7.0
10/28/2004	P		457.24	48.0	68.0	19.20	438.04	3,200	<25	<25	<25	<25	3,100	6.8	6.9
04/13/2005	P		457.24	48.0	68.0	15.15	442.09	<5,000	<50	<50	<50	<50	3,900	3.9	7.0
10/27/2005	P		457.24	48.0	68.0	18.12	439.12	<5,000	<50	<50	<50	<50	2,900	3.15	7.0
04/12/2006	P		457.24	48.0	68.0	15.32	441.92	<5,000	<50	<50	<50	<50	3,400	4.3	7.6
10/31/2006	P	u, v	457.24	48.0	68.0	18.85	438.39	2,700	<25	<25	<25	<25	3,400	--	10.36
4/19/2007	P	v	457.24	48.0	68.0	22.25	434.99	970	<25	<25	<25	<25	2,200	5.54	10.52
10/16/2007	P	v, w (MTBE)	457.24	48.0	68.0	37.17	420.07	2,700	240	<25	50	55	2,600	4.56	10.26
4/24/2008	P		457.24	48.0	68.0	24.55	432.69	15,000	5,300	200	620	470	4,200	2.15	6.90
9/10/2008	--	k	457.24	48.0	68.0	--	--	--	--	--	--	--	--	--	--
MW-7															
3/23/1995	--		454.92	48.0	**68.0**	13.29	441.63	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
5/31/1995	--		454.92	48.0	**68.0**	13.72	441.20	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/31/1995	--		454.92	48.0	**68.0**	16.53	438.39	<50	<0.5	<0.5	<0.5	1.2	<3	--	--
11/28/1995	--		454.92	48.0	**68.0**	15.50	439.42	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/22/1996	--		454.92	48.0	**68.0**	12.30	442.62	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/23/1996	--		454.92	48.0	**68.0**	13.02	441.90	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
8/8/1996	--	m	454.92	48.0	**68.0**	--	--	--	--	--	--	--	--	--	--
11/7/1996	--		454.92	48.0	**68.0**	16.50	438.42	<50	<0.5	<0.5	<0.5	0.8	<3	--	--
3/27/1997	--		454.92	48.0	**68.0**	14.22	440.70	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/19/1997	--		454.92	48.0	**68.0**	15.74	439.18	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/18/1998	--		454.92	48.0	**68.0**	13.82	441.10	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--

Table 2. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-7 Cont.															
11/2/1998	--		454.92	48.0	**68.0**	24.80	430.12	<50	<0.5	<0.5	<0.5	<0.5	4	--	--
6/4/1999	P		454.92	48.0	**68.0**	16.55	438.37	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/11/1999	P		454.92	48.0	**68.0**	18.02	436.90	<50	<0.5	<0.5	<0.5	<1	<3	1.03	--
6/20/2000	P		454.92	48.0	**68.0**	16.50	438.42	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	1.3	--
8/29/2000	P		454.92	48.0	**68.0**	17.80	437.12	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	1.67	--
11/29/2000	P		454.92	48.0	**68.0**	19.61	435.31	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	0.51	--
5/2/2001	P	s	454.92	48.0	**68.0**	22.05	432.87	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50/2.66	0.9	--
8/15/2001	P		454.92	48.0	**68.0**	27.55	427.37	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.84	--
10/5/2001	P		454.92	48.0	**68.0**	27.59	427.33	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.62	--
1/21/2002	P	s	454.92	48.0	**68.0**	26.50	428.42	<50	<0.50	<0.50	<0.50	<0.50	15/21	0.65	--
4/26/2002	P		454.92	48.0	**68.0**	26.22	428.70	<50	<0.50	<0.50	<0.50	<0.50	18	0.61	--
10/7/2002	--		454.92	48.0	**68.0**	20.04	434.88	<50	1.2	<0.50	<0.50	0.77	41	4.8	--
05/01/2003	P	c	454.92	48.0	**68.0**	17.47	437.45	<50	<0.50	<0.50	<0.50	0.5	43	2.7	--
10/03/2003	P	d	454.92	48.0	68.0	19.55	435.37	<50	<1.0	<1.0	<1.0	<1.0	49	5.7	7.1
04/06/2004	P		457.17	48.0	68.0	16.60	440.57	<50	<0.50	<0.50	<0.50	0.75	0.76	0.7	7.0
10/28/2004	P		457.17	48.0	68.0	19.17	438.00	<50	<0.50	<0.50	<0.50	<0.50	14	6.7	6.9
04/13/2005	P		457.17	48.0	68.0	14.84	442.33	<50	<0.50	<0.50	<0.50	<0.50	1.7	2.3	6.9
10/27/2005	P		457.17	48.0	68.0	17.38	439.79	<50	<0.50	<0.50	<0.50	<0.50	2.3	2.16	7.0
04/12/2006	P		457.17	48.0	68.0	14.84	442.33	<50	<0.50	<0.50	<0.50	<0.50	1.1	3.0	7.2
10/31/2006	P		457.17	48.0	68.0	18.74	438.43	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	7.55
4/19/2007	P		457.17	48.0	68.0	22.11	435.06	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.37	7.60
10/16/2007	P		457.17	48.0	68.0	37.23	419.94	140	68	6.8	<0.50	5.0	24	4.87	8.02
4/24/2008	P		457.17	48.0	68.0	24.47	432.70	<50	<0.50	0.99	<0.50	<0.50	22	1.96	7.24
10/15/2008	P		457.17	48.0	68.0	43.40	413.77	<50	<0.50	<0.50	<0.50	<0.50	8.2	2.31	7.14
4/28/2009	P		457.17	48.0	68.0	32.13	425.04	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.78	6.93
11/9/2009	P		457.17	48.0	68.0	22.15	435.02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.3	6.8
4/12/2010	**P**		**457.17**	**48.0**	**68.0**	**18.49**	**438.68**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**--**	**7.55**
MW-8															
3/23/1995	--	e	456.97	47.0	**67.0**	11.55	445.42	--	--	--	--	--	--	--	--
5/31/1995	--	e	456.97	47.0	**67.0**	12.37	444.60	--	--	--	--	--	--	--	--

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

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-8 Cont.															
8/31/1995	--	e	456.97	47.0	**67.0**	15.68	441.29	--	--	--	--	--	--	--	--
11/28/1995	--		456.97	47.0	**67.0**	14.15	442.82	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/22/1996	--	e	456.97	47.0	**67.0**	10.97	446.00	--	--	--	--	--	--	--	--
5/23/1996	--	e	456.97	47.0	**67.0**	11.90	445.07	--	--	--	--	--	--	--	--
8/8/1996	--	e	456.97	47.0	**67.0**	13.85	443.12	--	--	--	--	--	--	--	--
11/7/1996	--		456.97	47.0	**67.0**	15.08	441.89	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
3/27/1997	--	e	456.97	47.0	**67.0**	12.96	444.01	--	--	--	--	--	--	--	--
5/19/1997	--	e	456.97	47.0	**67.0**	14.35	442.62	--	--	--	--	--	--	--	--
5/18/1998	--	e	456.97	47.0	**67.0**	12.97	444.00	--	--	--	--	--	--	--	--
11/2/1998	--		456.97	47.0	**67.0**	26.01	430.96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
6/4/1999	--	e	456.97	47.0	**67.0**	15.53	441.44	--	--	--	--	--	--	--	--
11/11/1999	P		456.97	47.0	**67.0**	16.67	440.30	<50	<0.5	<0.5	<0.5	<1	<3	1.01	--
6/20/2000	--	e	456.97	47.0	**67.0**	15.29	441.68	--	--	--	--	--	--	2.4	--
8/29/2000	--	e	456.97	47.0	**67.0**	16.59	440.38	--	--	--	--	--	--	3.37	--
11/29/2000	P		456.97	47.0	**67.0**	19.80	437.17	<50.0	<0.500	<0.500	<0.500	0.772	<2.50	1.35	--
5/2/2001	--	e	456.97	47.0	**67.0**	22.12	434.85	--	--	--	--	--	--	--	--
8/15/2001	--	e	456.97	47.0	**67.0**	27.63	429.34	--	--	--	--	--	--	--	--
10/5/2001	P		456.97	47.0	**67.0**	27.65	429.32	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.07	--
1/21/2002	--	e	456.97	47.0	**67.0**	26.73	430.24	--	--	--	--	--	--	--	--
4/26/2002	--	e	456.97	47.0	**67.0**	26.39	430.58	--	--	--	--	--	--	--	--
10/7/2002	--		456.97	47.0	**67.0**	18.43	438.54	<50	<0.50	<0.50	<0.50	0.86	<0.50	4.2	--
05/01/2003	--	r	456.97	47.0	**67.0**	16.47	440.50	--	--	--	--	--	--	--	--
10/27/2005	--		456.97	47.0	67.0	17.14	439.83	--	--	--	--	--	--	--	--
04/12/2006	--		456.97	47.0	67.0	14.08	442.89	--	--	--	--	--	--	--	--
10/31/2006	--		456.97	47.0	67.0	18.12	438.85	--	--	--	--	--	--	--	--
4/19/2007	--		456.97	47.0	67.0	22.39	434.58	--	--	--	--	--	--	--	--
10/16/2007	--		456.97	47.0	67.0	38.18	418.79	--	--	--	--	--	--	--	--
4/24/2008	--		456.97	47.0	67.0	25.43	431.54	--	--	--	--	--	--	--	--
6/18/2008	--	k	--	47.0	67.0	--	--	--	--	--	--	--	--	--	--
MW-9															

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Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-9 Cont.															
3/23/1995	--	e	456.18	48.0	68.0	13.18	443.00	--	--	--	--	--	--	--	--
5/31/1995	--	e	456.18	48.0	68.0	12.66	443.52	--	--	--	--	--	--	--	--
8/31/1995	--	e	456.18	48.0	68.0	14.40	441.78	--	--	--	--	--	--	--	--
11/28/1995	--		456.18	48.0	68.0	14.26	441.92	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/22/1996	--	e	456.18	48.0	68.0	12.05	444.13	--	--	--	--	--	--	--	--
5/23/1996	--	e	456.18	48.0	68.0	12.07	444.11	--	--	--	--	--	--	--	--
8/8/1996	--	e	456.18	48.0	68.0	14.12	442.06	--	--	--	--	--	--	--	--
11/7/1996	--		456.18	48.0	68.0	15.42	440.76	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
3/27/1997	--	e	456.18	48.0	68.0	13.01	443.17	--	--	--	--	--	--	--	--
5/19/1997	--	e	456.18	48.0	68.0	14.60	441.58	--	--	--	--	--	--	--	--
5/18/1998	--	e	456.18	48.0	68.0	12.60	443.58	--	--	--	--	--	--	--	--
11/2/1998	--	e	456.18	48.0	68.0	25.08	431.10	--	--	--	--	--	--	--	--
6/4/1999	P		456.18	48.0	68.0	15.87	440.31	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/11/1999	P		456.18	48.0	68.0	17.02	439.16	<50	<0.5	<0.5	<0.5	<1	<3	0.96	--
6/20/2000	--	e	456.18	48.0	68.0	15.54	440.64	--	--	--	--	--	--	2.1	--
8/29/2000	--	e	456.18	48.0	68.0	16.81	439.37	--	--	--	--	--	--	2.59	--
11/29/2000	P		456.18	48.0	68.0	18.81	437.37	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	0.81	--
5/2/2001	--	e	456.18	48.0	68.0	22.09	434.09	--	--	--	--	--	--	--	--
8/15/2001	--	e	456.18	48.0	68.0	27.59	428.59	--	--	--	--	--	--	--	--
10/5/2001	P		456.18	48.0	68.0	27.63	428.55	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.93	--
10/5/2001	--	q	456.18	48.0	68.0	27.63	428.55	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
1/21/2002	--	e	456.18	48.0	68.0	26.77	429.41	--	--	--	--	--	--	--	--
4/26/2002	--	e	456.18	48.0	68.0	26.41	429.77	--	--	--	--	--	--	--	--
10/7/2002	P		456.18	48.0	68.0	18.85	437.33	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.6	--
05/01/2003	--	c, e	456.18	48.0	68.0	17.84	438.34	--	--	--	--	--	--	--	--
10/03/2003	P	d	456.18	48.0	68.0	18.69	437.49	<50	1.1	0.57	<0.50	<0.50	<0.50	4.9	6.8
04/06/2004	--	e	458.55	48.0	68.0	16.08	442.47	--	--	--	--	--	--	--	--
10/28/2004	P		458.55	48.0	68.0	18.35	440.20	<50	<0.50	<0.50	<0.50	<0.50	<0.50	6.8	6.9
04/13/2005	--	e	458.55	48.0	68.0	14.09	444.46	--	--	--	--	--	--	--	--
10/27/2005	P		458.55	48.0	68.0	17.41	441.14	<50	0.51	<0.50	<0.50	<0.50	1.4	2.56	7.0
04/12/2006	--		458.55	48.0	68.0	14.18	444.37	--	--	--	--	--	--	--	--

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Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-9 Cont.															
10/31/2006	P		458.55	48.0	68.0	17.97	440.58	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	7.46
4/19/2007	--		458.55	48.0	68.0	22.37	436.18	--	--	--	--	--	--	--	--
10/16/2007	P		458.55	48.0	68.0	37.75	420.80	<50	0.83	<0.50	<0.50	<0.50	<0.50	1.27	7.59
4/24/2008	--		458.55	48.0	68.0	24.89	433.66	--	--	--	--	--	--	--	--
10/15/2008	P		458.55	48.0	68.0	44.16	414.39	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.14	7.08
4/28/2009	--		458.55	48.0	68.0	32.61	425.94	--	--	--	--	--	--	--	--
11/9/2009	P		458.55	48.0	68.0	20.69	437.86	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.33	6.82
4/12/2010	**--**		**458.55**	**48.0**	**68.0**	**17.29**	**441.26**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-10															
3/23/1995	--	e	456.85	32.0	**52.0**	14.86	441.99	--	--	--	--	--	--	--	--
5/31/1995	--	e	456.85	32.0	**52.0**	15.63	441.22	--	--	--	--	--	--	--	--
8/31/1995	--	e	456.85	32.0	**52.0**	14.40	442.45	--	--	--	--	--	--	--	--
11/28/1995	--		456.85	32.0	**52.0**	17.24	439.61	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/22/1996	--	e	456.85	32.0	**52.0**	14.30	442.55	--	--	--	--	--	--	--	--
5/23/1996	--	e	456.85	32.0	**52.0**	14.93	441.92	--	--	--	--	--	--	--	--
8/8/1996	--	e	456.85	32.0	**52.0**	17.20	439.65	--	--	--	--	--	--	--	--
11/7/1996	--		456.85	32.0	**52.0**	18.25	438.60	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
3/27/1997	--	e	456.85	32.0	**52.0**	15.77	441.08	--	--	--	--	--	--	--	--
5/19/1997	--	e	456.85	32.0	**52.0**	17.38	439.47	--	--	--	--	--	--	--	--
5/18/1998	--	e	456.85	32.0	**52.0**	15.47	441.38	--	--	--	--	--	--	--	--
11/2/1998	--		456.85	32.0	**52.0**	26.94	429.91	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
6/4/1999	--	e	456.85	32.0	**52.0**	17.19	439.66	--	--	--	--	--	--	--	--
11/11/1999	P		456.85	32.0	**52.0**	19.35	437.50	<50	<0.5	<0.5	<0.5	<1	<3	0.68	--
6/20/2000	--	e	456.85	32.0	**52.0**	17.92	438.93	--	--	--	--	--	--	2.9	--
8/29/2000	--	e	456.85	32.0	**52.0**	19.15	437.70	--	--	--	--	--	--	1.54	--
11/29/2000	P		456.85	32.0	**52.0**	21.30	435.55	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	0.95	--
5/2/2001	--	e	456.85	32.0	**52.0**	29.95	426.90	--	--	--	--	--	--	--	--
8/15/2001	--	e	456.85	32.0	**52.0**	30.74	426.11	--	--	--	--	--	--	--	--
10/5/2001	P		456.85	32.0	**52.0**	30.95	425.90	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.89	--
1/21/2002	--	e	456.85	32.0	**52.0**	28.97	427.88	--	--	--	--	--	--	--	--

Table 2. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-10 Cont.															
4/26/2002	--	e	456.85	32.0	**52.0**	28.50	428.35	--	--	--	--	--	--	--	--
10/7/2002	--		456.85	32.0	**52.0**	21.15	435.70	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.0	--
05/01/2003	--	c, e	456.85	32.0	**52.0**	18.90	437.95	--	--	--	--	--	--	--	--
10/03/2003	P	d	456.85	32.0	52.0	20.64	436.21	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.4	7.1
04/06/2004	--	e	459.20	32.0	52.0	17.99	441.21	--	--	--	--	--	--	--	--
10/28/2004	P		459.20	32.0	52.0	20.27	438.93	<50	<0.50	<0.50	<0.50	<0.50	<0.50	5.9	7.1
04/13/2005	--	e	459.20	32.0	52.0	16.25	442.95	--	--	--	--	--	--	--	--
10/27/2005	P		459.20	32.0	52.0	19.03	440.17	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.38	7.2
04/12/2006	--		459.20	32.0	52.0	14.95	444.25	--	--	--	--	--	--	--	--
10/31/2006	P		459.20	32.0	52.0	20.20	439.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	7.30
4/19/2007	--		459.20	32.0	52.0	24.00	435.20	--	--	--	--	--	--	--	--
10/16/2007	NP		459.20	32.0	52.0	38.99	420.21	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.20	7.36
4/24/2008	--		459.20	32.0	52.0	26.62	432.58	--	--	--	--	--	--	--	--
9/10/2008	--	k	459.20	32.0	52.0	--	--	--	--	--	--	--	--	--	--
MW-11															
3/23/1995	--		455.07	38.0	**45.0**	17.34	437.73	--	--	--	--	--	--	--	--
5/31/1995	--		455.07	38.0	**45.0**	16.68	438.39	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/31/1995	--	h	455.07	38.0	**45.0**	20.20	434.87	--	--	--	--	--	--	--	--
11/28/1995	--		455.07	38.0	**45.0**	17.80	437.27	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/22/1996	--	h	455.07	38.0	**45.0**	15.97	439.10	--	--	--	--	--	--	--	--
5/23/1996	--		455.07	38.0	**45.0**	15.50	439.57	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
8/8/1996	--	h	455.07	38.0	**45.0**	17.77	437.30	--	--	--	--	--	--	--	--
11/7/1996	--		455.07	38.0	**45.0**	17.45	437.62	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
3/27/1997	--	h	455.07	38.0	**45.0**	15.77	439.30	--	--	--	--	--	--	--	--
5/19/1997	--		455.07	38.0	**45.0**	16.80	438.27	<50	1.1	4.5	<0.5	2.2	<3	--	--
5/18/1998	--		455.07	38.0	**45.0**	15.38	439.69	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/2/1998	--		455.07	38.0	**45.0**	24.15	430.92	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
6/4/1999	P		455.07	38.0	**45.0**	18.39	436.68	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/11/1999	P		455.07	38.0	**45.0**	18.62	436.45	<50	<0.5	<0.5	<0.5	<1	<3	1.01	--
6/20/2000	P		455.07	38.0	**45.0**	17.82	437.25	<50.0	0.631	<0.500	<0.500	<0.500	<2.50	4.1	--

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

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-11 Cont.															
8/29/2000	--	h	455.07	38.0	**45.0**	19.50	435.57	--	--	--	--	--	--	--	--
11/29/2000	P		455.07	38.0	**45.0**	20.60	434.47	<50.0	<0.500	<0.500	<0.500	1.63	<2.50	0.97	--
5/2/2001	P		455.07	38.0	**45.0**	22.42	432.65	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	1.04	--
8/15/2001	--	h	455.07	38.0	**45.0**	27.41	427.66	--	--	--	--	--	--	--	--
10/5/2001	P		455.07	38.0	**45.0**	27.59	427.48	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.05	--
1/21/2002	--	h	455.07	38.0	**45.0**	26.75	428.32	--	--	--	--	--	--	--	--
4/26/2002	P		455.07	38.0	**45.0**	26.50	428.57	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.47	--
10/7/2002	--		455.07	38.0	**45.0**	20.79	434.28	<50	<0.50	<0.50	<0.50	<0.50	1.0	1.4	--
05/01/2003	P	c	455.07	38.0	**45.0**	20.55	434.52	<50	<0.50	<0.50	<0.50	<0.50	1.5	3.2	--
10/03/2003	P	d	455.07	38.0	45.0	20.58	434.49	<50	<0.50	<0.50	<0.50	<0.50	3.1	3.0	7.1
04/06/2004	P		457.40	38.0	45.0	17.52	439.88	<50	<0.50	<0.50	<0.50	<0.50	14	5.1	6.7
10/28/2004	P		457.40	38.0	45.0	20.32	437.08	<50	<0.50	<0.50	<0.50	<0.50	29	1.3	7.2
04/13/2005	P		457.40	38.0	45.0	16.20	441.20	<50	<0.50	<0.50	<0.50	<0.50	3.7	2.8	7.0
10/27/2005	P		457.40	38.0	45.0	21.98	435.42	<50	<0.50	<0.50	<0.50	<0.50	21	1.04	7.2
04/12/2006	--	Well inaccessible m	457.40	38.0	45.0	--	--	--	--	--	--	--	--	--	--
10/31/2006	--		457.40	38.0	45.0	--	--	--	--	--	--	--	--	--	--
4/19/2007	P		457.40	38.0	45.0	22.38	435.02	<50	<0.50	<0.50	<0.50	<0.50	12	7.11	7.57
10/16/2007	P		457.40	38.0	45.0	37.11	420.29	<50	<0.50	<0.50	<0.50	<0.50	6.6	0.60	7.57
4/24/2008	P		457.40	38.0	45.0	26.10	431.30	<50	<0.50	<0.50	<0.50	<0.50	17	1.83	7.26
10/15/2008	--		457.40	38.0	45.0	43.34	414.06	--	--	--	--	--	--	--	--
4/28/2009	P		457.40	38.0	45.0	32.85	424.55	<50	<0.50	<0.50	<0.50	<0.50	5.3	5.89	7.23
11/9/2009	P		457.40	38.0	45.0	22.99	434.41	<50	<0.50	<0.50	<0.50	<0.50	12	0.72	7.0
4/12/2010	**P**		**457.40**	**38.0**	**45.0**	**21.14**	**436.26**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**10**	**2.03**	**7.25**
MW-12															
3/23/1995	--	h	455.04	18.0	**34.5**	15.54	439.50	--	--	--	--	--	--	--	--
5/31/1995	--		455.04	18.0	**34.5**	15.66	439.38	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/31/1995	--	h	455.04	18.0	**34.5**	18.23	436.81	--	--	--	--	--	--	--	--
11/28/1995	--		455.04	18.0	**34.5**	17.53	437.51	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/22/1996	--	h	455.04	18.0	**34.5**	14.45	440.59	--	--	--	--	--	--	--	--
5/23/1996	--		455.04	18.0	**34.5**	14.88	440.16	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--

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Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-12 Cont.															
8/8/1996	--	h	455.04	18.0	34.5	17.30	437.74	--	--	--	--	--	--	--	--
11/7/1996	--		455.04	18.0	34.5	18.30	436.74	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
3/27/1997	--	h	455.04	18.0	34.5	15.69	439.35	--	--	--	--	--	--	--	--
5/19/1997	--		455.04	18.0	34.5	17.41	437.63	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/18/1998	--		455.04	18.0	34.5	15.21	439.83	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/2/1998	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
6/4/1999	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
11/11/1999	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
6/20/2000	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
8/29/2000	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
11/29/2000	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
5/2/2001	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
8/15/2001	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
10/5/2001	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
1/21/2002	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
4/26/2002	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
10/7/2002	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
05/01/2003	--	c, m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
10/03/2003	--	m	455.04	18.0	34.5	--	--	--	--	--	--	--	--	--	--
04/06/2004	P		457.37	18.0	34.5	18.14	439.23	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.4	6.4
10/28/2004	P		457.37	18.0	34.5	20.66	436.71	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.7	6.8
04/13/2005	P		457.37	18.0	34.5	16.25	441.12	<50	<0.50	<0.50	<0.50	0.55	<0.50	1.9	7.5
10/27/2005	P		457.37	18.0	34.5	19.77	437.60	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.81	7.0
04/12/2006	P		457.37	18.0	34.5	16.08	441.29	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.6	7.2
10/31/2006	--		457.37	18.0	34.5	--	--	--	--	--	--	--	--	--	--
4/19/2007	NP		457.37	18.0	34.5	22.34	435.03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.66	7.28
10/16/2007	--	f	457.37	18.0	34.5	--	--	--	--	--	--	--	--	--	--
4/24/2008	--	m	457.37	18.0	34.5	--	--	--	--	--	--	--	--	--	--
10/15/2008	--	f	457.37	18.0	34.5	--	--	--	--	--	--	--	--	--	--
4/28/2009	NP		457.37	18.0	34.5	32.21	425.16	<50	<0.50	<0.50	<0.50	<0.50	1.4	7.68	6.63
11/9/2009	NP		457.37	18.0	34.5	23.74	433.63	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--

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Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-12 Cont.															
4/12/2010	**NP**		**457.37**	**18.0**	**34.5**	**19.93**	**437.44**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**--**	**7.18**
MW-13															
1/21/2002	P		--	--	--	24.61	--	15,000	160	68	1,700	3,200	4,900/5,200	0.71	--
4/26/2002	P		--	--	--	24.20	--	17,000	98	<100	1,700	3,400	1,600	0.6	--
10/7/2002	--	b	--	--	--	20.12	--	14,000	510	<50	2,200	2,300	2,800	0.8	--
05/01/2003	P	c	--	--	--	17.82	--	21,000	230	<50	1,900	2,300	1,600	1.9	--
10/03/2003	P	d	--	--	--	19.91	--	19,000	570	55	1,900	2,300	2,400	0.8	6.9
04/06/2004	P		457.91	--	--	17.14	440.77	15,000	470	35	1,600	1,300	1,800	2.0	6.7
10/28/2004	P		457.91	--	--	18.83	439.08	18,000	350	<25	1,900	1,800	1,800	0.8	6.7
04/13/2005	P		457.91	--	--	15.23	442.68	9,700	110	<25	860	280	920	0.9	6.9
10/27/2005	P		457.91	--	--	18.45	439.46	11,000	120	12	1,500	450	580	0.75	6.8
04/12/2006	P		457.91	--	--	15.06	442.85	4,700	65	<10	450	69	470	1.2	6.8
10/31/2006	P		457.91	--	--	19.06	438.85	15,000	150	<25	1,700	400	710	--	6.87
4/19/2007	NP		457.91	--	--	22.21	435.70	14,000	60	<25	1,800	640	330	1.44	7.09
10/16/2007	--	f	457.91	--	--	--	--	--	--	--	--	--	--	--	--
4/24/2008	NP		457.91	--	--	24.68	433.23	1,400	4.5	1.1	9.4	15	49	2.78	7.25
9/10/2008	--	k	457.91	--	--	--	--	--	--	--	--	--	--	--	--
RMW-13															
4/12/2010	**NP**	**y**	**458.03**	**--**	**--**	**18.50**	**439.53**	**63,000**	**7,800**	**200**	**1,600**	**6,400**	**1,500**	**2.47**	**7.21**
VW-1															
8/29/2000	P		--	24	45	17.40	--	2,360	27.6	11.6	26.3	33.2	110	4.47	--
11/29/2000	P		--	24.0	45	18.75	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	0.46	--
5/2/2001	--		--	24.0	45	21.59	--	--	--	--	--	--	--	--	--
8/15/2001	P	s	--	24.0	45	24.62	--	1,200	6.3	4.3	1.7	1.3	20/17	--	--
8/15/2001	--	q	--	24.0	45	--	--	1,200	6.2	4.1	1.8	1.1	20/17	--	--
10/5/2001	P	s	--	24.0	45	24.75	--	1,500	140	55	28	82	610/660	0.71	--
1/21/2002	P	s	--	24.0	45	24.59	--	6,700	810	350	270	1,100	2,600/3,400	0.69	--
1/21/2002	--	q, s	--	24.0	45	--	--	8,000	770	320	96	1,100	2,500/3,200	--	--
4/26/2002	P		--	24.0	45	24.27	--	370	26	2.1	6.6	1.7	48	0.5	--

Table 2. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
VW-1 Cont.															
4/26/2002	--	q	--	24.0	45	--	--	350	24	1.6	5.9	1.6	45	--	--
10/7/2002	P	b	--	24.0	45	19.20	--	410	25	2.2	8	4.3	88	1.7	--
05/01/2003	P	c	--	24.0	45	16.60	--	240	6.4	<0.50	3.3	1.3	36	1.7	--
10/03/2003	P	d	--	24.0	45	18.82	--	180	1.5	<0.50	0.69	<0.50	12	1.1	7.3
04/06/2004	P		457.08	24.0	45	15.78	441.30	300	2.2	<0.50	3.0	1.3	13	2.4	7.2
10/28/2004	P		457.08	24.0	45	18.33	438.75	210	<0.50	<0.50	0.67	<0.50	<0.50	1.2	7.1
04/13/2005	P		457.08	24.0	45	14.02	443.06	740	1.8	<0.50	3.6	1.1	9.6	2.4	7.1
10/27/2005	P		457.08	24.0	45	17.65	439.43	1,500	78	73	36	81	13	1.64	7.3
04/12/2006	P		457.08	24.0	45	13.89	443.19	230	1.4	<0.50	2.2	0.76	1.6	1.4	7.3
10/31/2006	P		457.08	24.0	45	17.87	439.21	80	<0.50	<0.50	2.3	0.82	<0.50	--	7.76
4/19/2007	P		457.08	24.0	45	21.09	435.99	250	1.6	<0.50	4.7	1.3	3.0	1.15	7.66
10/16/2007	NP		457.08	24.0	45	37.10	419.98	12,000	2,300	1,900	860	2,800	150	2.65	7.61
4/24/2008	NP		457.08	24.0	45	24.40	432.68	<50	<0.50	<0.50	<0.50	<0.50	4.5	4.95	7.47
10/15/2008	--		457.08	24.0	45	43.07	414.01	--	--	--	--	--	--	--	--
4/28/2009	NP		457.08	24.0	45	31.06	426.02	3,500	140	2.8	25	4.0	19	6.38	7.02
11/9/2009	P	x (GRO)	457.08	24.0	45	21.12	435.96	230	1.8	<0.50	<0.50	<0.50	1.1	2.28	6.95
4/12/2010	**P**		**457.08**	**24.0**	**45**	**17.27**	**439.81**	**410**	**0.80**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**3.38**	**7.21**
VW-2															
8/29/2000	--	g	--	28	49.5	--	--	--	--	--	--	--	--	--	--
11/29/2000	--	g	--	28	49.5	--	--	--	--	--	--	--	--	--	--
5/2/2001	--		--	28	49.5	--	--	--	--	--	--	--	--	--	--
10/5/2001	--	g	--	28	49.5	--	--	--	--	--	--	--	--	--	--
1/21/2002	--	g	--	28	49.5	--	--	--	--	--	--	--	--	--	--
4/26/2002	--	m	--	28	49.5	--	--	--	--	--	--	--	--	--	--
10/7/2002	--	g	--	28	49.5	--	--	--	--	--	--	--	--	--	--
05/01/2003	--	c, g	--	28	49.5	--	--	--	--	--	--	--	--	--	--
10/03/2003	--	Well inaccessible g	--	28	49.5	--	--	--	--	--	--	--	--	--	--
04/06/2004	--		458.64	28	49.5	16.96	441.68	--	--	--	--	--	--	--	--
10/28/2004	--		458.64	28	49.5	19.35	439.29	--	--	--	--	--	--	--	--
04/13/2005	--		458.64	28	49.5	15.51	443.13	--	--	--	--	--	--	--	--

Table 2. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
VW-2 Cont.															
10/27/2005	--		458.64	28	49.5	18.50	440.14	--	--	--	--	--	--	--	--
04/12/2006	--		458.64	28	49.5	14.92	443.72	--	--	--	--	--	--	--	--
10/31/2006	--		458.64	28	49.5	19.01	439.63	--	--	--	--	--	--	--	--
4/19/2007	--		458.64	28	49.5	22.52	436.12	--	--	--	--	--	--	--	--
10/16/2007	--		458.64	28	49.5	38.58	420.06	--	--	--	--	--	--	--	--
4/24/2008	--		458.64	28	49.5	24.91	433.73	--	--	--	--	--	--	--	--
10/15/2008	--		458.64	28	49.5	43.31	415.33	--	--	--	--	--	--	--	--
4/28/2009	--		458.64	28	49.5	32.56	426.08	--	--	--	--	--	--	--	--
11/9/2009	--		458.64	28	49.5	22.38	436.26	--	--	--	--	--	--	--	--
4/12/2010	--		**458.64**	**28**	**49.5**	**18.50**	**440.14**	--	--	--	--	--	--	--	--
VW-3															
8/29/2000	P		--	15.5	**24**	17.93	--	25,400	3,540	10,600	1,280	43,000	44,700	--	--
11/29/2000	P	s	--	15.5	**24**	19.75	--	54,200	9,450	1,870	2,350	9,400	12,300/15,100	0.47	--
5/2/2001	--	k	--	15.5	**24**	--	--	--	--	--	--	--	--	--	--
VW-4															
8/29/2000	--	g	--	17	**30**	--	--	--	--	--	--	--	--	--	--
11/29/2000	P	s	--	17	**30**	19.45	--	37,500	4,510	206	2,100	9,030	6,770/7,880	0.42	--
11/29/2000	--	q, s	--	17	**30**	--	--	36,100	3,700	206	1,850	7,890	6,430/8,460	--	--
5/2/2001	--		--	17	**30**	21.66	--	--	--	--	--	--	--	--	--
8/15/2001	--		--	17	**30**	--	--	--	--	--	--	--	--	--	--
10/5/2001	--	f	--	17	**30**	--	--	--	--	--	--	--	--	--	--
1/21/2002	--	f	--	17	**30**	--	--	--	--	--	--	--	--	--	--
4/26/2002	--	f	--	17	**30**	--	--	--	--	--	--	--	--	--	--
10/7/2002	--		--	17	**30**	19.25	--	--	--	--	--	--	--	--	--
05/01/2003	--	c	--	17	**30**	17.29	--	--	--	--	--	--	--	--	--
10/03/2003	P	d, n	--	17	30	19.10	--	48,000	3,300	1,700	3,600	21,000	1,600	10.5	6.7
04/06/2004	--		456.99	17	30	18.05	438.94	--	--	--	--	--	--	--	--
10/28/2004	--		456.99	17	30	18.71	438.28	--	--	--	--	--	--	--	--
04/13/2005	--		456.99	17	30	14.62	442.37	--	--	--	--	--	--	--	--

Table 2. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
VW-4 Cont.															
10/27/2005	--		456.99	17	30	18.00	438.99	--	--	--	--	--	--	--	--
04/12/2006	--		456.99	17	30	14.42	442.57	--	--	--	--	--	--	--	--
10/31/2006	--		456.99	17	30	18.30	438.69	--	--	--	--	--	--	--	--
4/19/2007	--		456.99	17	30	20.91	436.08	--	--	--	--	--	--	--	--
10/16/2007	--	f	456.99	17	30	--	--	--	--	--	--	--	--	--	--
4/24/2008	--		456.99	17	30	23.40	433.59	--	--	--	--	--	--	--	--
10/15/2008	--	f	456.99	17	30	--	--	--	--	--	--	--	--	--	--
4/28/2009	--	f	456.99	17	30	--	--	--	--	--	--	--	--	--	--
11/9/2009	--		456.99	17	30	21.65	435.34	--	--	--	--	--	--	--	--
4/12/2010	--		**456.99**	**17**	**30**	**17.80**	**439.19**	--	--	--	--	--	--	--	--

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

FOOTNOTES:
a = Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.
b = Chromatogram Pattern: C6-C10.
c = TPH-g, benzene, toluene, ethylbenzene, and total xylenes (BTEX), and MTBE analyzed using EPA Method 8260B beginning second quarter 2003 (05/01/03).
d = This sample was analyzed 3 days after the EPA recommended holding time. The results may still be useful for their intended purpose.
e = Well sampled annually in the fourth quarter.
f = Well dry.
g = Well inaccessible.
h = Well sampled semi-annually in second and fourth quarters.
k = Well abandoned.
m = Unable to locate well.
n = Sheen in well.
q = Duplicate sample.
r = Well removed from sampling schedule.
s = Original sample analyzed by 8021B and confirmation by 8260.
t = Bolts securing well box cover stripped at head. Unable to sample well.
u = Hydrocarbon result partly due to individ. peak(s) in quant. range.
v = pH measurement is believed to be erroneous.
w = Sample > 4x spike concentration.
x = Quantitation of unknown hydrocarbon(s) in sample based on gasoline.
y = Replacement well for abandoned wells MW-6 and MW-13 installed on 3/11/2010, and surveyed on 4/23/2010.

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

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

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

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

Values for DO and pH were obtained through field measurements.

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

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

Table 3. Summary of Fuel Additives Analytical Data

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

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-1									
10/7/2002	<40	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-2									
10/7/2002	<40	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-3									
10/7/2002	<40	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/03/2003	<100	<20	<0.50	<1.0	<1.0	<1.0	<0.50	<0.50	a
10/28/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/31/2006	<300	<20	22	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-4									
10/7/2002	<400	<200	260	<5.0	<5.0	<5.0	<5.0	<5.0	
5/1/2003	<100	25	86	<0.50	<0.50	<0.50	<0.50	<0.50	
10/03/2003	<100	<20	22	<1.0	<1.0	<1.0	<0.50	<0.50	a
04/06/2004	<100	<20	17	<0.50	<0.50	<0.50	<0.50	<0.50	
10/28/2004	<100	<20	4.5	<0.50	<0.50	<0.50	<0.50	<0.50	
04/13/2005	<100	<20	2.8	<0.50	<0.50	<0.50	<0.50	<0.50	
10/27/2005	<100	<20	22	<0.50	<0.50	<0.50	<0.50	<0.50	
04/12/2006	<300	<20	1.9	<0.50	<0.50	<0.50	<0.50	<0.50	b
10/31/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
4/19/2007	<300	<20	<0.50	<0.50	<0.50	0.66	<0.50	<0.50	
11/9/2009	<300	12	3.1	<0.50	<0.50	<0.50	<0.50	<0.50	
4/12/2010	**<300**	**<10**	**2.7**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-6									
10/7/2002	<40	<20	8	<0.50	<0.50	<0.50	<0.50	<0.50	
5/1/2003	<100	<20	12	<0.50	<0.50	<0.50	<0.50	<0.50	
10/03/2003	<500	<100	120	<5.0	<5.0	<5.0	<2.5	<2.5	a
04/06/2004	<5,000	<1,000	1,700	<25	<25	<25	<25	<25	
10/28/2004	<5,000	<1,000	3,100	<25	<25	<25	<25	<25	
04/13/2005	<10,000	<2,000	3,900	<50	<50	<50	<50	<50	
10/27/2005	<10,000	<2,000	2,900	<50	<50	<50	<50	<50	b

Table 3. Summary of Fuel Additives Analytical Data

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

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-6 Cont.									
04/12/2006	<30,000	<2,000	3,400	<50	<50	<50	<50	<50	b
10/31/2006	<15,000	<1,000	3,400	<25	<25	<25	<25	<25	b
4/19/2007	<15,000	<1,000	2,200	<25	<25	<25	<25	<25	
10/16/2007	<15,000	<1,000	2,600	<25	<25	<25	<25	<25	c (MTBE)
4/24/2008	<6,000	1,500	4,200	<10	<10	<10	<10	<10	
MW-7									
10/7/2002	<40	<20	41	<0.50	<0.50	<0.50	<0.50	<0.50	
5/1/2003	<100	<20	43	<0.50	<0.50	<0.50	<0.50	<0.50	
10/03/2003	<200	<40	49	<2.0	<2.0	<2.0	<1.0	<1.0	a
04/06/2004	<100	<20	0.76	<0.50	<0.50	<0.50	<0.50	<0.50	
10/28/2004	<100	<20	14	<0.50	<0.50	<0.50	<0.50	<0.50	
04/13/2005	<100	<20	1.7	<0.50	<0.50	<0.50	<0.50	<0.50	
10/27/2005	<100	<20	2.3	<0.50	<0.50	<0.50	<0.50	<0.50	b
04/12/2006	<300	<20	1.1	<0.50	<0.50	<0.50	<0.50	<0.50	b
10/31/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b
4/19/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/16/2007	<300	<20	24	<0.50	<0.50	<0.50	<0.50	<0.50	
4/24/2008	<300	<10	22	<0.50	<0.50	<0.50	<0.50	<0.50	
10/15/2008	<300	<10	8.2	<0.50	<0.50	<0.50	<0.50	<0.50	
4/28/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	d
11/9/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
4/12/2010	**<300**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-8									
10/7/2002	<40	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-9									
10/7/2002	<40	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/03/2003	<100	<20	<0.50	<1.0	<1.0	<1.0	<0.50	<0.50	a
10/28/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/27/2005	<100	<20	1.4	<0.50	<0.50	<0.50	<0.50	<0.50	b
10/31/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b

Table 3. Summary of Fuel Additives Analytical Data

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

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-9 Cont.									
10/16/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/15/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
11/9/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-10									
10/7/2002	<40	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/03/2003	<100	<20	<0.50	<1.0	<1.0	<1.0	<0.50	<0.50	a
10/28/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/27/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/31/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b
10/16/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-11									
10/7/2002	<40	<20	1.0	<0.50	<0.50	<0.50	<0.50	<0.50	
5/1/2003	<100	<20	--	<0.50	<0.50	<0.50	<0.50	<0.50	
10/03/2003	<100	<20	3.1	<1.0	<1.0	<1.0	<0.50	<0.50	a
04/06/2004	<100	<20	14	<0.50	<0.50	<0.50	<0.50	<0.50	
10/28/2004	<100	<20	29	<0.50	<0.50	<0.50	<0.50	<0.50	
04/13/2005	<100	<20	3.7	<0.50	<0.50	<0.50	<0.50	<0.50	
10/27/2005	<100	<20	21	<0.50	<0.50	<0.50	<0.50	<0.50	
04/12/2006	--	--	--	--	--	--	--	--	Well inaccessible
4/19/2007	<300	<20	12	<0.50	<0.50	<0.50	<0.50	<0.50	
10/16/2007	<300	<20	6.6	<0.50	<0.50	<0.50	<0.50	<0.50	
4/24/2008	<300	<10	17	<0.50	<0.50	<0.50	<0.50	<0.50	
4/28/2009	<300	<10	5.3	<0.50	<0.50	<0.50	<0.50	<0.50	d
11/9/2009	<300	<10	12	<0.50	<0.50	<0.50	<0.50	<0.50	
4/12/2010	**<300**	**<10**	**10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-12									
04/06/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/28/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
04/13/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/27/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 3. Summary of Fuel Additives Analytical Data

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

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-12 Cont.									
04/12/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b
4/19/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
4/28/2009	<300	<10	1.4	<0.50	<0.50	<0.50	<0.50	<0.50	d
11/9/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
4/12/2010	**<300**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-13									
10/7/2002	<4,000	<2,000	2,800	<50	<50	<50	<50	<50	
5/1/2003	<10,000	<2,000	--	<50	<50	<50	<50	<50	
10/03/2003	<10,000	<2,000	2,400	<100	<100	<100	<50	<50	a
04/06/2004	<5,000	<1,000	1,800	<25	<25	<25	<25	<25	
10/28/2004	<5,000	<1,000	1,800	<25	<25	<25	<25	<25	
04/13/2005	<5,000	<1,000	920	<25	<25	<25	<25	<25	
10/27/2005	<2,000	<400	580	<10	<10	<10	<10	<10	
04/12/2006	<6,000	<400	470	<10	<10	<10	<10	<10	b
10/31/2006	<15,000	<1,000	710	<25	<25	<25	<25	<25	b
4/19/2007	<15,000	<1,000	330	<25	<25	<25	<25	<25	
4/24/2008	<300	14	49	<0.50	<0.50	<0.50	<0.50	<0.50	
RMW-13									
4/12/2010	**<75,000**	**<2,500**	**1,500**	**<120**	**<120**	**<120**	**<120**	**<120**	
VW-1									
10/7/2002	<80	<40	--	<1.0	<1.0	<1.0	<1.0	<1.0	
5/1/2003	<100	<20	--	<0.50	<0.50	<0.50	<0.50	<0.50	
10/03/2003	<100	<20	12	<1.0	<1.0	<1.0	<0.50	<0.50	a
04/06/2004	<100	<20	13	<0.50	<0.50	<0.50	<0.50	<0.50	
10/28/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
04/13/2005	<100	<20	9.6	<0.50	<0.50	<0.50	<0.50	<0.50	
10/27/2005	<100	<20	13	<0.50	<0.50	<0.50	<0.50	<0.50	
04/12/2006	<300	<20	1.6	<0.50	<0.50	<0.50	<0.50	<0.50	b
10/31/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b
4/19/2007	<300	<20	3.0	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 3. Summary of Fuel Additives Analytical Data

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

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
VW-1 Cont.									
10/16/2007	<15,000	<1,000	150	<25	<25	<25	<25	<25	b
4/24/2008	<300	<10	4.5	<0.50	<0.50	<0.50	<0.50	<0.50	
4/28/2009	<300	<10	19	<0.50	<0.50	<0.50	<0.50	<0.50	d
11/9/2009	<300	<10	1.1	<0.50	<0.50	<0.50	<0.50	<0.50	
4/12/2010	**<300**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
VW-2									
10/03/2003	--	--	--	--	--	--	--	--	Well inaccessible
VW-4									
10/03/2003	<100,000	<20,000	1,600	<1,000	<1,000	<1,000	<500	<500	a

ABBREVIATIONS & SYMBOLS:
-- = Not analyzed/applicable/measured/available
< = Not detected at or above specified laboratory reporting limit
1,2-DCA = 1,2-Dichloroethane
DIPE = Di-isopropyl ether
EDB = 1,2-Dibromoethane
ETBE = Ethyl tert-butyl ether
MTBE = Methyl tert-butyl ether
TAME = tert-Amyl methyl ether
TBA = tert-Butyl alcohol
µg/L = Micrograms per Liter

FOOTNOTES:
a = This sample was analyzed 3 days after the EPA recommended holding time. The results may still be useful for their intended purpose.
b = Calibration verification for ethanol was within method limits but outside contract limits.
c = Sample >4x spike concentration.
d = Calibrtn. verif. recov. Below method CL for TAME.

NOTES:
All volatile organic compounds analyzed using EPA Method 8260B.

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

Table 4. Historical Ground-Water Flow Direction and Gradient

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

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
3/23/1995	Northwest	0.035
5/31/1995	North-Northwest	0.028
8/31/1995	North-Northwest	0.03
11/28/1995	North-Northwest	0.025
2/22/1996	North-Northwest	0.031
5/23/1996	North-Northwest	0.025
8/8/1996	North	0.019
11/7/1996	North-Northeast	0.019
3/27/1997	North-Northwest	0.021
5/19/1997	North	0.019
5/18/1998	North	0.02
11/2/1998	North	0.02
6/4/1999	North	0.02
11/11/1999	North	0.03
6/20/2000	North-Northeast	0.014
8/29/2000	North-Northeast	0.013
11/29/2000	North-Northwest	0.026
5/2/2001	Northeast	0.026
8/15/2001	Northeast	0.047
10/5/2001	Northeast	0.031
1/21/2002	Northeast	0.033
4/26/2002	Northeast	0.031
10/7/2002	Northeast	0.017
5/1/2003	North-Northeast	0.011
10/3/2003	North-Northeast	0.016
4/6/2004	North-Northeast	0.013
10/28/2004	North-Northeast	0.014
4/13/2005	North-Northwest	0.02
10/27/2005	North-Northwest	0.01 to 0.03
4/12/2006	Northeast	0.01
10/31/2006	Northeast	0.014
4/19/2007	Northeast	0.013
10/16/2007	Northeast	0.031
4/24/2008	North-Northwest	0.013
10/15/2008	Northeast	0.070
4/28/2009	Northeast	0.008
11/9/2009	Northeast	0.02
4/12/2010	**North-Northeast**	**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

BAI REPLACEMENT WELL INSTALLATION DATA
(Includes Field Notes, Lithologic Boring and Well Construction Log, Well Permit, Non-Hazardous Waste Data Forms, Non-Hazardous Soils Manifest, and Laboratory Analytical Report with Chain-of-Custody Documentation)

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

DAILY REPORT
Page 1 of ___

Project: 06-88-637 Project No.: BP6113
Field Representative(s): T. Geddes E. Farrar Day: Thursday Date: 3/11/10
Time Onsite: From: 0800 To: ____; From: ____ To: ____; From: ____ To: ____

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

Weather: clear 60
Equipment In Use: Vac truck
Visitors: ____

TIME:	WORK DESCRIPTION:
0645	Depart Vacaville
0800	Arrive Livermore
0915	Start cutting asphalt
0936	Subsurface under asphalt is very firm - well compacted sandy fill layer to 4" bgs. Transitions to firm sandy clay, med brn
	Gravel, fine &
1000	Cut new hole 3' to north
1015	2 pipes: 2" grey PVC @ 2', 4" white PVC @ 3'
1045	Moved 5' east & cut new hole
1110	@ 2', Sandy w/ gravel to 2"
	large rocks to 6" in sand silt 3' to
1135	Large rocks & gravel 3' to 5', walls caving in @ 5' to 6'
	- Drill crew arrives. Obtained permission to begin drilling @ 6' from TV
1140	Drill crew H&S
1220	Rocks from 8' to 14' - no sample recovery. Cobbles to 4" brown/grey silty sand w/ gravel to 1" on augers

Signature: ____

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

DAILY REPORT
Page 2 of ____

Project: 6113 Project No.: ____

Field Representative(s): ____ Day: ____ Date: ____

Time Onsite: From: ____ To: ____; From: ____ To: ____; From: ____ To: ____

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

Weather: ____

Equipment In Use: 6113 100311 - Waste soil

Visitors: ____

TIME:	WORK DESCRIPTION:
1235	first recovery from 13.5-15' blow count 10-10-14
	Silty sand w/ Gravel to 1/2", Iron Oxide staining,
	PID 7.1
	Silty Clay w/sand 14-14.5, Grey-green, Gravel to 1/2"
1248	20-21.5 BC 9-9-11, PID 1052
	Silty clay, little gravel to 1/2", moist, lt brown to
	brown, Soft, Clay 30%, Chert @ 20' w some sand
1257	25.5-26.5 BC 9-9-9 PID 150ppm, Silty Clay,
	lt brown to brown w/grey @ 26, Dark brown w/ Grey 26.5
	Damp, Stiff to firm, no gravel, Clay 90%
1310	30-31.5, BC 7-7-8, PID 87.8 Silty w/ some
	Clay, Brown w/Grey, fine, Clay 40%, Soft, Oxidation
1315	35-36.5, BC 8-9-13, Pid 33.5, Sandy Silt, Poorly
	Sorted, Grains fine to 1/4", Red Oxide color Some
	Grey clay inclusions in vertical streaks, Weathered
	Semi-loose
	initial DTW 31.15
1345	Well constructed w/ 24 bgs #3 Sand, 1' base bentonite
	Chips, 20' .02 screen & 15' blank casing.

Signature: ____

Bentonite hydrated @ 1340
used 7 bags grout to 25 & water

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

DAILY REPORT

Project: BP 6113 Project No.: 06-88-C37

Field Representative(s): T. Geddes E. Farrer Day: Thurs Date: 3/25/10

Time Onsite: From: 1015 To: _____; From: _____ To: _____; From: _____ To: _____

✓ Signed HASP ✓ Safety Glasses ✓ Hard Hat ✓ Steel Toe Boots ✓ Safety Vest

✓ UST Emergency System Shut-off Switches Located ✓ Proper Gloves

✓ Proper Level of Barricading ___ Other PPE (describe) _____

Weather: Overcast

Equipment In Use: Pump, Hose

Visitors: _____

TIME:	WORK DESCRIPTION:
0745	Depart office
0800	Arrive Lowes
1015	Arrive 6113
	DTW RW-13 18.85' 2' subsidence of grout
	in well box, bring out more concrete.
1043	Well Swept, begin pumping @ ~2.5 GPM
1045	DTW 20'
1046	DTW 22'
1048	DTW 24.1'
1049	DTW 26'
1051	DTW 28'
1053	DTW 30.1'
1054	DTW 32'
1058	DTW 34'
1056:55	Pump @ 34.5' & 29 Gallons. Pump stopped
1101:40	DTW 32'
1107	DTW 31'
1111:47	DTW 30.02'
1118:08	DTW 29'

Signature: _____

1127 DTW 28'
1138 DTW 27'
1147 DTW 26'
1158 DTWas' - recover pump & surge
1208 pumping
1218 RM
1227 offsite

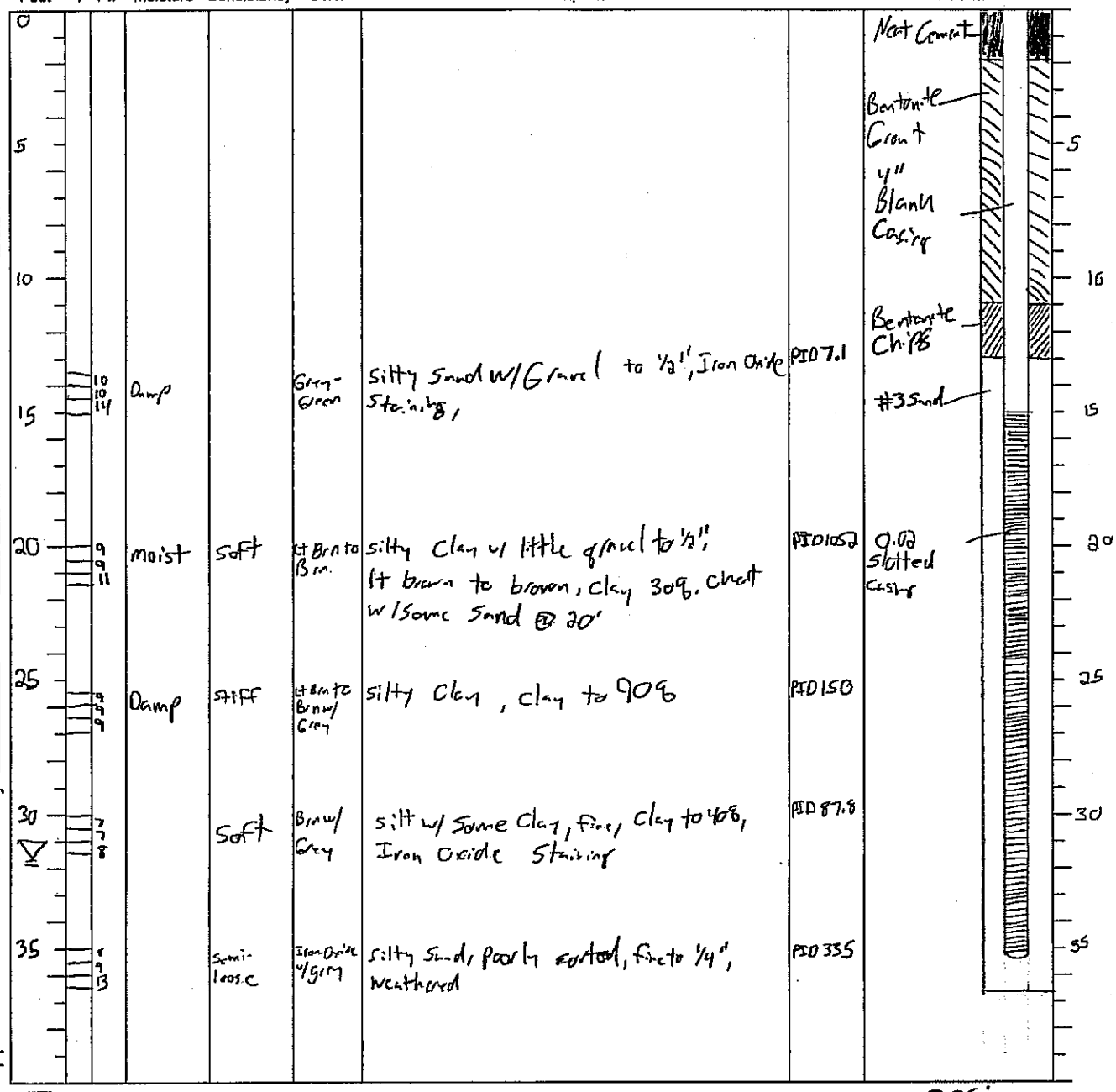
SUMMARY OF LITHOLOGY

DATE DRILLED: 3/11/10 START TIME: 1045

EQUIPMENT: CME 75 HSA FINISH TIME: 1345

Logger: Eric Farrar Drilling Contractor: Cascade

Approved for Publication By: Date: Driller:



GROUNDWATER 31.15' END OF BORING AT 36.5' FEET

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF ACTUAL CONDITIONS ENCOUNTERED.

WELL I.D. RMW-13 PROJECT NO. 06-82-637

DRAWING NO.

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave. Suite 212, Chico, California

ZONE 7 WATER AGENCY

100 NORTH CANYONS PARKWAY, LIVERMORE, CALIFORNIA 94551 VOICE (925) 454-5000 FAX (925) 245-9306
E-MAIL whong@zone7water.com

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT ARCO Station #6113
785 E. Stanley Blvd, Livermore, CA

Coordinates Source Google Earth ft. Accuracy∀ ??? ft.
LAT: 37.677848° ft. LONG: -121.787875° ft.
APN 99-256-5-2

CLIENT
Name Atlantic Richfield Company - RM
Address PO Box 1257 Phone 925-275-3803
City San Ramon, CA Zip 94583

APPLICANT Tom Venus, PE
Name c/o Broadbent & Associates, Inc.
Email tvenus@broadbentinc.com Fax 530-566-1401
Address 1324 Mangrove Ave, #212 Phone 530-566-1400
City Chico, CA Zip 95926

TYPE OF PROJECT:

Well Construction	XX	Geotechnical Investigation	9
Well Destruction	9	Contamination Investigation	XX
Cathodic Protection	9	Other ____	9

PROPOSED WELL USE:

Domestic	9	Irrigation	9
Municipal	9	Remediation	XX
Industrial	9	Groundwater Monitoring	XX
Dewatering	9	Other ____	9

DRILLING METHOD:

Mud Rotary	9	Air Rotary	9	Hollow Stem Auger	XX
Cable Tool	9	Direct Push	9	Other ____	9

DRILLING COMPANY Cascade Drilling, LP
3632 Omec Circle, Rancho Cordova, CA 95742
DRILLER'S LICENSE NO. C-57# 938110
WELL SPECIFICATIONS:
Drill Hole Diameter 10 in. Maximum
Casing Diameter 4 in. Depth 35 ft.
Surface Seal Depth 12 ft. Number one

SOIL BORINGS:
Number of Borings ____ Maximum
Hole Diameter ____ in. Depth ____ ft.

ESTIMATED STARTING DATE 12/22/2009
ESTIMATED COMPLETION DATE 12/23/2009

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Thomas A. Venus Date 12-7-2009

ATTACH SITE PLAN OR SKETCH

PERMIT NUMBER 29099
WELL NUMBER 3S/2E-18A21
APN 099-0256-005-02

PERMIT CONDITIONS
(Circled Permit Requirements Apply)

(A.) GENERAL
1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to your proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original **Department of Water Resources Water Well Drillers Report (DWR Form 188), signed by the driller**.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS
1. Minimum surface seal diameter is four inches greater than the well casing diameter.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
3. Grout placed by tremie.
4. An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements.
5. A sample port is required on the discharge pipe near the wellhead.

(C.) GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal diameter is four inches greater than the well or piezometer casing diameter.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
3. Grout placed by tremie.

D. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

E. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

F. WELL DESTRUCTION. See attached.

G. SPECIAL CONDITIONS. Submit to Zone 7 within 60 days after completion of permitted work the well installation report **including all soil and water laboratory analysis results**.

Approved Wyman Hong Date 12/24/09
Wyman Hong

Revised: April 23, 2008

NO. 857340

NON-HAZARDOUS WASTE DATA FORM

1. BESI #

GENERATOR

2. Generator's Name and Mailing Address

BP WEST COAST PRODUCTS, LLC
P.O. BOX 80249
RANCHO SANTA MARGARITA, CA 92688

Generator's Site Address (if different than mailing address)

BP 6173
785 E Stanley Blvd
Livermore, CA

Generator's Phone: (949) 460-5200

24-HOUR EMERGENCY PHONE: (949) 699-3706

3. Transporter 1 Company Name: Broadbent & Associates, Inc. — Phone #: (530) 566-1400

4. Transporter 2 Company Name: Gomes Excavating — Phone #: (707) 374-2881

5. Designated Facility Name and Site Address

INTRAT, INC.
1105 AIRPORT RD #C
RIO VISTA, CA 94571

Phone #: (530) 753-1829

6. Waste Shipping Name and Description	7. Containers No.	7. Containers Type	8. Total Quantity	9. Unit Wt/Vol	10. Profile No.
A. NON-HAZARDOUS WATER	1	TT	80	G	
B.					
C.					
D.					

11. Special Handling Instructions and Additional Information

WEAR ALL APPROPRIATE PROTECTIVE CLOTHING

WELL PURGING / DECON WATER

12. GENERATOR'S CERTIFICATION: I certify the materials described above on this data form are non-hazardous.

Generator's/Offeror's Printed/Typed Name: Tracy Geddes — Signature — Month: 3 — Day: 25 — Year: 10

TRANSPORTER

13. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Tracy Geddes — Signature — Month: 3 — Day: 25 — Year: 10

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

FACILITY

14. Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.

Printed/Typed Name — Signature — Month — Day — Year

GENERATOR (ORIGINAL)

NO. 686078

NON-HAZARDOUS WASTE DATA FORM

31

BESI # 179747

GENERATOR

Generator's Name and Mailing Address

BP WEST COAST PRODUCTS, LLC
P.O. BOX 80249
RANCHO SANTA MARGARITA, CA 92688

Generator's Site Address (if different than mailing address)

06113
785 E STANLEY BOULEVARD
LIVERMORE, CA 94550

Generator's Phone: 949-460-5200

Container type removed from site:

☒ Drums ☐ Vacuum Truck ☐ Roll-off Truck ☐ Dump Truck

☐ Other _____

Quantity 1

Container type transported to receiving facility:

☐ Drums ☒ Vacuum Truck ☐ Roll-off Truck ☐ Dump Truck

☐ Other _____

Quantity 1 Volume 55 gallons

WASTE DESCRIPTION NON-HAZARDOUS WATER

GENERATING PROCESS WELL PURGING / DECON WATER

COMPONENTS OF WASTE	PPM	%
1. WATER		99-100%
2. TPH		<1%

COMPONENTS OF WASTE	PPM	%
3.		
4.		

Waste Profile _____ PROPERTIES: pH 7-10 ☐ SOLID ☒ LIQUID ☐ SLUDGE ☐ SLURRY ☐ OTHER _____

HANDLING INSTRUCTIONS: WEAR ALL APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT

Generator Printed/Typed Name: Larry Moothart of BESI on behalf of generator | Signature | Month 4 | Day 28 | Year 10

The Generator certifies that the waste as described is 100% non-hazardous

TRANSPORTER

Transporter 1 Company Name: BELSHIRE | Phone#: 949-460-5200

Transporter 1 Printed/Typed Name: Larry Moothart | Signature | Month 4 | Day 28 | Year 10

Transporter Acknowledgment of Receipt of Materials

Transporter 2 Company Name: NIETO & SONS TRUCKING, INC. | Phone#: 714-990-6855

Transporter 2 Printed/Typed Name: GILBERT GARCIA | Signature | Month 5 | Day 3 | Year 10

Transporter Acknowledgment of Receipt of Materials

RECEIVING FACILITY

Designated Facility Name and Site Address

DEMENNO KERDOON
2000 N. ALAMEDA ST.
COMPTON, CA 90222

Phone#: 310-537-7100

Printed/Typed Name: Gilbert Garcia | Signature | Month 05 | Day 03 | Year 10

Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.

Manifest

TPST Soil Recyclers of CA
Non-Hazardous Soils

↓ Manifest # ↓

Date of Shipment:	Responsible for Payment:	Transporter Truck #:	Facility #:	Given by TPST:	Load #
/ /		394/712	A07	35187	001

Generator and/or Consultant

Generator's Name and Billing Address:
BP WEST COAST PRODUCTS, LLC
P.O. BOX 80249
RANCHO SANTA MARGARITA, CA 92688

Generator's Phone #: 949-460-5200
Generator's US EPA ID No.: CAR000100297
Person to Contact:
FAX#:
Customer Account Number with TPST:

Consultant's Name and Billing Address:

Consultant's Phone #:
Person to Contact:
FAX#:
Customer Account Number with TPST:

Generation Site (Transport from): *(name & address)*
06113
786 E STANLEY BOULEVARD
LIVERMORE, CA 94550

Site Phone #:
Person to Contact:
FAX#:
BTEX Levels
TPH Levels
AVG. Levels

Designated Facility (Transport to): *(name & address)*
TPST SOIL RECYCLERS OF CALIFORNIA
12328 HIBISCUS AVENUE
ADELANTO, CA 92301

Facility Phone #: (800) 862-8001
Person to Contact: DELLENA JEFFREY
FAX#: (760) 246-8004
Facility Permit Numbers:

Transporter Name and Mailing Address:
BELSHIRE
26971 TOWNE CENTRE DRIVE
FOOTHILL RANCH, CA 92610
BESI: 179747

Transporter's Phone #: 949-460-5200
Transporter's US EPA ID No.: CAR000183913
Person to Contact: LARRY MOOTHART
Transporter's DOT No.: 450647
FAX#: 949-460-5210
Customer Account Number with TPST:

Description of Soil	Moisture Content	Contaminated by:	Approx. Qty:	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Sand ☐ Organic ☐ Clay ☐ Other ☐	0 - 10% ☐ 10 - 20% ☐ 20% - over ☐	Gas ☐ Diesel ☐ Other ☐	6 dms		41480	37600	3880
Sand ☐ Organic ☐ Clay ☐ Other ☐	0 - 10% ☐ 10 - 20% ☐ 20% - over ☐	Gas ☐ Diesel ☐ Other ☐					1.94

List any exception to items listed above: Scale Ticket# 79658

Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils described in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.

Print or Type Name: Generator ☐ Consultant ☐
Larry Moothart of BESI on behalf of generator
Signature and date:
Month 4 Day 28 Year 10

Transporter

Transporter's certification: I/We acknowledge receipt of the soil described above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that this soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.

Print or Type Name: Kevin Dunleop
Signature and date:
Month 4 Day 28 Year 10

Recycling Facility

Discrepancies: 06113
583726

Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above: 5.3.10

Print or Type Name: D. JEFFREY/J. PROVANSAL
Signature and date:

Please print or type.

TRANSPORTER COPY

Calscience Environmental Laboratories, Inc.

March 26, 2010

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

Subject: **Calscience Work Order No.: 10-03-1140**
Client Reference: BP 6113

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 3/13/2010 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,

Calscience Environmental
Laboratories, Inc.
Richard Villafania
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 03/13/10
Work Order No: 10-03-1140
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: BP 6113

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
6113-100311-Waste Soil	**10-03-1140-5-A**	**03/11/10 15:00**	**Solid**	**GC 46**	**03/18/10**	**03/19/10 19:00**	**100318B14**

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

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics (C10-C28)	110	10	2		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	119	61-145	

Method Blank	**099-12-701-35**	**N/A**	**Solid**	**GC 46**	**03/18/10**	**03/19/10 13:38**	**100318B14**

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics (C10-C28)	ND	5.0	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	121	61-145	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 03/13/10
Work Order No: 10-03-1140
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: BP 6113

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
6113-100311-Rinsewater	**10-03-1140-6-D**	**03/11/10 15:05**	**Aqueous**	**GC 1**	**03/16/10**	**03/17/10 06:56**	**100316B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	7700	1000	20		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	85	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-695-779**	**N/A**	**Aqueous**	**GC 1**	**03/16/10**	**03/17/10 02:41**	**100316B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	81	38-134	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 03/13/10
Work Order No: 10-03-1140
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: BP 6113

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
RMW13@14.5-15.0	**10-03-1140-1-A**	**03/11/10 12:35**	**Solid**	**GC 57**	**03/13/10**	**03/17/10 08:41**	**100316B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	125	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
RMW13@21.0-21.5	**10-03-1140-2-A**	**03/11/10 12:48**	**Solid**	**GC 57**	**03/13/10**	**03/17/10 11:48**	**100316B03**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	1900	20	40		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	205	42-126	LH,AY

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
RMW13@25.5-26.0	**10-03-1140-3-A**	**03/11/10 12:57**	**Solid**	**GC 57**	**03/13/10**	**03/17/10 09:46**	**100316B03**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	160	5.0	10		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	153	42-126	LH,AY

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
RMW13@31.0-31.5	**10-03-1140-4-A**	**03/11/10 13:10**	**Solid**	**GC 57**	**03/13/10**	**03/17/10 10:18**	**100316B03**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	63	4.0	8		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	141	42-126	LH,AY

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Broadbent & Associates, Inc.	Date Received: 03/13/10
1324 Mangrove Ave, Ste 212	Work Order No: 10-03-1140
Chico, CA 95926-2642	Preparation: EPA 5030B
	Method: EPA 8015B (M)

Project: BP 6113

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
6113-100311-Waste Soil	**10-03-1140-5-A**	**03/11/10 15:00**	**Solid**	**GC 57**	**03/13/10**	**03/17/10 12:20**	**100316B03**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	690	10	20		mg/kg
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	192	42-126		LH,AY	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-697-202**	**N/A**	**Solid**	**GC 57**	**03/16/10**	**03/16/10 18:27**	**100316B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	0.50	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	117	42-126			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-697-203**	**N/A**	**Solid**	**GC 57**	**03/16/10**	**03/16/10 20:03**	**100316B03**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	4.0	8		mg/kg
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	118	42-126			

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Broadbent & Associates, Inc.	Date Received:	03/13/10
1324 Mangrove Ave, Ste 212	Work Order No:	10-03-1140
Chico, CA 95926-2642	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L

Project: BP 6113

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
6113-100311-Rinsewater	**10-03-1140-6-A**	**03/11/10 15:05**	**Aqueous**	**GC/MS BB**	**03/20/10**	**03/20/10 11:58**	**100320L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	36	2.5	5		Xylenes (total)	340	2.5	5	
Ethylbenzene	110	2.5	5		Methyl-t-Butyl Ether (MTBE)	6.2	2.5	5	
Toluene	4.8	2.5	5						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	91	80-128		Dibromofluoromethane	93	80-127	
Toluene-d8	104	80-120		1,4-Bromofluorobenzene	102	68-120	

Method Blank	**099-12-703-1,271**	**N/A**	**Aqueous**	**GC/MS BB**	**03/20/10**	**03/20/10 11:30**	**100320L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Xylenes (total)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
Toluene	ND	0.50	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	109	80-128		Dibromofluoromethane	101	80-127	
Toluene-d8	98	80-120		1,4-Bromofluorobenzene	85	68-120	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 03/13/10
Work Order No: 10-03-1140
Preparation: EPA 5030B
Method: EPA 8260B
Units: mg/kg

Project: BP 6113

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
RMW13@14.5-15.0	**10-03-1140-1-A**	**03/11/10 12:35**	**Solid**	**GC/MS Q**	**03/17/10**	**03/17/10 18:11**	**100317L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.0010	0.0010	1		Xylenes (total)	0.0054	0.0010	1	
1,2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl Ether (MTBE)	0.0018	0.0010	1	
1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alcohol (TBA)	0.12	0.010	1	
Ethylbenzene	0.0037	0.0010	1		Diisopropyl Ether (DIPE)	ND	0.0020	1	
Ethanol	ND	0.10	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0020	1	
Toluene	ND	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0020	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	107	75-141			1,2-Dichloroethane-d4	110	73-151		
Toluene-d8	100	87-111			1,4-Bromofluorobenzene	98	71-113		

RMW13@21.0-21.5	**10-03-1140-2-A**	**03/11/10 12:48**	**Solid**	**GC/MS VV**	**03/22/10**	**03/22/10 18:56**	**100322L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	2.1	0.10	100		Xylenes (total)	52	1.0	1000	
1,2-Dibromoethane	ND	0.10	100		Methyl-t-Butyl Ether (MTBE)	0.15	0.10	100	
1,2-Dichloroethane	ND	0.10	100		Tert-Butyl Alcohol (TBA)	ND	1.0	100	
Ethylbenzene	22	1.0	1000		Diisopropyl Ether (DIPE)	ND	0.20	100	
Ethanol	ND	10	100		Ethyl-t-Butyl Ether (ETBE)	ND	0.20	100	
Toluene	0.13	0.10	100		Tert-Amyl-Methyl Ether (TAME)	ND	0.20	100	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	91	75-141			1,2-Dichloroethane-d4	94	73-151		
Toluene-d8	102	87-111			1,4-Bromofluorobenzene	101	71-113		

RMW13@25.5-26.0	**10-03-1140-3-A**	**03/11/10 12:57**	**Solid**	**GC/MS Q**	**03/17/10**	**03/17/10 19:11**	**100317L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.98	0.10	100		Xylenes (total)	3.3	0.10	100	
1,2-Dibromoethane	ND	0.10	100		Methyl-t-Butyl Ether (MTBE)	0.28	0.10	100	
1,2-Dichloroethane	ND	0.10	100		Tert-Butyl Alcohol (TBA)	ND	1.0	100	
Ethylbenzene	2.0	0.10	100		Diisopropyl Ether (DIPE)	ND	0.20	100	
Ethanol	ND	10	100		Ethyl-t-Butyl Ether (ETBE)	ND	0.20	100	
Toluene	ND	0.10	100		Tert-Amyl-Methyl Ether (TAME)	ND	0.20	100	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	100	75-141			1,2-Dichloroethane-d4	100	73-151		
Toluene-d8	100	87-111			1,4-Bromofluorobenzene	102	71-113		

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

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Broadbent & Associates, Inc.	Date Received:	03/13/10
1324 Mangrove Ave, Ste 212	Work Order No:	10-03-1140
Chico, CA 95926-2642	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	mg/kg

Project: BP 6113

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
RMW13@31.0-31.5	**10-03-1140-4-A**	**03/11/10 13:10**	**Solid**	**GC/MS Q**	**03/17/10**	**03/17/10 19:41**	**100317L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.54	0.10	100		Xylenes (total)	0.25	0.10	100	
1,2-Dibromoethane	ND	0.10	100		Methyl-t-Butyl Ether (MTBE)	ND	0.10	100	
1,2-Dichloroethane	ND	0.10	100		Tert-Butyl Alcohol (TBA)	ND	1.0	100	
Ethylbenzene	0.32	0.10	100		Diisopropyl Ether (DIPE)	ND	0.20	100	
Ethanol	ND	10	100		Ethyl-t-Butyl Ether (ETBE)	ND	0.20	100	
Toluene	ND	0.10	100		Tert-Amyl-Methyl Ether (TAME)	ND	0.20	100	
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
Dibromofluoromethane	104	75-141			1,2-Dichloroethane-d4	104	73-151		
Toluene-d8	101	87-111			1,4-Bromofluorobenzene	100	71-113		

6113-100311-Waste Soil	**10-03-1140-5-A**	**03/11/10 15:00**	**Solid**	**GC/MS VV**	**03/22/10**	**03/22/10 19:22**	**100322L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.86	0.10	100		Xylenes (total)	17	0.10	100	
Ethylbenzene	4.9	0.10	100		Methyl-t-Butyl Ether (MTBE)	ND	0.10	100	
Toluene	0.17	0.10	100						
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
Dibromofluoromethane	93	75-141			1,2-Dichloroethane-d4	94	73-151		
Toluene-d8	101	87-111			1,4-Bromofluorobenzene	98	71-113		

Method Blank	**099-12-709-307**	**N/A**	**Solid**	**GC/MS Q**	**03/17/10**	**03/17/10 15:08**	**100317L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0010	1		Xylenes (total)	ND	0.0010	1	
1,2-Dibromoethane	ND	0.0010	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0010	1	
1,2-Dichloroethane	ND	0.0010	1		Tert-Butyl Alcohol (TBA)	ND	0.010	1	
Ethylbenzene	ND	0.0010	1		Diisopropyl Ether (DIPE)	ND	0.0020	1	
Ethanol	ND	0.10	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0020	1	
Toluene	ND	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0020	1	
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
Dibromofluoromethane	102	75-141			1,2-Dichloroethane-d4	105	73-151		
Toluene-d8	103	87-111			1,4-Bromofluorobenzene	99	71-113		

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 03/13/10
Work Order No: 10-03-1140
Preparation: EPA 5030B
Method: EPA 8260B
Units: mg/kg

Project: BP 6113

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-709-309**	**N/A**	**Solid**	**GC/MS Q**	**03/17/10**	**03/17/10 14:38**	**100317L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.10	100		Xylenes (total)	ND	0.10	100	
1,2-Dibromoethane	ND	0.10	100		Methyl-t-Butyl Ether (MTBE)	ND	0.10	100	
1,2-Dichloroethane	ND	0.10	100		Tert-Butyl Alcohol (TBA)	ND	1.0	100	
Ethylbenzene	ND	0.10	100		Diisopropyl Ether (DIPE)	ND	0.20	100	
Ethanol	ND	10	100		Ethyl-t-Butyl Ether (ETBE)	ND	0.20	100	
Toluene	ND	0.10	100		Tert-Amyl-Methyl Ether (TAME)	ND	0.20	100	
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
Dibromofluoromethane	103	75-141			1,2-Dichloroethane-d4	106	73-151		
Toluene-d8	103	87-111			1,4-Bromofluorobenzene	101	71-113		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-709-311**	**N/A**	**Solid**	**GC/MS VV**	**03/22/10**	**03/22/10 12:23**	**100322L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.10	100		Xylenes (total)	ND	0.10	100	
1,2-Dibromoethane	ND	0.10	100		Methyl-t-Butyl Ether (MTBE)	ND	0.10	100	
1,2-Dichloroethane	ND	0.10	100		Tert-Butyl Alcohol (TBA)	ND	1.0	100	
Ethylbenzene	ND	0.10	100		Diisopropyl Ether (DIPE)	ND	0.20	100	
Ethanol	ND	10	100		Ethyl-t-Butyl Ether (ETBE)	ND	0.20	100	
Toluene	ND	0.10	100		Tert-Amyl-Methyl Ether (TAME)	ND	0.20	100	
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
Dibromofluoromethane	108	75-141			1,2-Dichloroethane-d4	110	73-151		
Toluene-d8	99	87-111			1,4-Bromofluorobenzene	93	71-113		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-709-315**	**N/A**	**Solid**	**GC/MS VV**	**03/24/10**	**03/24/10 11:48**	**100324L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.10	100		Xylenes (total)	ND	0.10	100	
1,2-Dibromoethane	ND	0.10	100		Methyl-t-Butyl Ether (MTBE)	ND	0.10	100	
1,2-Dichloroethane	ND	0.10	100		Tert-Butyl Alcohol (TBA)	ND	1.0	100	
Ethylbenzene	ND	0.10	100		Diisopropyl Ether (DIPE)	ND	0.20	100	
Ethanol	ND	10	100		Ethyl-t-Butyl Ether (ETBE)	ND	0.20	100	
Toluene	ND	0.10	100		Tert-Amyl-Methyl Ether (TAME)	ND	0.20	100	
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
Dibromofluoromethane	108	75-141			1,2-Dichloroethane-d4	111	73-151		
Toluene-d8	100	87-111			1,4-Bromofluorobenzene	91	71-113		

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

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 03/13/10
Work Order No: 10-03-1140
Preparation: EPA 3550B
Method: EPA 8015B

Project BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-03-1360-1	**Solid**	**GC 46**	**03/18/10**	**03/19/10**	**100318S14**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Diesel Range Organics	110	103	64-130	7	0-15	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 03/13/10
Work Order No: 10-03-1140
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-03-1139-3	**Aqueous**	**GC 1**	**03/16/10**	**03/17/10**	**100316S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	87	86	38-134	1	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 03/13/10
Work Order No: 10-03-1140
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-03-1138-1	**Solid**	**GC 57**	**03/13/10**	**03/16/10**	**100316S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	60	66	42-126	9	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 03/13/10
Work Order No: 10-03-1140
Preparation: EPA 5030B
Method: EPA 8260B

Project BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-03-0975-2	**Aqueous**	**GC/MS BB**	**03/20/10**	**03/20/10**	**100320S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	116	115	76-124	1	0-20	
Carbon Tetrachloride	103	103	74-134	0	0-20	
Chlorobenzene	109	107	80-120	2	0-20	
1,2-Dibromoethane	114	112	80-120	2	0-20	
1,2-Dichlorobenzene	106	107	80-120	1	0-20	
1,1-Dichloroethene	85	49	73-127	17	0-20	LN,AY
Ethylbenzene	112	112	78-126	0	0-20	
Toluene	114	115	80-120	1	0-20	
Trichloroethene	93	76	77-120	6	0-20	LN,AY
Vinyl Chloride	100	104	72-126	4	0-20	
Methyl-t-Butyl Ether (MTBE)	101	100	67-121	1	0-49	
Tert-Butyl Alcohol (TBA)	104	106	36-162	2	0-30	
Diisopropyl Ether (DIPE)	99	100	60-138	1	0-45	
Ethyl-t-Butyl Ether (ETBE)	101	99	69-123	2	0-30	
Tert-Amyl-Methyl Ether (TAME)	108	108	65-120	0	0-20	
Ethanol	101	96	30-180	5	0-72	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 03/13/10
Work Order No: 10-03-1140
Preparation: EPA 5030B
Method: EPA 8260B

Project BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-03-1152-11	**Solid**	**GC/MS Q**	**03/17/10**	**03/17/10**	**100317S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	88	89	40-142	1	0-18	
Carbon Tetrachloride	83	81	37-139	2	0-20	
Chlorobenzene	83	82	43-127	1	0-26	
1,2-Dibromoethane	82	80	70-130	3	0-30	
1,2-Dichlorobenzene	79	81	40-160	2	0-36	
1,1-Dichloroethene	90	89	16-178	1	0-25	
Ethylbenzene	87	85	70-130	3	0-30	
Toluene	91	90	44-128	0	0-15	
Trichloroethene	88	90	47-131	2	0-19	
Vinyl Chloride	92	93	29-161	1	0-42	
Methyl-t-Butyl Ether (MTBE)	91	91	42-150	1	0-34	
Tert-Butyl Alcohol (TBA)	97	90	61-109	8	0-47	
Diisopropyl Ether (DIPE)	94	94	73-133	0	0-25	
Ethyl-t-Butyl Ether (ETBE)	92	93	73-132	1	0-25	
Tert-Amyl-Methyl Ether (TAME)	91	92	82-120	2	0-25	
Ethanol	79	83	39-117	5	0-99	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 03/13/10
Work Order No: 10-03-1140
Preparation: EPA 5030B
Method: EPA 8260B

Project BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-03-1605-1	**Solid**	**GC/MS VV**	**03/22/10**	**03/22/10**	**100322S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	101	100	40-142	1	0-18	
Carbon Tetrachloride	106	104	37-139	2	0-20	
Chlorobenzene	98	95	43-127	3	0-26	
1,2-Dibromoethane	100	96	70-130	4	0-30	
1,2-Dichlorobenzene	94	89	40-160	5	0-36	
1,1-Dichloroethene	86	89	16-178	3	0-25	
Ethylbenzene	99	96	70-130	3	0-30	
Toluene	98	97	44-128	2	0-15	
Trichloroethene	106	105	47-131	1	0-19	
Vinyl Chloride	111	107	29-161	3	0-42	
Methyl-t-Butyl Ether (MTBE)	86	89	42-150	3	0-34	
Tert-Butyl Alcohol (TBA)	97	87	61-109	12	0-47	
Diisopropyl Ether (DIPE)	99	92	73-133	7	0-25	
Ethyl-t-Butyl Ether (ETBE)	90	92	73-132	1	0-25	
Tert-Amyl-Methyl Ether (TAME)	92	93	82-120	1	0-25	
Ethanol	89	75	39-117	16	0-99	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 03/13/10
Work Order No: 10-03-1140
Preparation: EPA 5030B
Method: EPA 8260B

Project BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-03-1801-1	**Solid**	**GC/MS VV**	**03/24/10**	**03/24/10**	**100324S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	105	102	40-142	3	0-18	
Carbon Tetrachloride	111	112	37-139	1	0-20	
Chlorobenzene	100	96	43-127	4	0-26	
1,2-Dibromoethane	97	95	70-130	2	0-30	
1,2-Dichlorobenzene	93	88	40-160	6	0-36	
1,1-Dichloroethene	99	99	16-178	1	0-25	
Ethylbenzene	104	100	70-130	3	0-30	
Toluene	103	99	44-128	5	0-15	
Trichloroethene	105	102	47-131	3	0-19	
Vinyl Chloride	113	119	29-161	5	0-42	
Methyl-t-Butyl Ether (MTBE)	89	87	42-150	2	0-34	
Tert-Butyl Alcohol (TBA)	106	93	61-109	13	0-47	
Diisopropyl Ether (DIPE)	95	95	73-133	1	0-25	
Ethyl-t-Butyl Ether (ETBE)	84	84	73-132	1	0-25	
Tert-Amyl-Methyl Ether (TAME)	88	85	82-120	3	0-25	
Ethanol	102	87	39-117	15	0-99	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 10-03-1140
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-701-35	**Solid**	**GC 46**	**03/18/10**	**03/19/10**	**100318B14**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Diesel Range Organics (C10-C28)	106	116	75-123	9	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Broadbent & Associates, Inc.	Date Received:	N/A
1324 Mangrove Ave, Ste 212	Work Order No:	10-03-1140
Chico, CA 95926-2642	Preparation:	EPA 5030B
	Method:	EPA 8015B (M)

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-779	**Aqueous**	**GC 1**	**03/16/10**	**03/17/10**	**100316B02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	86	92	78-120	7	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 10-03-1140
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-697-203	**Solid**	**GC 57**	**03/16/10**	**03/16/10**	**100316B03**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	76	88	70-118	14	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Broadbent & Associates, Inc.	Date Received:	N/A
1324 Mangrove Ave, Ste 212	Work Order No:	10-03-1140
Chico, CA 95926-2642	Preparation:	EPA 5030B
	Method:	EPA 8015B (M)

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-697-202	**Solid**	**GC 57**	**03/16/10**	**03/16/10**	**100316B02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	76	88	70-118	14	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 10-03-1140
Preparation: EPA 5030B
Method: EPA 8260B

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-1,271	**Aqueous**	**GC/MS BB**	**03/20/10**	**03/20/10**	**100320L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	108	108	80-120	73-127	1	0-20	
Carbon Tetrachloride	110	102	74-134	64-144	8	0-20	
Chlorobenzene	106	106	80-120	73-127	0	0-20	
1,2-Dibromoethane	119	114	79-121	72-128	4	0-20	
1,2-Dichlorobenzene	104	105	80-120	73-127	1	0-20	
1,1-Dichloroethene	107	101	78-126	70-134	6	0-28	
Ethylbenzene	112	110	80-120	73-127	2	0-20	
Toluene	109	110	80-120	73-127	0	0-20	
Trichloroethene	106	107	79-127	71-135	1	0-20	
Vinyl Chloride	106	103	72-132	62-142	3	0-20	
Methyl-t-Butyl Ether (MTBE)	111	103	69-123	60-132	8	0-20	
Tert-Butyl Alcohol (TBA)	107	102	63-123	53-133	5	0-20	
Diisopropyl Ether (DIPE)	100	98	59-137	46-150	2	0-37	
Ethyl-t-Butyl Ether (ETBE)	107	101	69-123	60-132	6	0-20	
Tert-Amyl-Methyl Ether (TAME)	109	102	70-120	62-128	7	0-20	
Ethanol	89	109	28-160	6-182	20	0-57	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 10-03-1140
Preparation: EPA 5030B
Method: EPA 8260B

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-709-307	**Solid**	**GC/MS Q**	**03/17/10**	**03/17/10**	**100317L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	102	102	84-114	79-119	1	0-7	
Bromobenzene	96	98	80-120	73-127	2	0-20	
Bromochloromethane	104	104	80-120	73-127	1	0-20	
Bromodichloromethane	101	101	80-120	73-127	0	0-20	
Bromoform	86	84	80-120	73-127	2	0-20	
Bromomethane	109	106	80-120	73-127	3	0-20	
n-Butylbenzene	101	98	77-123	69-131	2	0-25	
sec-Butylbenzene	100	99	80-120	73-127	1	0-20	
tert-Butylbenzene	103	101	80-120	73-127	2	0-20	
Carbon Disulfide	129	114	80-120	73-127	12	0-20	LQ
Carbon Tetrachloride	94	93	69-135	58-146	1	0-13	
Chlorobenzene	99	96	85-109	81-113	3	0-8	
Chloroethane	121	118	80-120	73-127	2	0-20	LQ
Chloroform	106	107	80-120	73-127	0	0-20	
Chloromethane	102	99	80-120	73-127	3	0-20	
2-Chlorotoluene	92	106	80-120	73-127	14	0-20	
4-Chlorotoluene	102	100	80-120	73-127	2	0-20	
Dibromochloromethane	94	94	80-120	73-127	0	0-20	
1,2-Dibromo-3-Chloropropane	83	83	80-120	73-127	1	0-20	
1,2-Dibromoethane	95	94	80-120	73-127	1	0-20	
Dibromomethane	104	103	80-120	73-127	1	0-20	
1,2-Dichlorobenzene	99	96	80-110	75-115	3	0-10	
1,3-Dichlorobenzene	98	98	80-120	73-127	0	0-20	
1,4-Dichlorobenzene	98	98	80-120	73-127	0	0-20	
Dichlorodifluoromethane	105	102	80-120	73-127	3	0-20	
1,1-Dichloroethane	106	105	80-120	73-127	1	0-20	
1,2-Dichloroethane	100	100	80-120	73-127	0	0-20	
1,1-Dichloroethene	103	100	83-125	76-132	3	0-10	
c-1,2-Dichloroethene	108	107	80-120	73-127	1	0-20	
t-1,2-Dichloroethene	103	101	80-120	73-127	2	0-20	
1,2-Dichloropropane	101	103	79-115	73-121	2	0-25	
1,3-Dichloropropane	99	99	80-120	73-127	1	0-20	
2,2-Dichloropropane	99	97	80-120	73-127	2	0-20	
1,1-Dichloropropene	103	103	80-120	73-127	1	0-20	
c-1,3-Dichloropropene	101	99	80-120	73-127	2	0-20	
t-1,3-Dichloropropene	113	112	80-120	73-127	1	0-20	
Ethylbenzene	101	101	80-120	73-127	0	0-20	
Isopropylbenzene	100	99	80-120	73-127	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 10-03-1140
Preparation: EPA 5030B
Method: EPA 8260B

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-709-307	**Solid**	**GC/MS Q**	**03/17/10**	**03/17/10**	**100317L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
p-Isopropyltoluene	99	98	80-120	73-127	1	0-20	
Methylene Chloride	104	105	80-120	73-127	1	0-20	
Naphthalene	83	85	80-120	73-127	1	0-20	
n-Propylbenzene	102	102	80-120	73-127	1	0-20	
Styrene	101	102	80-120	73-127	1	0-20	
Ethanol	99	100	50-134	36-148	1	0-23	
1,1,1,2-Tetrachloroethane	91	92	80-120	73-127	1	0-20	
1,1,2,2-Tetrachloroethane	98	96	80-120	73-127	2	0-20	
Tetrachloroethene	100	100	80-120	73-127	0	0-20	
Toluene	105	104	79-115	73-121	1	0-8	
1,2,3-Trichlorobenzene	91	90	80-120	73-127	0	0-20	
1,2,4-Trichlorobenzene	91	92	80-120	73-127	1	0-20	
1,1,1-Trichloroethane	97	97	80-120	73-127	1	0-20	
1,1,2-Trichloroethane	101	100	80-120	73-127	1	0-20	
Trichloroethene	101	100	87-111	83-115	1	0-7	
Trichlorofluoromethane	104	102	80-120	73-127	2	0-20	
1,2,3-Trichloropropane	90	88	80-120	73-127	1	0-20	
1,2,4-Trimethylbenzene	100	98	80-120	73-127	2	0-20	
1,3,5-Trimethylbenzene	99	100	80-120	73-127	1	0-20	
Vinyl Acetate	104	95	80-120	73-127	10	0-20	
Vinyl Chloride	104	103	72-126	63-135	1	0-10	
p/m-Xylene	102	102	80-120	73-127	1	0-20	
o-Xylene	99	99	80-120	73-127	0	0-20	
Methyl-t-Butyl Ether (MTBE)	102	104	75-129	66-138	2	0-13	
Tert-Butyl Alcohol (TBA)	97	89	66-126	56-136	9	0-24	
Diisopropyl Ether (DIPE)	106	107	77-125	69-133	1	0-13	
Ethyl-t-Butyl Ether (ETBE)	103	104	72-132	62-142	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	103	103	77-125	69-133	0	0-10	

Total number of LCS compounds : 66
Total number of ME compounds : 1
Total number of ME compounds allowed : 3
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 10-03-1140
Preparation: EPA 5030B
Method: EPA 8260B

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-709-309	**Solid**	**GC/MS Q**	**03/17/10**	**03/17/10**	**100317L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	102	102	84-114	79-119	1	0-7	
Bromobenzene	96	98	80-120	73-127	2	0-20	
Bromochloromethane	104	104	80-120	73-127	1	0-20	
Bromodichloromethane	101	101	80-120	73-127	0	0-20	
Bromoform	86	84	80-120	73-127	2	0-20	
Bromomethane	109	106	80-120	73-127	3	0-20	
n-Butylbenzene	101	98	77-123	69-131	2	0-25	
sec-Butylbenzene	100	99	80-120	73-127	1	0-20	
tert-Butylbenzene	103	101	80-120	73-127	2	0-20	
Carbon Disulfide	129	114	80-120	73-127	12	0-20	LQ
Carbon Tetrachloride	94	93	69-135	58-146	1	0-13	
Chlorobenzene	99	96	85-109	81-113	3	0-8	
Chloroethane	121	118	80-120	73-127	2	0-20	LQ
Chloroform	106	107	80-120	73-127	0	0-20	
Chloromethane	102	99	80-120	73-127	3	0-20	
2-Chlorotoluene	92	106	80-120	73-127	14	0-20	
4-Chlorotoluene	102	100	80-120	73-127	2	0-20	
Dibromochloromethane	94	94	80-120	73-127	0	0-20	
1,2-Dibromo-3-Chloropropane	83	83	80-120	73-127	1	0-20	
1,2-Dibromoethane	95	94	80-120	73-127	1	0-20	
Dibromomethane	104	103	80-120	73-127	1	0-20	
1,2-Dichlorobenzene	99	96	80-110	75-115	3	0-10	
1,3-Dichlorobenzene	98	98	80-120	73-127	0	0-20	
1,4-Dichlorobenzene	98	98	80-120	73-127	0	0-20	
Dichlorodifluoromethane	105	102	80-120	73-127	3	0-20	
1,1-Dichloroethane	106	105	80-120	73-127	1	0-20	
1,2-Dichloroethane	100	100	80-120	73-127	0	0-20	
1,1-Dichloroethene	103	100	83-125	76-132	3	0-10	
c-1,2-Dichloroethene	108	107	80-120	73-127	1	0-20	
t-1,2-Dichloroethene	103	101	80-120	73-127	2	0-20	
1,2-Dichloropropane	101	103	79-115	73-121	2	0-25	
1,3-Dichloropropane	99	99	80-120	73-127	1	0-20	
2,2-Dichloropropane	99	97	80-120	73-127	2	0-20	
1,1-Dichloropropene	103	103	80-120	73-127	1	0-20	
c-1,3-Dichloropropene	101	99	80-120	73-127	2	0-20	
t-1,3-Dichloropropene	113	112	80-120	73-127	1	0-20	
Ethylbenzene	101	101	80-120	73-127	0	0-20	
Isopropylbenzene	100	99	80-120	73-127	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 10-03-1140
Preparation: EPA 5030B
Method: EPA 8260B

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-709-309	**Solid**	**GC/MS Q**	**03/17/10**	**03/17/10**	**100317L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
p-Isopropyltoluene	99	98	80-120	73-127	1	0-20	
Methylene Chloride	104	105	80-120	73-127	1	0-20	
Naphthalene	83	85	80-120	73-127	1	0-20	
n-Propylbenzene	102	102	80-120	73-127	1	0-20	
Styrene	101	102	80-120	73-127	1	0-20	
Ethanol	99	100	50-134	36-148	1	0-23	
1,1,1,2-Tetrachloroethane	91	92	80-120	73-127	1	0-20	
1,1,2,2-Tetrachloroethane	98	96	80-120	73-127	2	0-20	
Tetrachloroethene	100	100	80-120	73-127	0	0-20	
Toluene	105	104	79-115	73-121	1	0-8	
1,2,3-Trichlorobenzene	91	90	80-120	73-127	0	0-20	
1,2,4-Trichlorobenzene	91	92	80-120	73-127	1	0-20	
1,1,1-Trichloroethane	97	97	80-120	73-127	1	0-20	
1,1,2-Trichloroethane	101	100	80-120	73-127	1	0-20	
Trichloroethene	101	100	87-111	83-115	1	0-7	
Trichlorofluoromethane	104	102	80-120	73-127	2	0-20	
1,2,3-Trichloropropane	90	88	80-120	73-127	1	0-20	
1,2,4-Trimethylbenzene	100	98	80-120	73-127	2	0-20	
1,3,5-Trimethylbenzene	99	100	80-120	73-127	1	0-20	
Vinyl Acetate	104	95	80-120	73-127	10	0-20	
Vinyl Chloride	104	103	72-126	63-135	1	0-10	
p/m-Xylene	102	102	80-120	73-127	1	0-20	
o-Xylene	99	99	80-120	73-127	0	0-20	
Methyl-t-Butyl Ether (MTBE)	102	104	75-129	66-138	2	0-13	
Tert-Butyl Alcohol (TBA)	97	89	66-126	56-136	9	0-24	
Diisopropyl Ether (DIPE)	106	107	77-125	69-133	1	0-13	
Ethyl-t-Butyl Ether (ETBE)	103	104	72-132	62-142	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	103	103	77-125	69-133	0	0-10	

Total number of LCS compounds : 66
Total number of ME compounds : 1
Total number of ME compounds allowed : 3
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 10-03-1140
Preparation: EPA 5030B
Method: EPA 8260B

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-709-311	**Solid**	**GC/MS VV**	**03/22/10**	**03/22/10**	**100322L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	92	94	84-114	79-119	2	0-7	
Bromobenzene	93	95	80-120	73-127	2	0-20	
Bromochloromethane	95	96	80-120	73-127	1	0-20	
Bromodichloromethane	97	99	80-120	73-127	2	0-20	
Bromoform	104	106	80-120	73-127	1	0-20	
Bromomethane	103	103	80-120	73-127	0	0-20	
n-Butylbenzene	77	74	77-123	69-131	4	0-25	LR
sec-Butylbenzene	81	79	80-120	73-127	4	0-20	LR
tert-Butylbenzene	87	86	80-120	73-127	2	0-20	
Carbon Disulfide	77	77	80-120	73-127	0	0-20	LR
Carbon Tetrachloride	101	102	69-135	58-146	1	0-13	
Chlorobenzene	92	93	85-109	81-113	2	0-8	
Chloroethane	87	88	80-120	73-127	1	0-20	
Chloroform	92	95	80-120	73-127	3	0-20	
Chloromethane	110	109	80-120	73-127	0	0-20	
2-Chlorotoluene	90	91	80-120	73-127	2	0-20	
4-Chlorotoluene	87	88	80-120	73-127	1	0-20	
Dibromochloromethane	103	104	80-120	73-127	2	0-20	
1,2-Dibromo-3-Chloropropane	104	108	80-120	73-127	3	0-20	
1,2-Dibromoethane	97	98	80-120	73-127	2	0-20	
Dibromomethane	98	102	80-120	73-127	4	0-20	
1,2-Dichlorobenzene	91	91	80-110	75-115	1	0-10	
1,3-Dichlorobenzene	89	89	80-120	73-127	0	0-20	
1,4-Dichlorobenzene	87	87	80-120	73-127	0	0-20	
Dichlorodifluoromethane	103	105	80-120	73-127	2	0-20	
1,1-Dichloroethane	90	99	80-120	73-127	9	0-20	
1,2-Dichloroethane	94	97	80-120	73-127	2	0-20	
1,1-Dichloroethene	83	80	83-125	76-132	3	0-10	LR
c-1,2-Dichloroethene	91	94	80-120	73-127	4	0-20	
t-1,2-Dichloroethene	87	84	80-120	73-127	3	0-20	
1,2-Dichloropropane	98	101	79-115	73-121	4	0-25	
1,3-Dichloropropane	98	99	80-120	73-127	1	0-20	
2,2-Dichloropropane	92	93	80-120	73-127	1	0-20	
1,1-Dichloropropene	89	91	80-120	73-127	2	0-20	
c-1,3-Dichloropropene	101	102	80-120	73-127	1	0-20	
t-1,3-Dichloropropene	102	104	80-120	73-127	2	0-20	
Ethylbenzene	90	92	80-120	73-127	2	0-20	
Isopropylbenzene	90	91	80-120	73-127	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 10-03-1140
Preparation: EPA 5030B
Method: EPA 8260B

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-709-311	**Solid**	**GC/MS VV**	**03/22/10**	**03/22/10**	**100322L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
p-Isopropyltoluene	83	81	80-120	73-127	2	0-20	
Methylene Chloride	88	87	80-120	73-127	1	0-20	
Naphthalene	92	91	80-120	73-127	1	0-20	
n-Propylbenzene	90	89	80-120	73-127	1	0-20	
Styrene	94	96	80-120	73-127	2	0-20	
Ethanol	72	85	50-134	36-148	15	0-23	
1,1,1,2-Tetrachloroethane	101	104	80-120	73-127	3	0-20	
1,1,2,2-Tetrachloroethane	95	96	80-120	73-127	1	0-20	
Tetrachloroethene	100	103	80-120	73-127	3	0-20	
Toluene	90	92	79-115	73-121	2	0-8	
1,2,3-Trichlorobenzene	85	84	80-120	73-127	2	0-20	
1,2,4-Trichlorobenzene	85	82	80-120	73-127	3	0-20	
1,1,1-Trichloroethane	92	93	80-120	73-127	1	0-20	
1,1,2-Trichloroethane	98	101	80-120	73-127	2	0-20	
Trichloroethene	92	94	87-111	83-115	2	0-7	
Trichlorofluoromethane	94	95	80-120	73-127	1	0-20	
1,2,3-Trichloropropane	102	103	80-120	73-127	1	0-20	
1,2,4-Trimethylbenzene	89	89	80-120	73-127	0	0-20	
1,3,5-Trimethylbenzene	93	93	80-120	73-127	0	0-20	
Vinyl Acetate	88	93	80-120	73-127	5	0-20	
Vinyl Chloride	100	100	72-126	63-135	1	0-10	
p/m-Xylene	92	94	80-120	73-127	2	0-20	
o-Xylene	92	94	80-120	73-127	2	0-20	
Methyl-t-Butyl Ether (MTBE)	92	90	75-129	66-138	1	0-13	
Tert-Butyl Alcohol (TBA)	87	96	66-126	56-136	9	0-24	
Diisopropyl Ether (DIPE)	90	100	77-125	69-133	10	0-13	
Ethyl-t-Butyl Ether (ETBE)	93	94	72-132	62-142	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	94	98	77-125	69-133	3	0-10	

Total number of LCS compounds : 66
Total number of ME compounds : 4
Total number of ME compounds allowed : 3
LCS ME CL validation result : Not Pass(See Narrative)

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 10-03-1140
Preparation: EPA 5030B
Method: EPA 8260B

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-709-315	**Solid**	**GC/MS VV**	**03/24/10**	**03/24/10**	**100324L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	97	95	84-114	79-119	2	0-7	
Bromobenzene	99	99	80-120	73-127	0	0-20	
Bromochloromethane	99	97	80-120	73-127	2	0-20	
Bromodichloromethane	101	98	80-120	73-127	2	0-20	
Bromoform	100	96	80-120	73-127	3	0-20	
Bromomethane	116	110	80-120	73-127	5	0-20	
n-Butylbenzene	79	87	77-123	69-131	10	0-25	
sec-Butylbenzene	81	87	80-120	73-127	7	0-20	
tert-Butylbenzene	87	90	80-120	73-127	4	0-20	
Carbon Disulfide	92	91	80-120	73-127	1	0-20	
Carbon Tetrachloride	106	105	69-135	58-146	1	0-13	
Chlorobenzene	96	95	85-109	81-113	1	0-8	
Chloroethane	95	94	80-120	73-127	1	0-20	
Chloroform	98	97	80-120	73-127	1	0-20	
Chloromethane	113	112	80-120	73-127	1	0-20	
2-Chlorotoluene	97	97	80-120	73-127	0	0-20	
4-Chlorotoluene	92	91	80-120	73-127	2	0-20	
Dibromochloromethane	103	101	80-120	73-127	2	0-20	
1,2-Dibromo-3-Chloropropane	102	104	80-120	73-127	2	0-20	
1,2-Dibromoethane	99	97	80-120	73-127	1	0-20	
Dibromomethane	104	102	80-120	73-127	2	0-20	
1,2-Dichlorobenzene	94	94	80-110	75-115	0	0-10	
1,3-Dichlorobenzene	91	90	80-120	73-127	1	0-20	
1,4-Dichlorobenzene	91	91	80-120	73-127	0	0-20	
Dichlorodifluoromethane	97	93	80-120	73-127	4	0-20	
1,1-Dichloroethane	98	98	80-120	73-127	0	0-20	
1,2-Dichloroethane	105	102	80-120	73-127	3	0-20	
1,1-Dichloroethene	92	91	83-125	76-132	1	0-10	
c-1,2-Dichloroethene	97	96	80-120	73-127	1	0-20	
t-1,2-Dichloroethene	94	94	80-120	73-127	0	0-20	
1,2-Dichloropropane	100	98	79-115	73-121	2	0-25	
1,3-Dichloropropane	100	98	80-120	73-127	1	0-20	
2,2-Dichloropropane	92	90	80-120	73-127	2	0-20	
1,1-Dichloropropene	96	95	80-120	73-127	1	0-20	
c-1,3-Dichloropropene	100	98	80-120	73-127	2	0-20	
t-1,3-Dichloropropene	101	100	80-120	73-127	1	0-20	
Ethylbenzene	96	95	80-120	73-127	1	0-20	
Isopropylbenzene	95	96	80-120	73-127	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 10-03-1140
Preparation: EPA 5030B
Method: EPA 8260B

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-709-315	**Solid**	**GC/MS VV**	**03/24/10**	**03/24/10**	**100324L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
p-Isopropyltoluene	83	90	80-120	73-127	7	0-20	
Methylene Chloride	97	97	80-120	73-127	0	0-20	
Naphthalene	86	91	80-120	73-127	5	0-20	
n-Propylbenzene	95	98	80-120	73-127	3	0-20	
Styrene	100	100	80-120	73-127	1	0-20	
Ethanol	91	88	50-134	36-148	3	0-23	
1,1,1,2-Tetrachloroethane	102	101	80-120	73-127	1	0-20	
1,1,2,2-Tetrachloroethane	92	91	80-120	73-127	1	0-20	
Tetrachloroethene	103	99	80-120	73-127	4	0-20	
Toluene	96	94	79-115	73-121	2	0-8	
1,2,3-Trichlorobenzene	80	88	80-120	73-127	9	0-20	
1,2,4-Trichlorobenzene	79	86	80-120	73-127	8	0-20	LR
1,1,1-Trichloroethane	97	97	80-120	73-127	0	0-20	
1,1,2-Trichloroethane	100	100	80-120	73-127	1	0-20	
Trichloroethene	97	94	87-111	83-115	2	0-7	
Trichlorofluoromethane	100	99	80-120	73-127	1	0-20	
1,2,3-Trichloropropane	106	105	80-120	73-127	1	0-20	
1,2,4-Trimethylbenzene	93	93	80-120	73-127	0	0-20	
1,3,5-Trimethylbenzene	98	101	80-120	73-127	3	0-20	
Vinyl Acetate	91	92	80-120	73-127	2	0-20	
Vinyl Chloride	106	105	72-126	63-135	1	0-10	
p/m-Xylene	99	99	80-120	73-127	1	0-20	
o-Xylene	98	98	80-120	73-127	0	0-20	
Methyl-t-Butyl Ether (MTBE)	95	94	75-129	66-138	2	0-13	
Tert-Butyl Alcohol (TBA)	89	88	66-126	56-136	2	0-24	
Diisopropyl Ether (DIPE)	100	99	77-125	69-133	1	0-13	
Ethyl-t-Butyl Ether (ETBE)	90	90	72-132	62-142	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	92	91	77-125	69-133	2	0-10	

Total number of LCS compounds : 66
Total number of ME compounds : 1
Total number of ME compounds allowed : 3
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

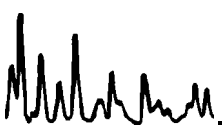
Glossary of Terms and Qualifiers

Work Order Number: 10-03-1140

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

Work Order Number: 10-03-1140

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



Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Project Name: BP 6113 **Req Due Date (mm/dd/yy):** **Rush TAT:** Yes ___ No X

BP/ARC Facility No: 6113 **Lab Work Order Number:** 10-03-1140

Lab Name:	Calscience	BP/ARC Facility Address:	785 E. Stanley Boulevard	Consultant/Contractor:	Broadbent & Associates, Inc.
Lab Address:	7440 Lincoln Way	City, State, ZIP Code:	Livermore, CA	Consultant/Contractor Project No:	06-82-637-6-876
Lab PM:	Richard Villafania	Lead Regulatory Agency:	ACEH	Address:	1324 Mangrove Ave. Ste. 212, Chico, CA 95926
Lab Phone:	714-895-5494	California Global ID No.:	T0600100111	Consultant/Contractor PM:	Tom Venus
Lab Shipping Accnt:	9225	Enfos Proposal No:	000TS-0008	Phone:	530-566-1400
Lab Bottle Order No:		Accounting Mode:	Provision ___ OOC-BU X OOC-RM ___	Email EDD To:	tvenus@broadbentinc.com
Other Info:		Stage:	Other (6) Activity: Divestment (76)	Invoice To:	BP/ARC X Contractor ___

BP/ARC EBM: Chuck Carmel

EBM Phone:

EBM Email:

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix:	No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol		Requested Analyses: GRO (8260)	BTEX (8260)	5 Oxys (8260)	EDB (8260)	1,2-DCA (8260)	Ethanol (8260)	DRO (8015)	MTBE (8260)			Report Type & QC Level / Comments
1	RMW13@14.5-15.0	3/11/10	1235	X				1	X						X	X	X	X	X	X					Standard X
2	RMW13@21.0-21.5	"	1248	X				1	X						X	X	X	X	X	X					Full Data Package ___
3	RMW13@25.5-26.0	"	1257	X				1	X						X	X	X	X	X	X					
4	RMW13@31.0-31.5	"	1310	X				1	X						X	X	X	X	X	X					
5	6113-100311-Waste Soil	"	1500	X				1	X						X	X					X	X			
6	6113-100311-Rinsewater	"	1505		X			6				X			X	X					X*	X			* 03/16/10 - 8015B DRO analysis cancelled.

Comments

Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

Sampler's Name:	Eric Fuller	**Relinquished By / Affiliation**	**Date**	**Time**	**Accepted By / Affiliation** / **Date** / **Time**
Sampler's Company:	BAI	[illegible] / BAI	3/12/10	1210	
Shipment Method:	GSO Ship Date: 3/12/10				[illegible] CEL 3.13.10 9:30
Shipment Tracking No:	[redacted] 106193657				

Special Instructions:

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

SHIPPING AIR BILL

GSO GOLDEN STATE OVERNIGHT

1-800-322-5555

WWW.GSO.COM

1 FROM

DATE 3/12/10 SHIPPERS GSO ACCOUNT NO. 9255

COMPANY DAI

ADDRESS 875 Lotting Ln

ADDRESS STE/ ROOM F

CITY Vacaville ZIP CODE 95688

SENDERS NAME Tracy Gudeas PHONE NUMBER 707 [illegible] 7290

2 TO

COMPANY CAL SCIENCE

NAME PHONE NUMBER 714-895-[illegible]

ADDRESS 7440 LINCOLN WAY

ADDRESS STE/ ROOM

CITY GARDEN GROVE ZIP CODE 92841

3 YOUR INTERNAL BILLING REFERENCE WILL APPEAR ON YOUR INVOICE

SPECIAL INSTRUCTIONS

4 PACKAGE INFORMATION

☐ LETTER (MAX 8 OZ)

☑ PACKAGE (WT) 40lb

☐ DECLARED VALUE $

☐ COD AMOUNT $ (CASH NOT ACCEPTED)

5 DELIVERY SERVICE ☐ PRIORITY OVERNIGHT BY 10:30 AM ☐ EARLY PRIORITY BY 8:00 AM ☑ SATU DELI

*DELIVERY TIMES MAY BE LATER IN SOME AREAS • CONSULT YOUR SERVICE GUIDE OR CALL GOLDEN ST

6 RELEASE SIGNATURE

SIGN TO AUTHORIZE DELIVERY WITHOUT OBTAINING SIGNATURE

7 CREDIT CARD ☐ M/C ☐ VISA ☐ AM EX CREDIT CARD NUMBER

8 PICK UP INFORMATION TIME DRIVER # ROUTE #

106193657

9 GSO TRACKING NUMBER 106193657

1140

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 10-03-1140

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Broadbent DATE: 03/13/10

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 3.1 °C + 0.5 °C (CF) = 3.6 °C ☑ Blank ☐ Sample

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

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

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

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only Initial: YL

CUSTODY SEALS INTACT:

☑ Cooler ☐_____ ☐ No (Not Intact) ☐ Not Present ☐ N/A Initial: YL

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: WSC

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☐	☑	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☐	☑	☐
Analyses received within holding time	☑	☐	☐
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☑	☐	☐
Tedlar bag(s) free of condensation	☐	☐	☐

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☑Sleeve (5 6) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐500PB ☐500PBna ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ Checked by: WSC

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

Preservative: h: HCL n: HNO_3 na_2: $Na_2S_2O_3$ Na: NaOH p: H_3PO_4 s: H_2SO_4 znna: $ZnAc_2$+NaOH f: Field-filtered Scanned by: WSC

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 10-03-1 1 4 0

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS:

- ☐ **Sample(s)/Container(s) NOT RECEIVED but listed on COC**
- ☐ **Sample(s)/Container(s) received but NOT LISTED on COC**
- ☐ **Holding time expired** – list sample ID(s) and test
- ☑ **Insufficient quantities for analysis** – list test
- ☐ **Improper container(s) used** – list test
- ☐ **Improper preservative used** – list test
- ☐ **No preservative noted on COC or label** – list test & notify lab
- ☐ **Sample labels illegible** – note test/container type
- ☑ **Sample label(s) do not match COC** – Note in comments
  - ☐ **Sample ID**
  - ☑ **Date and/or Time Collected**
  - ☐ **Project Information**
  - ☐ **# of Container(s)**
  - ☐ **Analysis**
- ☐ **Sample container(s) compromised** – Note in comments
  - ☐ **Water present in sample container**
  - ☐ **Broken**
  - ☐ **Without Label(s)**
- ☐ **Air sample container(s) compromised** – Note in comments
  - ☐ **Flat**
  - ☐ **Very low in volume**
  - ☐ **Leaking (Not transferred - duplicate bag submitted)**
  - ☐ **Leaking (transferred into Calscience Tedlar® Bag*)**
  - ☐ **Leaking (transferred into Client's Tedlar® Bag*)**
- ☐ **Other:** _____

Comments:

(-5) collection time per label is 1257

(-6) received 6 vials/HCL for DRO 8015.

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Cont. received	Analysis

Comments: _____

*Transferred at Client's request.

Initial / Date: MES 03/13/10

APPENDIX B

BAI GROUND-WATER SAMPLING DATA
(Includes Field Data Sheets, Non-Hazardous Waste Data Form, Laboratory Analytical Reports with Chain-of-Custody Documentation and Field Procedures)

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

FIELD DATA REPORT

DATE: 4/12/10
PERSONNEL: T.G. C.B.
WEATHER: *Rainy

PROJECT NO.: BP 6113
COMMENTS:

Equip:	Geosquirt	Tubing	Bailers	DO	wli	Ec/pH

Well ID	Time	MEASURING POINT	DTW (FT)	PRODUCT THICKNESS	pH	Cond. (X100)	Temp. (C/F)	DO (mg/l)	Redox (mV)	Iron (mg/l)	Alk. (mg/l)	WELL HEAD CONDITION: VAULT, BOLTS, CAP, LOCK, ETC
MW-2	0920	TOC	18.53									
MW-4	0918	"	19.25									
MW-7	0948	"	18.49									
MW-9	0927	"	17.29									
MW-11	0940	"	21.14									
MW-12	0935	"	19.93									
RMW-B	0924	"	18.50									
VW-1	0953	"	17.27									
VW-3	0905	"	18.50									
VW-4	0908	"	17.80									

G:\ADMINISTRATION\BAI FORMS\WATER LVL MEAS FORM

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

Groundwater Sampling Data Sheet

Well I.D.: MW-4
Project Name/Location: BP 6113
Project #: 06-88-637
Sampler's Name: TG. E.F.
Date: 4/12/10
Purging Equipment: Pump
Sampling Equipment: Bailer
Casing Type: PVC

Casing Diameter:		4	inch
Total Well Depth:		26.68	feet
Depth to Water:	-	19.25	feet
Water Column Thickness:	=	7.43	feet
Unit Casing Volume*:	x	.65	gallon / foot
Casing Water Volume:	=	4.8	gallons
Casing Volume:	x	3	each
Estimated Purge Volume:	=	14.4	gallons

***UNIT CASING VOLUMES**
2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.65 gal/lin ft.
6" = 1.47 gal/lin ft.

Free product measurement (if present):

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
0	1111	.81	-55		828.0	68.8	7.11	
5	1113	X	X	X	820.1	65.0	6.93	
10	1115	X	X	X	860.0	65.3	6.96	
15	1117	.75	X	X	877.3	65.4	6.87	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: 15 gallons
Depth to Water at Sample Collection: 21.93 feet
Sample Collection Time: 1120
Purged Dry? (Y / N) — N circled

Comments: HC odor

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

Groundwater Sampling Data Sheet

Well I.D.: MW-7
Project Name/Location: BP 6117 Project #: 06.80.657
Sampler's Name: C. Ford - T. Goddard Date: 4/12/10
Purging Equipment: Pump
Sampling Equipment: Bailer
Casing Type: PVC

Casing Diameter:		4	inch
Total Well Depth:		67.45	feet
Depth to Water:	-	18.49	feet
Water Column Thickness:	=	48.96	feet
Unit Casing Volume*:	x	0.65	gallon / foot
Casing Water Volume:	=	31.82	gallons
Casing Volume:	x	3	each
Estimated Purge Volume:	=	95.47	gallons

***UNIT CASING VOLUMES**
2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.65 gal/lin ft.
6" = 1.47 gal/lin ft.

Free product measurement (if present):

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
0	1007		-7		570.0	61.3	6.26	
10	1010	x	x	x	559.3	63.3	7.75	
20	1013	x	x	x	561.5	64.2	7.66	
30	1016	x	x	x	561.2	64.8	7.55	
		x	x	x				
		x	x	x				
		x	x	x				
		x	x	x				

Total Water Volume Purged: 30 gallons
Depth to Water at Sample Collection: 18.57 feet
Sample Collection Time: 1028 Purged Dry? (Y / (N))

Comments:

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

Groundwater Sampling Data Sheet

Well I.D.: MW-11
Project Name/Location: [illegible]113
Project #: 06-88-637
Sampler's Name: T. [illegible] E. [illegible]
Date: 4/12/10
Purging Equipment: Bailer
Sampling Equipment: Bailer
Casing Type: PVC

Casing Diameter:		2"	inch
Total Well Depth:		45.0	feet
Depth to Water:	-	21.14	feet
Water Column Thickness:	=	23.38	feet
Unit Casing Volume*:	x	.16	gallon / foot
Casing Water Volume:	=	3.4	gallons
Casing Volume:	x	3	each
Estimated Purge Volume:	=	11.4	gallons

***UNIT CASING VOLUMES**
2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.65 gal/lin ft.
6" = 1.47 gal/lin ft.

Free product measurement (if present):

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (μS)	Temperature (Fahrenheit)	pH	Observations
0	1149	2.03	-18		728.7	63.8	7.40	
1.5	1151	X	X	X	722.0	64.5	7.31	
3	1154	X	X	X	726.0	65.3	7.29	
4	1156	1.20	X	X	729.5	65.7	7.25	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: 4 gallons
Depth to Water at Sample Collection: 21.15 feet
Sample Collection Time: 1200
Purged Dry? (Y / N) — N circled

Comments:

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

Groundwater Sampling Data Sheet

Well I.D.: MW-1D
Project Name/Location: BP 6113 Project #: 06-88-631
Sampler's Name: E. Farrar T. Cadelas Date: 4/12/10
Purging Equipment: –
Sampling Equipment: Bailer
Casing Type: PVC

Casing Diameter:		2	inch	
Total Well Depth:			feet	
Depth to Water:	-	14.53	feet	
Water Column Thickness:	=		feet	
Unit Casing Volume*:	x		gallon / foot	
Casing Water Volume:	=		gallons	
Casing Volume:	x	3	each	
Estimated Purge Volume:	=		gallons	

***UNIT CASING VOLUMES**
2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.65 gal/lin ft.
6" = 1.47 gal/lin ft.

Free product measurement (if present):

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
0	1200				6373	65.9	7.18	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: – gallons
Depth to Water at Sample Collection: – feet
Sample Collection Time: 1200
Purged Dry? (Y / N) — N circled

Comments: No purge @ 18'

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

Groundwater Sampling Data Sheet

Well I.D.: RMW-13
Project Name/Location: B.A. 6113 — Project #: 06.88.637
Sampler's Name: E. Farrar T. Geddes — Date: 4/12/10
Purging Equipment: —
Sampling Equipment: Bailer
Casing Type: PVC

Casing Diameter:		4	inch
Total Well Depth:			feet
Depth to Water:	-	18.50	feet
Water Column Thickness:	=		feet
Unit Casing Volume*:	x		gallon / foot
Casing Water Volume:	=		gallons
Casing Volume:	x	3	each
Estimated Purge Volume:	=		gallons

***UNIT CASING VOLUMES**
2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.65 gal/lin ft.
6" = 1.47 gal/lin ft.

Free product measurement (if present): —

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
—	0939	2.47	45		1454	69.5	7.21	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: 0 gallons
Depth to Water at Sample Collection: — feet
Sample Collection Time: 0940
Purged Dry? (Y / (N))

Comments: NRO 15'

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

Groundwater Sampling Data Sheet

Well I.D.: VW-1
Project Name/Location: BP6113 | Project #: BC-88-637
Sampler's Name: T. Gables E. Farer | Date: 4/12/10
Purging Equipment: Pump
Sampling Equipment: Bailer
Casing Type: PVC

Casing Diameter:		4	inch
Total Well Depth:		44.34	feet
Depth to Water:	-	17.27	feet
Water Column Thickness:	=	27.07	feet
Unit Casing Volume*:	x	.65	gallon / foot
Casing Water Volume:	=	17.5	gallons
Casing Volume:	x	3	each
Estimated Purge Volume:	=	52.7	gallons

***UNIT CASING VOLUMES**
2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.65 gal/lin ft.
6" = 1.47 gal/lin ft.

Free product measurement (if present):

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
0	1040	3.38	48		714.3	63.7	7.37	
10	1044	X	X	X	715.0	64.8	7.29	
15	1046	X	X	X	713.2	65.3	7.23	
20	1048	.65	X	X	712.9	65.4	7.21	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: 20 gallons
Depth to Water at Sample Collection: 17.38 feet
Sample Collection Time: 1050
Purged Dry? (Y / N) — N circled

Comments: HC odor

NO. 857343

NON-HAZARDOUS WASTE DATA FORM

1. BEST #

GENERATOR

2. Generator's Name and Mailing Address

BP WEST COAST PRODUCTS, LLC
P.O. BOX 80249
RANCHO SANTA MARGARITA, CA 92688

Generator's Site Address (if different than mailing address)

785 E. Stanley Blvd
Livermore, CA
BP 6113

Generator's Phone: (949) 460-5200

24-HOUR EMERGENCY PHONE: (949) 699-3706

3. Transporter 1 Company Name: Broadbent & Associates, Inc. — Phone #: (530) 566-1400

4. Transporter 2 Company Name: Gomes Excavating — Phone #: (707) 374-2881

5. Designated Facility Name and Site Address

INTRAT, INC.
1105 AIRPORT RD #C
RIO VISTA, CA 94571

Phone #: (530) 753-1829

6. Waste Shipping Name and Description	7. Containers No.	7. Containers Type	8. Total Quantity	9. Unit Wt/Vol	10. Profile No.
A. NON-HAZARDOUS WATER	1	TT	74	G	
B.					
C.					
D.					

11. Special Handling Instructions and Additional Information

WEAR ALL APPROPRIATE PROTECTIVE CLOTHING

WELL PURGING / DECON WATER

12. GENERATOR'S CERTIFICATION: I certify the materials described above on this data form are non-hazardous.

Generator's/Offeror's Printed/Typed Name: Tracy Geddes — Signature: [signature] — Month: 4 Day: 12 Year: 10

TRANSPORTER

13. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Tracy Geddes — Signature: [signature] — Month: 4 Day: 12 Year: 10

Transporter 2 Printed/Typed Name — Signature — Month Day Year

FACILITY

14. Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.

Printed/Typed Name — Signature — Month Day Year

GENERATOR (ORIGINAL)

Calscience Environmental Laboratories, Inc.

April 22, 2010

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

Subject: **Calscience Work Order No.: 10-04-0877**
Client Reference: BP 6113

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 4/13/2010 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,

Calscience Environmental
Laboratories, Inc.
Richard Villafania
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 04/13/10
Work Order No: 10-04-0877
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: BP 6113

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-4	**10-04-0877-1-E**	**04/12/10 11:20**	**Aqueous**	**GC 11**	**04/14/10**	**04/14/10 21:10**	**100414B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	1200	50	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	108	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-7	**10-04-0877-2-E**	**04/12/10 10:20**	**Aqueous**	**GC 11**	**04/14/10**	**04/14/10 18:55**	**100414B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	91	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-11	**10-04-0877-3-E**	**04/12/10 12:00**	**Aqueous**	**GC 11**	**04/14/10**	**04/14/10 21:43**	**100414B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	91	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-12	**10-04-0877-4-E**	**04/12/10 12:00**	**Aqueous**	**GC 11**	**04/14/10**	**04/14/10 22:17**	**100414B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	92	38-134	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 04/13/10
Work Order No: 10-04-0877
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: BP 6113

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
RMW-13	**10-04-0877-5-D**	**04/12/10 09:40**	**Aqueous**	**GC 11**	**04/15/10**	**04/15/10 19:37**	**100415B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	63000	2500	50		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	101	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW-1	**10-04-0877-6-D**	**04/12/10 10:50**	**Aqueous**	**GC 11**	**04/15/10**	**04/15/10 19:04**	**100415B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	410	50	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	101	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-695-808**	**N/A**	**Aqueous**	**GC 11**	**04/14/10**	**04/14/10 17:13**	**100414B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	92	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-695-809**	**N/A**	**Aqueous**	**GC 11**	**04/15/10**	**04/15/10 12:18**	**100415B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	91	38-134	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 04/13/10
Work Order No: 10-04-0877
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BP 6113

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-4	**10-04-0877-1-C**	**04/12/10 11:20**	**Aqueous**	**GC/MS BB**	**04/17/10**	**04/17/10 18:19**	**100417L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	2.0	0.50	1		Methyl-t-Butyl Ether (MTBE)	2.7	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	103	80-128			Dibromofluoromethane	106	80-127		
Toluene-d8	99	80-120			1,4-Bromofluorobenzene	97	68-120		

MW-7	10-04-0877-2-B	04/12/10 10:20	Aqueous	GC/MS L	04/14/10	04/14/10 20:09	100414L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	98	80-128			Dibromofluoromethane	101	80-127		
Toluene-d8	98	80-120			1,4-Bromofluorobenzene	83	68-120		

MW-11	10-04-0877-3-C	04/12/10 12:00	Aqueous	GC/MS O	04/19/10	04/19/10 12:53	100419L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	10	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	103	80-128			Dibromofluoromethane	96	80-127		
Toluene-d8	102	80-120			1,4-Bromofluorobenzene	93	68-120		

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Broadbent & Associates, Inc.		Date Received:	04/13/10
1324 Mangrove Ave, Ste 212		Work Order No:	10-04-0877
Chico, CA 95926-2642		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: BP 6113			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-12	**10-04-0877-4-C**	**04/12/10 12:00**	**Aqueous**	**GC/MS BB**	**04/17/10**	**04/17/10 19:15**	**100417L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	105	80-128			Dibromofluoromethane	104	80-127		
Toluene-d8	99	80-120			1,4-Bromofluorobenzene	92	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
RMW-13	**10-04-0877-5-C**	**04/12/10 09:40**	**Aqueous**	**GC/MS BB**	**04/17/10**	**04/17/10 19:43**	**100417L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	7800	120	250		Methyl-t-Butyl Ether (MTBE)	1500	120	250	
1,2-Dibromoethane	ND	120	250		Tert-Butyl Alcohol (TBA)	ND	2500	250	
1,2-Dichloroethane	ND	120	250		Diisopropyl Ether (DIPE)	ND	120	250	
Ethylbenzene	1600	120	250		Ethyl-t-Butyl Ether (ETBE)	ND	120	250	
Toluene	200	120	250		Tert-Amyl-Methyl Ether (TAME)	ND	120	250	
Xylenes (total)	6400	120	250		Ethanol	ND	75000	250	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	107	80-128			Dibromofluoromethane	104	80-127		
Toluene-d8	99	80-120			1,4-Bromofluorobenzene	91	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW-1	**10-04-0877-6-C**	**04/12/10 10:50**	**Aqueous**	**GC/MS BB**	**04/17/10**	**04/17/10 20:11**	**100417L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.80	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	107	80-128			Dibromofluoromethane	104	80-127		
Toluene-d8	98	80-120			1,4-Bromofluorobenzene	97	68-120		

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Broadbent & Associates, Inc.	Date Received:	04/13/10
1324 Mangrove Ave, Ste 212	Work Order No:	10-04-0877
Chico, CA 95926-2642	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L

Project: BP 6113

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-1,308**	**N/A**	**Aqueous**	**GC/MS L**	**04/14/10**	**04/14/10 17:08**	**100414L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	98	80-128			Dibromofluoromethane	109	80-127		
Toluene-d8	102	80-120			1,4-Bromofluorobenzene	96	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-1,310**	**N/A**	**Aqueous**	**GC/MS BB**	**04/17/10**	**04/17/10 11:47**	**100417L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	99	80-128			Dibromofluoromethane	99	80-127		
Toluene-d8	99	80-120			1,4-Bromofluorobenzene	89	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-1,311**	**N/A**	**Aqueous**	**GC/MS O**	**04/19/10**	**04/19/10 12:22**	**100419L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	99	80-128			Dibromofluoromethane	95	80-127		
Toluene-d8	101	80-120			1,4-Bromofluorobenzene	97	68-120		

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

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 04/13/10
Work Order No: 10-04-0877
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-7	**Aqueous**	**GC 11**	**04/14/10**	**04/14/10**	**100414S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	101	100	38-134	1	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 04/13/10
Work Order No: 10-04-0877
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-04-0984-3	**Aqueous**	**GC 11**	**04/15/10**	**04/15/10**	**100415S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	110	110	38-134	1	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

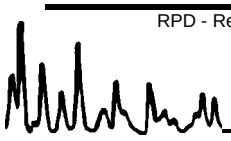
Date Received: 04/13/10
Work Order No: 10-04-0877
Preparation: EPA 5030B
Method: EPA 8260B

Project BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-04-0871-3	**Aqueous**	**GC/MS L**	**04/14/10**	**04/14/10**	**100414S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	108	105	76-124	3	0-20	
Carbon Tetrachloride	101	101	74-134	0	0-20	
Chlorobenzene	104	104	80-120	0	0-20	
1,2-Dibromoethane	102	97	80-120	5	0-20	
1,2-Dichlorobenzene	97	101	80-120	4	0-20	
Ethylbenzene	105	106	78-126	2	0-20	
Toluene	99	131	80-120	28	0-20	LM,BA,AY
Trichloroethene	95	116	77-120	19	0-20	
Methyl-t-Butyl Ether (MTBE)	111	87	67-121	24	0-49	
Tert-Butyl Alcohol (TBA)	97	99	36-162	3	0-30	
Diisopropyl Ether (DIPE)	86	89	60-138	3	0-45	
Ethyl-t-Butyl Ether (ETBE)	105	78	69-123	29	0-30	
Tert-Amyl-Methyl Ether (TAME)	103	95	65-120	7	0-20	
Ethanol	85	112	30-180	28	0-72	

RPD - Relative Percent Difference , CL - Control Limit



Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 04/13/10
Work Order No: 10-04-0877
Preparation: EPA 5030B
Method: EPA 8260B

Project BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-04-0878-1	**Aqueous**	**GC/MS BB**	**04/17/10**	**04/17/10**	**100417S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	98	102	76-124	3	0-20	
Carbon Tetrachloride	93	100	74-134	7	0-20	
Chlorobenzene	99	102	80-120	4	0-20	
1,2-Dibromoethane	99	105	80-120	6	0-20	
1,2-Dichlorobenzene	99	102	80-120	3	0-20	
Ethylbenzene	98	100	78-126	2	0-20	
Toluene	97	99	80-120	3	0-20	
Trichloroethene	99	104	77-120	5	0-20	
Methyl-t-Butyl Ether (MTBE)	89	96	67-121	8	0-49	
Tert-Butyl Alcohol (TBA)	106	120	36-162	12	0-30	
Diisopropyl Ether (DIPE)	93	98	60-138	5	0-45	
Ethyl-t-Butyl Ether (ETBE)	89	95	69-123	7	0-30	
Tert-Amyl-Methyl Ether (TAME)	88	93	65-120	6	0-20	
Ethanol	126	147	30-180	16	0-72	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 04/13/10
Work Order No: 10-04-0877
Preparation: EPA 5030B
Method: EPA 8260B

Project BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-04-1200-1	**Aqueous**	**GC/MS O**	**04/19/10**	**04/19/10**	**100419S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	102	103	76-124	1	0-20	
Carbon Tetrachloride	104	114	74-134	9	0-20	
Chlorobenzene	103	99	80-120	4	0-20	
1,2-Dibromoethane	93	86	80-120	9	0-20	
1,2-Dichlorobenzene	97	97	80-120	0	0-20	
Ethylbenzene	114	108	78-126	5	0-20	
Toluene	106	108	80-120	2	0-20	
Trichloroethene	99	106	77-120	7	0-20	
Methyl-t-Butyl Ether (MTBE)	94	96	67-121	2	0-49	
Tert-Butyl Alcohol (TBA)	120	104	36-162	9	0-30	
Diisopropyl Ether (DIPE)	100	101	60-138	1	0-45	
Ethyl-t-Butyl Ether (ETBE)	97	101	69-123	4	0-30	
Tert-Amyl-Methyl Ether (TAME)	99	98	65-120	1	0-20	
Ethanol	108	111	30-180	3	0-72	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 10-04-0877
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-808	**Aqueous**	**GC 11**	**04/14/10**	**04/14/10**	**100414B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	116	110	78-120	5	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 10-04-0877
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-809	**Aqueous**	**GC 11**	**04/15/10**	**04/15/10**	**100415B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	113	113	78-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 10-04-0877
Preparation: EPA 5030B
Method: EPA 8260B

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-1,308	**Aqueous**	**GC/MS L**	**04/14/10**	**04/14/10**	**100414L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	97	90	80-120	73-127	8	0-20	
Carbon Tetrachloride	96	101	74-134	64-144	5	0-20	
Chlorobenzene	98	99	80-120	73-127	1	0-20	
1,2-Dibromoethane	98	98	79-121	72-128	1	0-20	
1,2-Dichlorobenzene	97	95	80-120	73-127	2	0-20	
Ethylbenzene	102	104	80-120	73-127	2	0-20	
Toluene	118	116	80-120	73-127	2	0-20	
Trichloroethene	101	102	79-127	71-135	2	0-20	
Methyl-t-Butyl Ether (MTBE)	107	109	69-123	60-132	1	0-20	
Tert-Butyl Alcohol (TBA)	92	88	63-123	53-133	4	0-20	
Diisopropyl Ether (DIPE)	104	110	59-137	46-150	6	0-37	
Ethyl-t-Butyl Ether (ETBE)	101	105	69-123	60-132	3	0-20	
Tert-Amyl-Methyl Ether (TAME)	93	99	70-120	62-128	6	0-20	
Ethanol	88	91	28-160	6-182	3	0-57	

Total number of LCS compounds : 14
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 10-04-0877
Preparation: EPA 5030B
Method: EPA 8260B

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-1,310	**Aqueous**	**GC/MS BB**	**04/17/10**	**04/17/10**	**100417L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	98	99	80-120	73-127	0	0-20	
Carbon Tetrachloride	95	95	74-134	64-144	1	0-20	
Chlorobenzene	99	99	80-120	73-127	0	0-20	
1,2-Dibromoethane	100	101	79-121	72-128	1	0-20	
1,2-Dichlorobenzene	98	102	80-120	73-127	4	0-20	
Ethylbenzene	98	98	80-120	73-127	0	0-20	
Toluene	97	98	80-120	73-127	0	0-20	
Trichloroethene	100	100	79-127	71-135	0	0-20	
Methyl-t-Butyl Ether (MTBE)	94	93	69-123	60-132	0	0-20	
Tert-Butyl Alcohol (TBA)	91	104	63-123	53-133	13	0-20	
Diisopropyl Ether (DIPE)	92	92	59-137	46-150	0	0-37	
Ethyl-t-Butyl Ether (ETBE)	93	92	69-123	60-132	0	0-20	
Tert-Amyl-Methyl Ether (TAME)	93	92	70-120	62-128	1	0-20	
Ethanol	95	108	28-160	6-182	13	0-57	

Total number of LCS compounds : 14
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 10-04-0877
Preparation: EPA 5030B
Method: EPA 8260B

Project: BP 6113

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-1,311	**Aqueous**	**GC/MS O**	**04/19/10**	**04/19/10**	**100419L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	97	97	80-120	73-127	0	0-20	
Carbon Tetrachloride	98	105	74-134	64-144	7	0-20	
Chlorobenzene	94	98	80-120	73-127	4	0-20	
1,2-Dibromoethane	88	85	79-121	72-128	4	0-20	
1,2-Dichlorobenzene	89	96	80-120	73-127	8	0-20	
Ethylbenzene	103	107	80-120	73-127	3	0-20	
Toluene	101	101	80-120	73-127	0	0-20	
Trichloroethene	97	99	79-127	71-135	2	0-20	
Methyl-t-Butyl Ether (MTBE)	91	89	69-123	60-132	2	0-20	
Tert-Butyl Alcohol (TBA)	77	80	63-123	53-133	3	0-20	
Diisopropyl Ether (DIPE)	95	97	59-137	46-150	2	0-37	
Ethyl-t-Butyl Ether (ETBE)	94	98	69-123	60-132	4	0-20	
Tert-Amyl-Methyl Ether (TAME)	101	96	70-120	62-128	5	0-20	
Ethanol	104	66	28-160	6-182	45	0-57	

Total number of LCS compounds : 14
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

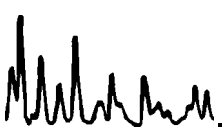
Glossary of Terms and Qualifiers

Work Order Number: 10-04-0877

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

Work Order Number: 10-04-0877

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



Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

0877

BP/ARC Project Name: BP 6113
BP/ARC Facility No: 6113
Req Due Date (mm/dd/yy):
Rush TAT: Yes ___ No X
Lab Work Order Number:

Lab Name: Calscience	BP/ARC Facility Address: 785 E. Stanley Boulevard	Consultant/Contractor: Broadbent & Associates, Inc.
Lab Address: 7440 Lincoln Way	City, State, ZIP Code: Livermore, CA	Consultant/Contractor Project No: 06-82-637-5-822
Lab PM: Richard Villafania	Lead Regulatory Agency: ACEH	Address: 1324 Mangrove Ave. Ste. 212, Chico, CA 95926
Lab Phone: 714-895-5494	California Global ID No.: T0600100111	Consultant/Contractor PM: Jason Duda
Lab Shipping Accnt: 9225	Enfos Proposal No: 000TS-0007	Phone: 530-566-1400
Lab Bottle Order No:	Accounting Mode: Provision X OOC-BU ___ OOC-RM ___	Email EDD To: jduda@broadbentinc.com
Other Info:	Stage: Operate (5) Activity: Monitoring/MNA (22)	Invoice To: BP/ARC X Contractor ___
BP/ARC EBM: Chuck Carmel		
EBM Phone:		
EBM Email:		

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix:	No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol		Requested Analyses: GRO (8015)	BTEX (8260)	5 Oxys (8260)	EDB (8260)	1,2-DCA (8260)	Ethanol (8260)				
1	MW-4	4/12/10	1120		X			6				X			X	X	X	X	X	X				
2	MW-7		1020		X							X			X	X	X	X	X	X				
3	MW-11		1200		X							X			X	X	X	X	X	X				
4	MW-12		1200		X							X			X	X	X	X	X	X				
5	RMW-13		0940		X							X			X	X	X	X	X	X				
6	VW-1		1050		X							X			X	X	X	X	X	X				
7	TB-6113-100412	4/12/10						2																

Report Type & QC Level: Standard X; Full Data Package ___

Comments: Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

Hold Trip Blank

Sampler's Name: Eric Farrar	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: BAI	BAI	4/12/10	1400			
Shipment Method: GSO Ship Date: 4/12/10						
Shipment Tracking No: 106470693					4/13/10	1030

Special Instructions:

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

GSO
GOLDEN STATE OVERNIGHT

1-800-322-5555
WWW.GSO.COM

SHIPPING AIR BILL

GSO COPY

1 FROM
DATE 4/12/10 SHIPPERS GSO ACCOUNT NO. 9256
COMPANY BAL
ADDRESS 845 Cottonwood Ln STE/ROOM F
CITY Vacaville ZIP CODE 95687
SENDERS NAME Eric PHONE NUMBER 925-247-7901

2 TO
COMPANY CAL SCIENCE
NAME Richard Villafranca PHONE NUMBER 714-895-5494
ADDRESS 7440 LINCOLN WAY
ADDRESS STE/ROOM
CITY GARDEN GROVE ZIP CODE 92841

3 YOUR INTERNAL BILLING REFERENCE WILL APPEAR ON YOUR INVOICE

SPECIAL INSTRUCTIONS

4 PACKAGE INFORMATION
☐ LETTER (MAX 8 OZ)
☒ PACKAGE (WT) 40
☐ DECLARED VALUE $
☐ COD AMOUNT $ (CASH NOT ACCEPTED)

5 DELIVERY SERVICE
☒ PRIORITY OVERNIGHT BY 10:30 AM
☐ EARLY PRIORITY BY 8:00 AM
☐ SATURDAY DELIVERY
*DELIVERY TIMES MAY BE LATER IN SOME AREAS • CONSULT YOUR SERVICE GUIDE OR CALL GOLDEN STATE OVERNIGHT.

6 RELEASE SIGNATURE
SIGN TO AUTHORIZE DELIVERY WITHOUT OBTAINING SIGNATURE

7 CREDIT CARD ☐ M/C ☐ VISA ☐ AM EX
CREDIT CARD NUMBER EXP. DATE

8 PICK UP INFORMATION
TIME DRIVER # ROUTE #
106470693

9 GSO TRACKING NUMBER
106470693

0877

ORC

GSO
GOLDEN STATE OVERNIGHT
1-800-322-5555
www.gso.com

PDS

D

GARDEN GROVE
92841 30 lb 1/V12

D92843A

80760803 1004121807

CSL-06

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 10-04-0877

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Broadbent DATE: 04/13/10

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 2.4 °C + 0.5 °C (CF) = 2.9 °C ☑ Blank ☐ Sample

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

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

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

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only Initial: JP

CUSTODY SEALS INTACT:

☑ Cooler ☐_____ ☐ No (Not Intact) ☐ Not Present ☐ N/A Initial: JP

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: YL

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☑	☐	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑6 VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na**

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:** not ours **Labeled/Checked by:** YL

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

Preservative: h: HCL n: HNO_3 na$_2$: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 znna: $ZnAc_2$+NaOH f: Field-filtered **Scanned by:** YL

BROADBENT & ASSOCIATES INC. FIELD PROCEDURES

A.1 QUALITY ASSURANCE/QUALITY CONTROL FIELD PROTOCOLS

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

A.1.1 Water Level & Free-Product Measurement

Prior to ground-water sample collection from each monitoring well, the presence of separate-phase hydrocarbons (SPH or free product, FP) and depth to ground water shall be measured. Depth to ground water will be measured with a standard water level indicator that has been decontaminated prior to its use in accordance with procedures discussed below. Depth to groundwater will be gauged from a saw cut notch at the top of the well casing on each well head. Where FP is suspected, the initial gauging will be done with an oil-water interface probe. Once depth to water has been measured, the first retrieval of a new disposable bailer will be scrutinized for the presence of SPH/FP.

A.1.2 Monitoring Well Purging

Subsequent to measuring depth to ground water and prior to the collection of ground-water samples, purging of standing water within the monitoring will be performed if called for. Consistent with the American Society for Testing and Materials (ASTM) Standard D6452-99, Section 7.1, the well will be purged of approximately three wetted-casing volumes of water, or until the well is dewatered, or until monitored field parameters indicate stabilization. The well will be purged using a pre-cleaned disposable bailer or submersible pump and disposable plastic tubing dedicated to each individual well. The well will be purged at a low flow rate to minimize the possibility of purging the well dry. So that the sample collected is representative of formation water, several field parameters will be monitored during the purging process. The sample will not be collected until these parameters (i.e. temperature, pH, and conductivity) have stabilized to within 10% of the previously measured value. If a well is purged dry, the sample should not be collected until the well has recovered to a minimum 50% of its initial volume.

A.1.3 Ground-Water Sample Collection

Once the wells are satisfactorily purged, water samples will be collected from each well. Water samples for organic analyses will be collected using a pre-cleaned, new, disposable bailer and transferred into the appropriate, new, laboratory-prepared containers such that no head space or air bubbles are present in the sample container (if appropriate to the analysis). The samples will be properly labeled (i.e. sample identification, sampler initials, date/time of collection, site location, requested analyses), placed in an ice chest with bagged ice or ice substitute, and delivered to the contracted analytical laboratory.

A.1.4 Surface Water Sample Collection

Unless specified otherwise, surface water samples will be collected from mid-depth in the central area of the associated surface water body. Water samples will be collected into appropriate, new, laboratory-prepared containers by dipping the container into the surface water unless the container has a preservative present. If a sample preservative is present, a new, cleaned non-preserved surrogate container will be used to obtain the sample which will then be directly transferred into a new, laboratory-provided, preserved container. Samples will be properly labeled and transported as described above.

A.1.5 Decontamination Protocol

Prior to use in each well, re-usable ground-water sampling equipment (e.g., water level indicator, oil-interface probe, purge pump, etc.) will be decontaminated. Decontamination protocol will include thoroughly cleaning with a solution of Liquinox, rinsing with clean water, and final rinsing with control water (potable water of known quality, distilled, or de-ionized water). Pre-cleaned new disposable bailers and disposable plastic tubing will be dedicated to each individual well.

A.1.6 Chain of Custody Procedures

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

Field Custody Procedures

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

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

Transfer of Custody and Shipment

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

Samples will be packaged properly for shipment and dispatched to the appropriate laboratory for analysis, with a separate COC accompanying each shipment. Shipments will be accompanied by the original COC. Samples will be delivered by BAI personnel to the laboratory, or shipped by responsible courier. When a shipping courier is utilized, the sample shipment number will be identified on the COC.

A.1.7 Field Records

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

APPENDIX C

GEOTRACKER UPLOAD CONFIRMATION REPORTS

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!

Submittal Type:	**GEO_WELL**
Submittal Title:	**2Q10 GEO_WELL 6113**
Facility Global ID:	**T0600100111**
Facility Name:	**ARCO #06113**
File Name:	**GEO_WELL.zip**
Organization Name:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**5/5/2010 10:51:18 AM**
Confirmation Number:	**5764502286**

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:	**EDF - Monitoring Report - Semi-Annually**
Submittal Title:	**2Q10 GW Monitoring**
Facility Global ID:	**T0600100111**
Facility Name:	**ARCO #06113**
File Name:	**10040877.zip**
Organization Name:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**5/5/2010 11:22:18 AM**
Confirmation Number:	**9585801482**

VIEW QC REPORT

VIEW DETECTIONS REPORT

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A GEO_BORE FILE

SUCCESS

Your GEO_BORE file has been successfully submitted!

Submittal Type:	**GEO_BORE**
Facility Global ID:	**T0600100111**
Field Point:	**RMW-13**
Facility Name:	**ARCO #06113**
File Name:	**GEO_BORE RMW-13.pdf**
Username:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**5/5/2010 10:25:44 AM**
Confirmation Number:	**1242804288**

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A GEO_MAP FILE

SUCCESS

Your GEO_MAP file has been successfully submitted!

Submittal Type:	**GEO_MAP**
Facility Global ID:	**T0600100111**
Facility Name:	**ARCO #06113**
File Name:	**785 EAST STANLEY_2010-04-23.pdf**
Username:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**5/5/2010 10:23:44 AM**
Confirmation Number:	**2239343106**

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A GEO_XY FILE

SUCCESS

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

Submittal Type:	**GEO_XY**
Submittal Title:	**GEO_XY 4-23-2010**
Facility Global ID:	**T0600100111**
Facility Name:	**ARCO #06113**
File Name:	**GEO_XY.zip**
Organization Name:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**5/5/2010 10:22:10 AM**
Confirmation Number:	**1140885710**

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A GEO_Z FILE

SUCCESS

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

Submittal Type:	**GEO_Z**
Submittal Title:	**GEO_Z 4-23-2010**
Facility Global ID:	**T0600100111**
Facility Name:	**ARCO #06113**
File Name:	**GEO_Z.zip**
Organization Name:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**5/5/2010 10:22:52 AM**
Confirmation Number:	**7773217737**

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:	**EDF - Other Report / Document**
Submittal Title:	**Well Installation Activities 3-11-2010**
Facility Global ID:	**T0600100111**
Facility Name:	**ARCO #06113**
File Name:	**10031140.zip**
Organization Name:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**5/5/2010 12:37:15 PM**
Confirmation Number:	**2172189176**

VIEW QC REPORT

VIEW DETECTIONS REPORT