Atlantic Richfield Company
(a BP affiliated company)

P.O. Box 1257
San Ramon, CA 94583
Phone: (925) 275-3801
Fax: (925) 275-3815

30 October 2008

Re: Third Quarter 2008 Ground-Water Monitoring and Remediation System Status Report
Atlantic Richfield Company (a BP affiliated company) Station #2111
1156 Davis Street
San Leandro, California
ACEH Case #RO0000494

"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:

Paul Supple
Environmental Business Manger

Third Quarter 2008 Ground-Water Monitoring
and
Remediation System Status Report
Atlantic Richfield Company Station #2111
1156 Davis Street
San Leandro, California

Prepared for

Mr. Paul Supple
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 Avenue, Suite 212
Chico, California 95926
(530) 566-1400
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30 October 2008

Project No. 06-08-615

Broadbent & Associates, Inc.
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BROADBENT & ASSOCIATES, INC
ENVIRONMENTAL, WATER RESOURCES & ENGINEERING

30 October 2008 Project No. 06-08-615

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

Attn.: Mr. Paul Supple

Re: Third Quarter 2008 Ground-Water Monitoring and Remediation System Status Report, Atlantic Richfield Company (a BP affiliated company) Station #2111, 1156 Davis Street, San Leandro, California; ACEH Case #RO0000494

Dear Mr. Supple:

Attached is the *Third Quarter 2008 Ground-Water Monitoring and Remediation System Status Report* for Atlantic Richfield Company Station #2111 located at 1156 Davis Street, San Leandro, California (Site). This report presents results of ground-water monitoring conducted at the Site during the Third Quarter 2008, and summarizes the performance of the remediation system during the same period.

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

Sincerely,

BROADBENT & ASSOCIATES, INC.

Thomas A. Venus, P.E.
Senior Engineer

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

PROFESSIONAL GEOLOGIST
ROBERT H. MILLER
No. 561
CERTIFIED HYDROGEOLOGIST
exp. 4-30-10
STATE OF CALIFORNIA

Enclosures

cc: Mr. Paresh Khatri, Alameda County Environmental Health (Submitted via ACEH ftp site)
Mr. Karl Busche, City of San Leandro Environmental Services Division, 835 East 14th Street, San Leandro, California 94577
Electronic copy uploaded to GeoTracker

STATION #2111 QUARTERLY GROUND-WATER MONITORING AND REMEDIATION SYSTEM STATUS REPORT

Facility: #2111 Address:	1156 Davis Street, San Leandro, California
Environmental Business Manager:	Mr. Paul Supple
Consulting Co./Contact Persons:	Broadbent & Associates, Inc.(BAI)/Rob Miller & Tom Venus (530) 566-1400
Consultant Project No.:	06-08-615
Primary Agency/Regulatory ID No.:	Alameda County Environmental Health (ACEH) ACEH Case #RO0000494
Facility Permits/Permitting Agency:	City of San Leandro Special Discharge Permit SD-036; Bay Area Air Quality Management District Plant 16189

WORK PERFORMED THIS QUARTER (Third Quarter 2008):

1. Prepared and submitted Second Quarter 2008 Ground-Water Monitoring and Remediation System Status Report.
2. Conducted ground-water monitoring/sampling for Third Quarter 2008. Work performed on 20 August 2008 by Stratus Environmental, Inc (Stratus).
3. Performed routine operation, maintenance and performance monitoring of the Dual-Phase Extraction (DPE) treatment system. Work performed by Stratus.
4. Submitted monthly discharge reports for July, August and September 2008 to the City of San Leandro. Work performed by Stratus.

WORK PROPOSED FOR NEXT QUARTER (Fourth Quarter 2008):

1. Prepared and submitted this Third Quarter 2008 Ground-Water Monitoring and Remediation System Status Report (contained herein).
2. Conduct quarterly ground-water monitoring/sampling for Fourth Quarter 2008.
3. Continue operation, maintenance and performance monitoring of the DPE treatment system.
4. Submit monthly discharge reports for October, November and December 2008.

QUARTERLY RESULTS SUMMARY:

Current phase of project:	**Ground-Water Monitoring/Sampling/DPE Remediation**
Frequency of ground-water monitoring:	**Quarterly: MW-1 through MW-8**
Frequency of ground-water sampling:	**Quarterly: MW-1 through MW-5, MW-7 and MW-8** **Annually (3Q): MW-6**
Is free product (FP) present on-site:	**No**
FP recovered this quarter:	**0 gallons**
Cumulative FP recovered:	**1.44 gallons (MW-2)**
Depth to ground-water (below TOC):	**15.59 ft (MW-6) to 18.32 ft (MW-1)**
General ground-water flow direction:	**West**
Approximate hydraulic gradient:	**0.006 ft/ft**
Current remediation techniques:	**DPE treatment system**
System startup:	**01/29/2007**
Extraction wells:	**SVE: V-1, V-2, V-3, MW-1, MW-3, MW-7, MW-8** **GWE: MW-2**
Frequency of DPE system field monitoring:	**Weekly**
Frequency of DPE system sampling:	**Monthly**

QUARTERLY RESULTS SUMMARY (Continued):

Gallons of ground water treated and discharged:	**This Quarter** **102,976**		**Cumulative** **1,052,669**	
Total operating hours:	**75**		**2287**	
Mass Removal (pounds)				
Gasoline range organics (GRO):	**0.283 (GWE)**	**139.42 (SVE)**	**5.537 (GWE)**	**664.34 (SVE)**
Benzene:	**0.005 (GWE)**		**0.085 (GWE)**	
Methyl-tert butyl ether (MTBE):	**0.319 (GWE)**		**7.993 (GWE)**	
Ground-water DPE system influent sample results (µg/L):	**7/1/2008**	**8/5/2008**	**9/2/2008**	
GRO:	**660**	**80**	**77**	
Benzene:	**9.2**	**<5.0**	**<5.0**	
MTBE:	**400**	**370**	**380**	
Ground-water DPE system effluent sample results (µg/L):				
GRO:	**<50**	**<50**	**<50**	
Benzene:	**<0.50**	**<0.50**	**<0.50**	
MTBE:	**<0.50**	**<0.50**	**<0.50**	
Soil vapor DPE system influent sample results (mg/M^3):				
GRO:	**1,200**	**1,100**	**1,300**	
Benzene:	**1.5**	**0.62**	**0.67**	
MTBE:	**9.3**	**10**	**13**	
Soil vapor DPE system effluent sample results (mg/M^3):				
GRO:	**<50**	**<50**	**<50**	
Benzene:	**<0.0016**	**<0.0016**	**<0.0016**	
MTBE:	**0.39**	**<0.0072**	**<0.0072**	

DISCUSSION:

Third quarter 2008 ground-water monitoring and sampling was conducted at Station #2111 on 20 August 2008 by Stratus personnel. Water levels were gauged in the eight wells associated with the Site. No irregularities were noted during water level gauging. Depth to water measurements ranged from 15.59 ft at MW-6 to 18.32 ft at MW-1. Resulting ground-water surface elevations ranged from 21.97 ft above mean sea level in well MW-7 to 21.01 ft in well MW-5. Water level elevations were between historic minimum and maximum ranges for each well, as summarized in Table 1, with the following exceptions: water level elevations reached historic minimum values in wells MW-4, MW-5, MW-6, and MW-8. Water level elevations yielded a potentiometric ground-water flow direction and gradient to the west at approximately 0.006 ft/ft, generally consistent with historical data (see Table 3). Ground-water monitoring field data sheets are provided within Appendix A. Measured depths to ground water and respective ground-water elevations are summarized in Table 1. Historic free product thickness and cumulative product recovery from well MW-2 is presented in Table 4. Potentiometric ground-water elevation contours are presented in Drawing 1.

Consistent with the current ground-water sampling schedule, water samples were collected from wells MW-1 through MW-8. No irregularities were reported during well sampling this quarter. Samples were submitted under chain-of-custody protocol to Calscience Environmental Laboratories, Inc. (Garden Grove, California), for analysis of Gasoline Range Organics (GRO, C6-12) by the EPA Method 8015B; for Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) by EPA Method 8260B; and tert-Amyl

methyl ether (TAME), tert-Butyl alcohol (TBA), Di-isopropyl ether (DIPE), 1,2-Dibromomethane (EDB), 1,2-Dichloroethane (1,2-DCA), Ethanol, Ethyl tert-butyl ether (ETBE), and Methyl tert-butyl ether (MTBE) 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 A.

Concentrations of GRO were detected above the laboratory reporting limit in one of the eight wells sampled at a concentration of 990 micrograms per liter (µg/L) in well MW-2. Benzene was detected above the laboratory reporting limit in one of the eight wells sampled at a concentration of 21 µg/L in well MW-2. TBA was detected above the laboratory reporting limit in four of the eight wells sampled at concentrations up to 520 µg/L in well MW-5. MTBE was detected above the laboratory reporting limit in six of the eight wells sampled at concentrations up to 190 µg/L in well MW-2. The remaining fuel additives and oxygenates were not detected above their laboratory reporting limits in the eight wells sampled this quarter.

Detected analyte concentrations were within the historic minimum and maximum ranges recorded for each well, with the following exceptions: GRO reached a historic minimum concentration in well MW-7 (<50 µg/L); ethylbenzene reached a historic minimum concentration in well MW-7 (<0.50 µg/L); total xylenes reached a historic minimum concentration in well MW-7 (<0.50 µg/L); TAME reached a historic minimum concentration in well MW-7 (<0.50 µg/L); TBA reached historic minimum concentrations in wells MW-1 (<10 µg/L) and MW-7 (34 µg/L) and MTBE concentrations reached historic minimum concentrations in wells MW-1 (3.3 µg/L), MW-2 (190 µg/L), MW-3 (0.70 µg/L), MW-5 (3.6 µg/L), MW-7 (39 µg/L), and MW-8 (13 µg/L). Historic laboratory analytical results are summarized in Table 1 and Table 2. The most recent GRO, Benzene, and MTBE concentrations are also presented in Drawing 1. A copy of the laboratory analytical report, including chain-of-custody documentation is provided in Appendix A. Ground-water monitoring data (GEO_WELL) and laboratory analytical results (EDF) were uploaded to the GeoTracker AB2886 database. Upload confirmation pages are provided in Appendix B.

For the Third Quarter 2008 period from 1 July 2008 to 24 September 2008, the DPE system reportedly operated approximately 3.68 percent of the time. During this period, a total of 102,976 gallons of ground water was treated and discharged. During the Third Quarter 2008, approximately 0.283 pounds of GRO (0.046 gallons), approximately 0.005 pounds of benzene (0.001 gallons), and approximately 0.319 pounds of MTBE (0.052 gallons) were removed. Ground-water extraction system performance and analytical data is summarized in Tables 5, 6 and 7. Soil vapor extraction system performance and analytical data is summarized in Tables 8, 9 and 10.

The DPE system operated for approximately 75 hours between 1 July 2008 and 24 September 2008 based on the hour meter reading. Stratus found the system non-operational upon arrival at the Site on 1 July 2008 due to a high-water level alarm in the air stripper tank. The system was restarted momentarily on 1 July 2008 to facilitate sample collection and then shut down pending receipt of the laboratory results. GRO and MTBE were detected above laboratory reporting limits in the mid-fluent vapor sample collected on 1 July 2008 at concentrations of 120 mg/m^3 and 12 mg/m^3, respectively. On 7 July 2008, Stratus visited the Site to collect a vapor-phase carbon sample. The system was left non-operational pending a vapor-phase carbon change-out. On 23 July 2008, Stratus oversaw EnviroSupply and Service, Inc. conduct a vapor-phase carbon change-out. This system was restarted upon departure and left operational. Stratus found the system non-operational upon arrival at the Site on 29 July 2008 due to a high-water level alarm in the air stripper tank. During this visit, Stratus changed the filters and restarted the system, which was left operational upon departure.

Stratus found the system non-operational upon arrival at the Site on 5 August 2008 due to a high-water level alarm. The system was restarted and samples were collected. The system was operational upon departure. Stratus found the system non-operational upon arrival at the Site on 12 August 2008 due to a high-water level alarm. The carbon within the lead vessel was broken up in an attempt to reduce the high pressure observed within the tank. The system was restarted and left operational upon departure. Stratus found the system non-operational upon arrival at the Site on 21 August 2008 due to a high-water level alarm. The system was restarted and left operational upon departure. Stratus found the system non-operational upon arrival at the Site on 27 August 2008 due to a high-water level alarm in the air stripper. Stratus states that the carbon needs to be changed in order to increase the flow through the vessels. The system was restarted and left operational upon departure.

Stratus found the system non-operational upon arrival at the Site on 2 September 2008 due to a high water level in either the air stripper tank or oil-water separator. The system was restarted momentarily on 2 September 2008 to facilitate sample collection and then shut down pending receipt of the laboratory results. The system was restarted on 10 September following receipt of the laboratory analytical results. Due to excessive cementing of the carbon within the liquid-phase carbon vessels that caused back pressure on the transfer pump, a carbon sample was collected during this visit for profiling and disposal purposes. A liquid-phase carbon change out was scheduled for 2 October 2008. The system was left operational upon departure. Stratus found the system non-operational upon arrival at the Site on 17 September 2008 due to a high water level. The system was restarted and left operational upon departure. Stratus found the system non-operational upon arrival at the Site on 24 September 2008 due to a high water level in the air stripper tank. The system was restarted and left operational upon departure. Copies of Stratus' remediation system operation and maintenance data packages for Third Quarter 2008 are contained within Appendix C. Copies of Stratus' remediation system monthly discharge reports for Third Quarter 2008 are contained within Appendix D.

CLOSURE:

The findings presented in this report are based upon: observations of Stratus field personnel (see Appendices A, C, D), 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 report was written. No other warranty, expressed or implied was made. This report has been prepared for the exclusive use of Atlantic Richfield Company. It is possible that variations in soil or ground-water conditions could exist beyond points explored in this investigation. Also, changes in site conditions could occur in the future due to variations in rainfall, temperature, regional water usage, or other factors.

ATTACHMENTS:

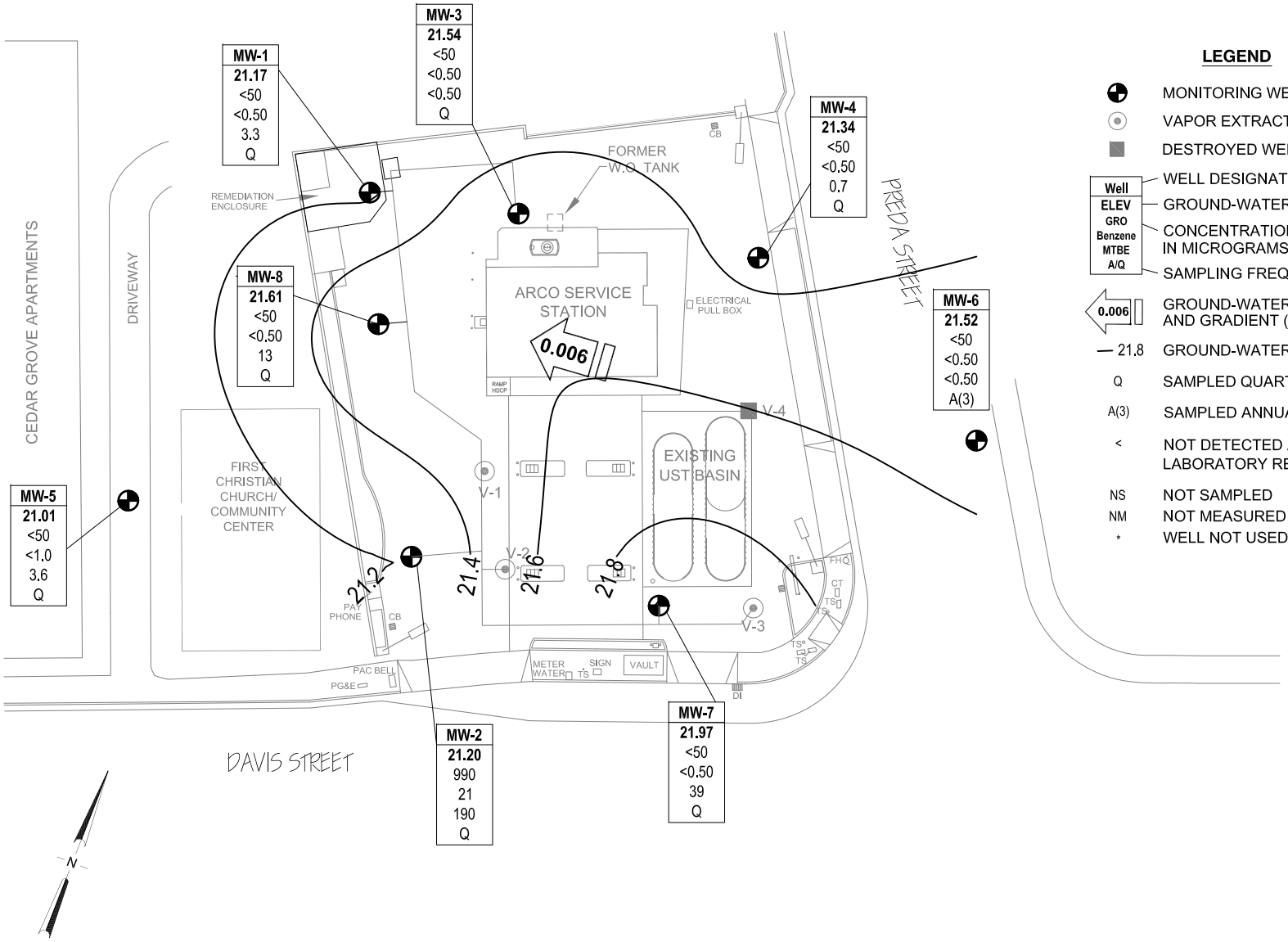
Drawing 1. Ground-Water Elevation Contour and Analytical Summary Map – 20 August 2008

Drawing 2. DPE Treatment System Process Flow Diagram with Sample Locations

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

Table 2. Summary of Fuel Additives Analytical Data

Table 3. Historical Ground-Water Flow Direction and Gradient



LEGEND

- MONITORING WELL LOCATION
- VAPOR EXTRACTION WELL LOCATION
- DESTROYED WELL LOCATION
- Well — WELL DESIGNATION
- ELEV — GROUND-WATER ELEVATION (FT MSL)
- GRO, Benzene, MTBE — CONCENTRATIONS OF GRO, BENZENE & MTBE IN MICROGRAMS PER LITER (µg/L)
- A/Q — SAMPLING FREQUENCY
- 0.006 — GROUND-WATER FLOW DIRECTION AND GRADIENT (FT/FT)
- 21.8 — GROUND-WATER ELEVATION CONTOUR (FT MSL)
- Q — SAMPLED QUARTERLY
- A(3) — SAMPLED ANNUALLY, THIRD QUARTER
- < — NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMIT
- NS — NOT SAMPLED
- NM — NOT MEASURED
- * — WELL NOT USED TO GENERATE CONTOURS

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

0 40 80
SCALE (ft)

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave. Suite 212, Chico, California 95926
Project No.: 06-08-615 Date: 9/27/08

Station #2111
1156 Davis Street
San Leandro, California

Ground-Water Elevation Contours and Analytical Summary Map
20 August 2008

Drawing
1

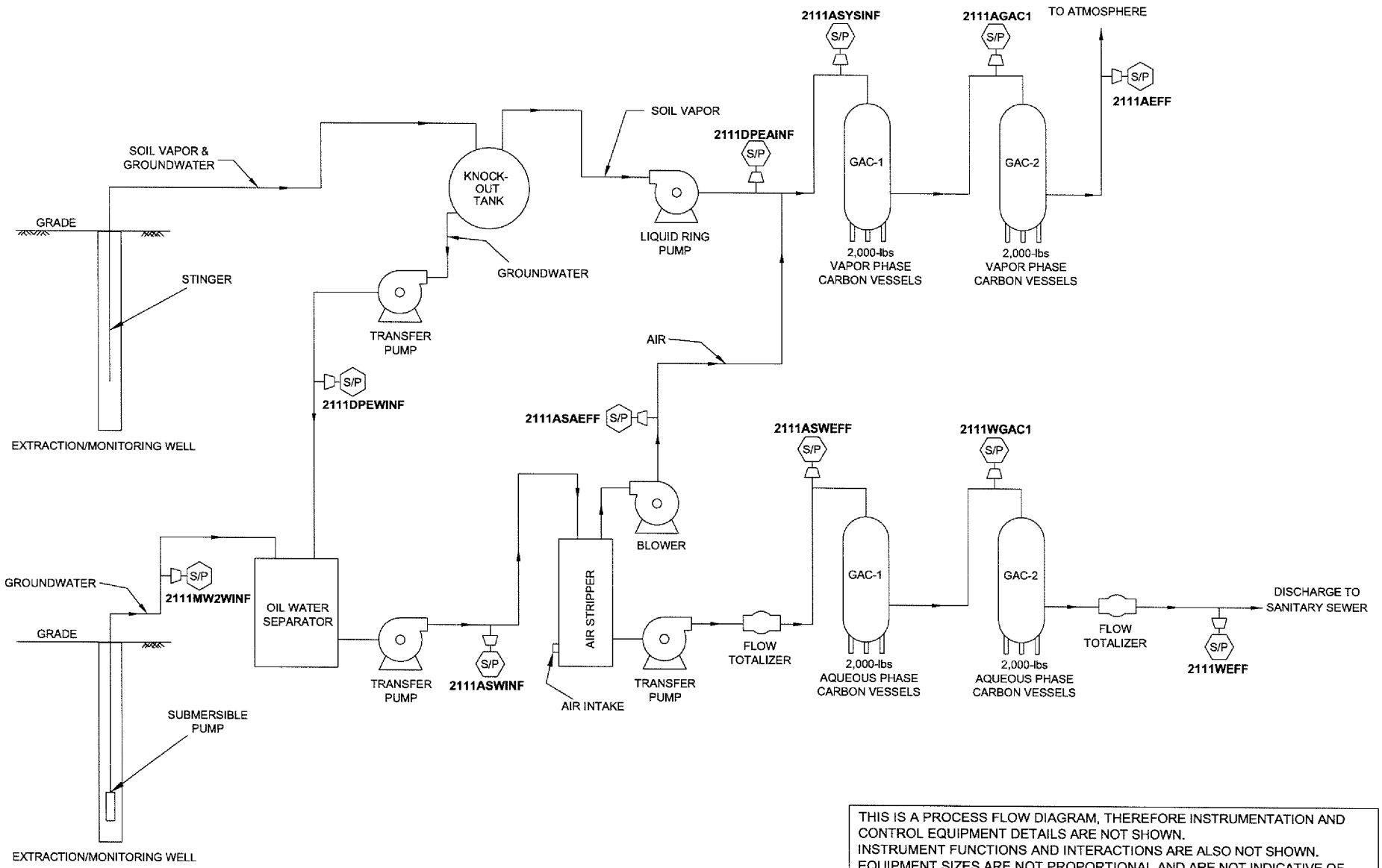


Diagram from Stratus Environmental Inc.

NOT TO SCALE	BROADBENT & ASSOCIATES, INC. ENGINEERING, WATER RESOURCES & ENVIRONMENTAL 1324 Mangrove Ave. Suite 212, Chico, California 95926 Project No.: 06-08-615 Date: 7/28/08	Station #2111 1156 Davis Street San Leandro, California	DPE Treatment System Process Flow Diagram with Sample Locations

Drawing
2

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

Station #2111, 1156 Davis St, San Leandro, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-1															
6/26/2000	--		39.60	12.50	26.00	16.46	23.14	--	--	--	--	--	--	--	--
7/20/2000	--		39.60	12.50	26.00	16.89	22.71	360	110	<0.5	<0.5	2.7	2,100	--	--
9/19/2000	--		39.60	12.50	26.00	17.62	21.98	290	76	<0.5	<0.5	2.3	1,500	--	--
12/21/2000	--		39.60	12.50	26.00	17.39	22.21	257	64	2.89	1.31	4.57	1,080/1,060	--	--
3/13/2001	--		39.60	12.50	26.00	15.70	23.90	<500	52.5	<5.0	<5.0	<5.0	1,430/1,370	--	--
9/18/2001	--		39.60	12.50	26.00	18.24	21.36	<500	64	7.3	<5.0	52	810/1,100	--	--
12/28/2001	--		39.60	12.50	26.00	15.95	23.65	<500	<5.0	<5.0	5	22	1,200/1,100	--	--
3/14/2002	--		39.60	12.50	26.00	16.01	23.59	<50	<0.5	<0.5	<0.5	<0.5	34/40	--	--
4/23/2002	--		39.60	12.50	26.00	15.43	24.17	<50	<0.5	<0.5	<0.5	<0.5	30	--	--
7/17/2002	NP		39.60	12.50	26.00	17.50	22.10	<50	1.2	<0.50	<0.50	<0.50	29	6.9	6.9
10/9/2002	--	c	39.60	12.50	26.00	18.27	21.33	240	4.9	<1.0	4.1	7.0	290	6.5	6.5
1/13/2003	--	c	39.60	12.50	26.00	15.37	24.23	760	34	11	17	56	300	6.8	6.8
04/07/03	--		39.60	12.50	26.00	16.61	22.99	<50	<0.50	<0.50	<0.50	<0.50	22	6.8	6.8
7/9/2003	--		39.60	12.50	26.00	17.27	22.33	<2,500	<25	<25	<25	<25	690	6.7	6.7
02/05/2004	NP	m	39.49	12.50	26.00	16.28	23.21	2,800	31	<25	<25	<25	1,100	0.9	6.5
04/05/2004	NP		39.49	12.50	26.00	16.25	23.24	5,800	46	<25	<25	<25	1,700	1.0	--
07/13/2004	NP		39.49	12.50	26.00	17.57	21.92	<1,000	<10	<10	<10	<10	730	0.5	6.6
11/04/2004	NP		39.49	12.50	26.00	17.78	21.71	560	<5.0	<5.0	<5.0	<5.0	380	0.8	6.5
01/20/2005	NP		39.49	12.50	26.00	15.50	23.99	670	<5.0	<5.0	<5.0	<5.0	570	0.6	6.0
04/11/2005	NP		39.49	12.50	26.00	14.82	24.67	<2,500	<25	<25	<25	25	1,100	0.9	6.9
08/01/2005	NP		39.49	12.50	26.00	16.77	22.72	2,200	33	<10	110	<10	1,400	1.27	7.3
10/21/2005	NP		39.49	12.50	26.00	17.71	21.78	<2,500	<25	<25	<25	<25	970	1.17	6.6
01/18/2006	NP	n	39.49	12.50	26.00	14.70	24.79	300	<2.5	<2.5	<2.5	<2.5	330	1.07	6.6
04/14/2006	NP		39.49	12.50	26.00	13.41	26.08	330	<2.5	<2.5	<2.5	<2.5	310	0.79	6.6
7/19/2006	NP	q	39.49	12.50	26.00	15.86	23.63	<250	<2.5	<2.5	<2.5	<2.5	180	1.2	6.7
10/24/2006	P		39.49	12.50	26.00	17.15	22.34	710	4.2	<2.5	19	13	360	--	6.68
1/15/2007	P		39.49	12.50	26.00	16.81	22.68	470	2.8	<2.5	14	8.4	220	1.14	7.12
4/18/2007	NP		39.49	12.50	26.00	16.69	22.80	100	<2.5	<2.5	<2.5	<2.5	150	1.20	6.85
7/17/2007	NP		39.49	12.50	26.00	20.85	18.64	<50	<1.0	<1.0	<1.0	<1.0	94	1.91	6.98
10/11/2007	NP		39.49	12.50	26.00	18.10	21.39	66	<0.50	<0.50	<0.50	<0.50	62	1.60	7.00
1/8/2008	NP	n	39.49	12.50	26.00	15.97	23.52	140	<0.50	<0.50	<0.50	<0.50	90	1.19	5.60

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

Station #2111, 1156 Davis St, San Leandro, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-1 Cont.															
4/8/2008	NP		39.49	12.50	26.00	16.53	22.96	88	<0.50	<0.50	<0.50	<0.50	110	1.73	6.89
8/20/2008	**NP**		**39.49**	**12.50**	**26.00**	**18.32**	**21.17**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**3.3**	**2.37**	**6.95**
MW-2															
6/26/2000	--	a	37.99	12.0	26.00	14.60	23.39	--	--	--	--	--	--	--	--
7/20/2000	--		37.99	12.0	26.00	15.14	22.85	95,000	2,300	18,000	2,500	19,000	13,000	--	--
9/19/2000	--		37.99	12.0	26.00	15.95	22.04	63,000	1,200	6,300	2,000	14,000	19,000	--	--
12/21/2000	--		37.99	12.0	26.00	15.60	22.39	45,900	--	2,130	1,160	9,460	22,400/24,700	--	--
12/21/00	--	b	37.99	12.0	26.00	--	--	5,010	360	189	213	626	54,300/89,200	--	--
3/13/2001	--		37.99	12.0	26.00	13.77	24.22	3,650	98.1	<5.0	<5.0	6.42	3,590/3,260	--	--
3/13/2001	--	b	37.99	12.0	26.00	--	--	<20,000	525	466	408	1,460	91,700/76,000	--	--
9/18/2001	--	a	37.99	12.0	26.00	16.86	21.13	--	--	--	--	--	--	--	--
12/28/2001	--		37.99	12.0	26.00	14.28	23.71	31,000	1,500	3,800	1,300	4,800	9,300/8,800	--	--
3/14/2002	--		37.99	12.0	26.00	14.15	23.84	1,800	25	43	43	270	990/960	--	--
4/23/2002	--		37.99	12.0	26.00	13.60	24.39	9,000	220	110	470	2,500	8,500	--	--
7/17/2002	NP	a, c	37.99	12.0	26.00	15.75	22.24	74,000	280	290	820	10,000	19,000/0.4	6.8	6.8
10/9/02	NP	g	37.99	12.0	26.00	16.69	21.30	--	--	--	--	--	--	--	--
1/13/03	--	g, h	37.99	12.0	26.00	13.59	24.40	--	--	--	--	--	--	--	--
04/07/03	--	g, h	37.99	12.0	26.00	14.70	23.29	--	--	--	--	--	--	--	--
07/09/03	--	g, h	37.99	12.0	26.00	15.48	22.51	--	--	--	--	--	--	--	--
02/05/2004	NP	g,m	37.86	12.0	26.00	14.43	23.43	--	--	--	--	--	--	--	--
04/05/2004	NP		37.86	12.0	26.00	14.35	23.51	2,300	33	<5.0	<5.0	200	750	0.6	--
07/13/2004	NP		37.86	12.0	26.00	15.79	22.07	59,000	380	<50	2,100	7,900	5,800	0.3	6.4
08/31/2004	--		37.86	12.0	26.00	15.89	21.97	--	--	--	--	--	--	--	--
11/04/2004	--	g, h	37.86	12.0	26.00	15.92	21.94	--	--	--	--	--	--	--	--
01/20/2005	NP	o	37.86	12.0	26.00	13.71	24.15	30,000	450	<50	1,300	3,300	7,000	0.7	6.2
04/11/2005	NP		37.86	12.0	26.00	12.70	25.16	11,000	170	<50	580	630	2,700	0.9	6.8
08/01/2005	NP		37.86	12.0	26.00	14.89	22.97	24,000	170	<50	1,100	2,700	2,700	0.64	6.9
10/21/2005	--	a	37.86	12.0	26.00	16.05	21.81	--	--	--	--	--	--	--	--
01/18/2006	NP	a	37.86	12.0	26.00	12.81	25.05	21,000	71	<50	470	1,400	1,600	1.18	6.6
04/14/2006	NP	a	37.86	12.0	26.00	12.24	25.62	7,800	78	<50	94	130	2,100	0.81	6.7

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

Station #2111, 1156 Davis St, San Leandro, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-2 Cont.															
7/19/2006	NP	q	37.86	12.0	26.00	14.00	23.86	4,900	31	<10	98	75	930	1.1	6.5
10/24/2006	--	g	37.86	12.0	26.00	15.38	22.48	--	--	--	--	--	--	--	6.45
1/15/2007	P		37.86	12.0	26.00	15.00	22.86	5,000	51	<10	49	34	1,400	1.85	7.13
4/18/2007	NP		37.86	12.0	26.00	14.82	23.04	3,000	39	<10	32	22	1,100	1.95	7.10
7/17/2007	NP	n	37.86	12.0	26.00	18.00	19.86	1,100	53	<10	28	<10	1,300	4.84	7.09
10/11/2007	NP		37.86	12.0	26.00	16.38	21.48	1,800	17	<10	<10	11	1,000	1.52	7.05
1/8/2008	NP	n	37.86	12.0	26.00	14.10	23.76	1,900	65	<10	37	28	1,300	1.06	4.22
4/8/2008	NP		37.86	12.0	26.00	14.70	23.16	200	34	<0.50	<0.50	<0.50	690	3.24	6.95
8/20/2008	**NP**		**37.86**	**12.0**	**26.00**	**16.66**	**21.20**	**990**	**21**	**<10**	**<10**	**<10**	**190**	**1.54**	**6.91**
MW-3															
6/26/2000	--		39.32	12.00	**26.00**	15.96	23.36	--	--	--	--	--	--	--	--
7/20/2000	--		39.32	12.00	**26.00**	16.42	22.90	<50	<0.5	<0.5	<0.5	<1.0	130	--	--
9/19/2000	--		39.32	12.00	**26.00**	17.18	22.14	190	17	<0.5	1.4	2.4	160	--	--
12/21/2000	--		39.32	12.00	**26.00**	16.97	22.35	187	17.8	<0.5	2.47	2.5	143/125	--	--
3/13/2001	--		39.32	12.00	**26.00**	15.17	24.15	72.4	2.83	<0.5	<0.5	<0.5	126/122	--	--
9/18/2001	--		39.32	12.00	**26.00**	17.81	21.51	140	6.4	<0.5	3.5	1.6	110/75	--	--
12/28/2001	--		39.32	12.00	**26.00**	15.44	23.88	130	5.9	<0.5	0.99	0.55	90/63	--	--
3/14/2002	--		39.32	12.00	**26.00**	15.50	23.82	<50	<0.5	<0.5	<0.5	<0.5	100/88	--	--
4/23/2002	--		39.32	12.00	**26.00**	14.96	24.36	<50	<0.5	<0.5	<0.5	<0.5	77	--	--
7/17/2002	NP		39.32	12.00	**26.00**	17.09	22.23	<50	<0.50	<0.50	<0.50	<0.50	47	7.2	7.2
10/9/2002	NP		39.32	12.00	**26.00**	17.87	21.45	<50	<0.50	<0.50	<0.50	<0.50	26/29	7.2	7.2
1/13/2003	NP	l	39.32	12.00	**26.00**	14.78	24.54	<50	<0.50	<0.50	<0.50	<0.50	59	6.8	6.8
04/07/03	NP		39.32	12.00	**26.00**	16.15	23.17	88	<0.50	<0.50	<0.50	<0.50	75	7.0	7.0
7/9/2003	--		39.32	12.00	**26.00**	16.79	22.53	100	<0.50	<0.50	<0.50	<0.50	52	6.5	6.5
02/05/2004	NP	m	39.19	12.00	26.00	15.66	23.53	240	<0.50	<0.50	<0.50	<0.50	37	0.5	--
04/05/2004	NP		39.19	12.00	26.00	15.78	23.41	140	<0.50	<0.50	<0.50	0.60	53	1.0	6.6
07/13/2004	NP		39.19	12.00	26.00	17.20	21.99	120	<0.50	<0.50	<0.50	<0.50	35	0.8	6.7
11/04/2004	NP		39.19	12.00	26.00	17.32	21.87	160	<0.50	<0.50	<0.50	<0.50	25	0.8	6.5
01/20/2005	NP		39.19	12.00	26.00	15.07	24.12	160	<0.50	<0.50	<0.50	<0.50	27	0.6	6.1
04/11/2005	NP		39.19	12.00	26.00	14.24	24.95	<50	<0.50	<0.50	<0.50	<0.50	21	0.6	6.1

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Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-3 Cont.															
08/01/2005	NP		39.19	12.00	26.00	16.29	22.90	<50	<0.50	<0.50	<0.50	<0.50	23	1.04	7.2
10/21/2005	NP		39.19	12.00	26.00	17.41	21.78	88	<0.50	<0.50	<0.50	<0.50	19	1.9	6.6
01/18/2006	NP		39.19	12.00	26.00	13.80	25.39	73	<0.50	<0.50	<0.50	<0.50	13	1.13	6.6
04/14/2006	NP		39.19	12.00	26.00	12.55	26.64	<50	<0.50	<0.50	<0.50	<0.50	6.7	0.71	6.6
7/19/2006	NP	q	39.19	12.00	26.00	15.04	24.15	<50	<0.50	<0.50	<0.50	<0.50	11	2.0	6.6
10/24/2006	P		39.19	12.00	26.00	16.45	22.74	<50	<0.50	<0.50	<0.50	<0.50	33	--	6.77
1/15/2007	P		39.19	12.00	26.00	16.00	23.19	<50	<0.50	<0.50	0.61	<0.50	29	1.11	7.03
4/18/2007	NP		39.19	12.00	26.00	15.87	23.32	<50	<0.50	<0.50	<0.50	<0.50	9.5	1.67	7.07
7/17/2007	NP		39.19	12.00	26.00	19.40	19.79	<50	<0.50	<0.50	<0.50	<0.50	19	4.25	7.27
10/11/2007	NP		39.19	12.00	26.00	17.43	21.76	<50	<0.50	<0.50	<0.50	<0.50	5.3	1.62	7.10
1/8/2008	NP		39.19	12.00	26.00	15.16	24.03	<50	<0.50	<0.50	<0.50	<0.50	8.9	2.02	6.94
4/8/2008	NP		39.19	12.00	26.00	15.75	23.44	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.98	6.80
8/20/2008	**NP**		**39.19**	**12.00**	**26.00**	**17.65**	**21.54**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**2.85**	**7.62**
MW-4															
6/26/2000	--		38.10	10.0	**24.00**	14.59	23.51	--	--	--	--	--	--	--	--
7/20/2000	--		38.10	10.0	**24.00**	15.04	23.06	97	7.9	<0.5	<0.5	1.1	51	--	--
9/19/2000	--		38.10	10.0	**24.00**	15.83	22.27	110	7	<0.5	<0.5	<1.0	60	--	--
12/21/2000	--		38.10	10.0	**24.00**	15.59	22.51	120	5.6	<0.5	1.72	<0.5	46.3/48.6	--	--
3/13/2001	--		38.10	10.0	**24.00**	13.73	24.37	76	0.796	<0.5	<0.5	<0.5	53.7/50	--	--
9/18/2001	--		38.10	10.0	**24.00**	16.50	21.60	<50	<0.5	<0.5	<0.5	<0.5	25/26	--	--
12/28/2001	--		38.10	10.0	**24.00**	14.03	24.07	<50	<0.5	<0.5	<0.5	<0.5	15/11	--	--
3/14/2002	--		38.10	10.0	**24.00**	14.10	24.00	<50	<0.5	<0.5	<0.5	<0.5	31/28	--	--
4/23/2002	--		38.10	10.0	**24.00**	13.57	24.53	<50	2.8	<0.5	<0.5	<0.5	42	--	--
7/17/2002	NP		38.10	10.0	**24.00**	15.76	22.34	<50	<0.50	<0.50	<0.50	<0.50	16	7.1	7.1
10/9/2002	NP		38.10	10.0	**24.00**	16.59	21.51	<50	2.2	<0.50	<0.50	<0.50	20/23	7.1	7.1
1/13/2003	NP	d	38.10	10.0	**24.00**	13.43	24.67	52	<0.50	1.6	<0.50	<0.50	22	6.6	6.6
04/07/03	NP		38.10	10.0	**24.00**	14.74	23.36	65	<0.50	<0.50	<0.50	<0.50	24	6.6	6.6
7/9/2003	--		38.10	10.0	**24.00**	15.44	22.66	120	<0.50	<0.50	<0.50	<0.50	34	6.6	6.6
02/05/2004	NP	m	37.99	10.0	24.00	14.39	23.60	120	<0.50	<0.50	<0.50	<0.50	22	0.5	6.6
04/05/2004	NP		37.99	10.0	24.00	14.37	23.62	110	<0.50	<0.50	<0.50	<0.50	27	1.1	6.5

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								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-4 Cont.															
07/13/2004	NP		37.99	10.0	24.00	15.96	22.03	77	<0.50	<0.50	<0.50	<0.50	27	0.6	6.6
11/04/2004	NP		37.99	10.0	24.00	16.02	21.97	<50	<0.50	<0.50	<0.50	<0.50	19	1.2	6.7
01/20/2005	NP		37.99	10.0	24.00	13.72	24.27	65	<0.50	<0.50	<0.50	<0.50	18	0.6	6.1
04/11/2005	NP		37.99	10.0	24.00	12.80	25.19	51	<0.50	<0.50	<0.50	<0.50	14	0.7	6.2
08/01/2005	NP		37.99	10.0	24.00	14.88	23.11	<50	<0.50	<0.50	<0.50	<0.50	18	1.46	7.3
10/21/2005	NP		37.99	10.0	24.00	15.01	22.98	<50	<0.50	<0.50	<0.50	<0.50	15	1.24	7.6
01/18/2006	NP		37.99	10.0	24.00	12.92	25.07	<50	<0.50	<0.50	<0.50	<0.50	8.9	0.77	6.5
04/14/2006	NP		37.99	10.0	24.00	11.41	26.58	<50	<0.50	<0.50	<0.50	<0.50	4.2	0.84	6.6
7/19/2006	NP		37.99	10.0	24.00	13.86	24.13	<50	<0.50	<0.50	<0.50	<0.50	3.4	1.0	6.7
10/24/2006	P		37.99	10.0	24.00	15.35	22.64	<50	<0.50	<0.50	2.0	<0.50	3.5	--	6.90
1/15/2007	P		37.99	10.0	24.00	14.96	23.03	<50	<0.50	<0.50	0.96	<0.50	3.8	--	7.04
4/18/2007	NP		37.99	10.0	24.00	14.80	23.19	<50	<0.50	<0.50	<0.50	<0.50	5.6	5.33	6.93
7/17/2007	NP		37.99	10.0	24.00	16.10	21.89	<50	<0.50	<0.50	<0.50	<0.50	6.6	3.73	6.87
10/11/2007	NP		37.99	10.0	24.00	16.45	21.54	<50	<0.50	<0.50	<0.50	<0.50	0.81	2.68	7.07
1/8/2008	NP		37.99	10.0	24.00	14.10	23.89	<50	<0.50	<0.50	<0.50	<0.50	1.2	3.50	6.74
4/8/2008	NP		37.99	10.0	24.00	14.68	23.31	<50	<0.50	<0.50	<0.50	<0.50	1.7	2.54	6.80
8/20/2008	**NP**		**37.99**	**10.0**	**24.00**	**16.65**	**21.34**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**0.70**	**2.36**	**6.90**
MW-5															
6/26/2000	--		37.21	9.50	23.50	14.27	22.94	--	--	--	--	--	--	--	--
7/20/2000	--		37.21	9.50	23.50	14.69	22.52	55	<0.5	<0.5	<0.5	<1.0	14,000	--	--
9/19/2000	--		37.21	9.50	23.50	15.36	21.85	54	<0.5	<0.5	<0.5	<1.0	13,000	--	--
12/21/2000	--		37.21	9.50	23.50	15.15	22.06	72.9	2.51	<0.5	<0.5	0.961	19,200/21,200	--	--
3/13/2001	--		37.21	9.50	23.50	13.50	23.71	<500	<5	<5	<5	<5	15,900/20,000	--	--
9/18/2001	--		37.21	9.50	23.50	15.94	21.27	<10,000	<100	<100	<100	<1,000	22,000/20,000	--	--
12/28/2001	--		37.21	9.50	23.50	13.45	23.76	<10,000	<100	<100	<100	<100	10,000/10,000	--	--
3/14/2002	--		37.21	9.50	23.50	13.82	23.39	<5,000	<50	<50	<50	<50	7,100/7,700	--	--
4/23/2002	--		37.21	9.50	23.50	13.25	23.96	<5,000	<50	<50	<50	<50	8,900	--	--
7/17/2002	NP	d	37.21	9.50	23.50	15.27	21.94	7,900	<50	<50	<50	<50	13,000	7.5	7.5
10/9/2002	NP	e	37.21	9.50	23.50	16.02	21.19	2,400	<20	<20	<20	<20	7,300/7,500	6.7	6.7
1/13/2003	NP	e, k, j	37.21	9.50	23.50	13.20	24.01	6,400	<50	<50	<50	<50	8,900	6.8	6.8

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								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-5 Cont.															
04/07/03	NP		37.21	9.50	**23.50**	14.42	22.79	<10,000	<100	<100	<100	<100	3,700	6.8	6.8
7/9/2003	--		37.21	9.50	**23.50**	15.01	22.20	11,000	<50	<50	<50	<50	6,500	6.9	6.9
02/05/2004	NP	m	37.12	9.50	23.50	14.10	23.02	8,100	<50	<50	<50	<50	7,900	1.5	--
04/05/2004	NP		37.12	9.50	23.50	14.14	22.98	4,000	<25	<25	<25	<25	2,000	1.0	6.6
07/13/2004	NP		37.12	9.50	23.50	15.37	21.75	<5,000	<50	<50	<50	<50	4,000	0.8	6.7
11/04/2004	NP		37.12	9.50	23.50	15.53	21.59	7,400	<50	<50	<50	<50	6,300	3.5	6.7
01/20/2005	NP	n	37.12	9.50	23.50	13.51	23.61	6,500	<50	<50	<50	<50	6,900	0.7	6.5
04/11/2005	NP		37.12	9.50	23.50	12.75	24.37	<5,000	<50	<50	<50	<50	2,600	0.5	7.0
08/01/2005	NP		37.12	9.50	23.50	14.59	22.53	110	<1.0	<1.0	<1.0	<1.0	130	1.36	7.5
10/21/2005	NP		37.12	9.50	23.50	15.57	21.55	<250	<2.5	<2.5	<2.5	<2.5	86	1.53	6.8
01/18/2006	NP		37.12	9.50	23.50	12.60	24.52	<250	<2.5	<2.5	<2.5	<2.5	100	1.2	6.7
04/14/2006	NP		37.12	9.50	23.50	11.74	25.38	310	<2.5	<2.5	<2.5	<2.5	240	0.93	6.6
7/19/2006	NP		37.12	9.50	23.50	13.78	23.34	<50	<2.5	<2.5	<2.5	<2.5	84	1.2	6.6
10/24/2006	P		37.12	9.50	23.50	14.95	22.17	61	<0.50	<0.50	<0.50	<0.50	17	--	6.69
1/15/2007	P		37.12	9.50	23.50	14.63	22.49	73	<0.50	<0.50	<0.50	<0.50	36	2.8	6.73
4/18/2007	NP	n, EBZ present in method blank	37.12	9.50	23.50	14.50	22.62	93	<2.5	<2.5	<2.5	<2.5	16	1.66	6.84
7/17/2007	NP	n	37.12	9.50	23.50	15.55	21.57	53	<2.5	<2.5	<2.5	<2.5	6.6	5.02	7.02
10/11/2007	NP		37.12	9.50	23.50	15.83	21.29	<50	<0.50	<0.50	<0.50	<0.50	4.8	2.92	7.23
1/8/2008	NP		37.12	9.50	23.50	13.82	23.30	<50	<0.50	<0.50	<0.50	<0.50	5.6	1.80	6.91
4/8/2008	NP		37.12	9.50	23.50	14.38	22.74	<50	<0.50	<0.50	<0.50	<0.50	8.0	1.14	6.76
8/20/2008	**NP**		**37.12**	**9.50**	**23.50**	**16.11**	**21.01**	**<50**	**<1.0**	**<1.0**	**<1.0**	**<1.0**	**3.6**	**1.65**	**6.86**
MW-6															
6/26/2000	--		37.11	10.00	**25.00**	13.46	23.65	--	--	--	--	--	--	--	--
7/20/2000	--		37.11	10.00	**25.00**	13.94	23.17	<50	<0.5	<0.5	<0.5	<1.0	<3.0	--	--
9/19/2000	--		37.11	10.00	**25.00**	14.41	22.70	<50	<0.5	<0.5	<0.5	<1.0	<3.0	--	--
12/21/2000	--		37.11	10.00	**25.00**	14.53	22.58	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
3/13/2001	--		37.11	10.00	**25.00**	12.67	24.44	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
9/18/2001	--		37.11	10.00	**25.00**	15.42	21.69	<50	<0.5	<0.5	<0.5	<0.5	<2.5/<2.0	--	--
12/28/2001	--		37.11	10.00	**25.00**	12.96	24.15	<50	<0.5	<0.5	<0.5	<0.5	12/<0.5	--	--
3/14/2002	--		37.11	10.00	**25.00**	12.98	24.13	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--

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

Station #2111, 1156 Davis St, San Leandro, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-6 Cont.															
4/23/2002	--		37.11	10.00	**25.00**	12.44	24.67	<50	<0.5	<0.5	<0.5	<0.5	3.1	--	--
7/17/2002	NP		37.11	10.00	**25.00**	14.65	22.46	<50	<0.50	<0.50	<0.50	<0.50	<2.5	7.3	7.3
10/9/2002	NP		37.11	10.00	**25.00**	15.51	21.60	<50	<0.50	<0.50	<0.50	<0.50	<2.5	7.1	7.1
1/13/2003	NP		37.11	10.00	**25.00**	12.27	24.84	<50	<0.50	<0.50	<0.50	<0.50	<2.5	6.8	6.8
04/07/03	NP		37.11	10.00	**25.00**	13.61	23.50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	6.6	6.6
7/9/2003	--		37.11	10.00	**25.00**	14.34	22.77	<50	<0.50	<0.50	<0.50	<0.50	<0.50	7	7.0
02/05/2004	--	m	37.11	10.00	25.00	13.38	23.73	--	--	--	--	--	--	--	--
04/05/2004	--		37.11	10.00	25.00	13.31	23.80	--	--	--	--	--	--	--	--
07/13/2004	NP		37.11	10.00	25.00	14.65	22.46	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.7	6.8
11/04/2004	--		37.11	10.00	25.00	14.95	22.16	--	--	--	--	--	--	--	--
01/20/2005	--		37.11	10.00	25.00	12.57	24.54	--	--	--	--	--	--	--	--
04/11/2005	--		37.11	10.00	25.00	12.05	25.06	--	--	--	--	--	--	--	--
08/01/2005	NP		37.11	10.00	25.00	13.79	23.32	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.15	7.6
10/21/2005	--		37.11	10.00	25.00	14.60	22.51	--	--	--	--	--	--	--	--
01/18/2006	--		37.11	10.00	25.00	11.80	25.31	--	--	--	--	--	--	--	--
04/14/2006	--		37.11	10.00	25.00	10.92	26.19	--	--	--	--	--	--	--	--
7/19/2006	NP		37.11	10.00	25.00	12.92	24.19	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.3	6.9
10/24/2006	--		37.11	10.00	25.00	14.23	22.88	--	--	--	--	--	--	--	--
1/15/2007	--		37.11	10.00	25.00	13.80	23.31	--	--	--	--	--	--	--	--
4/18/2007	--		37.11	10.00	25.00	13.67	23.44	--	--	--	--	--	--	--	--
7/17/2007	NP		37.11	10.00	25.00	14.08	23.03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.40	7.02
10/11/2007	--		37.11	10.00	25.00	15.28	21.83	--	--	--	--	--	--	--	--
1/8/2008	--		37.11	10.00	25.00	13.08	24.03	--	--	--	--	--	--	--	--
4/8/2008	--		37.11	10.00	25.00	13.52	23.59	--	--	--	--	--	--	--	--
8/20/2008	**NP**		**37.11**	**10.00**	**25.00**	**15.59**	**21.52**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**1.66**	**6.83**
MW-7															
6/26/2000	--		38.68	12.0	**27.00**	14.34	24.34	--	--	--	--	--	--	--	--
7/20/2000	--		38.68	12.0	**27.00**	15.26	23.42	14,000	5.4	<0.5	2.8	5.9	71,000	--	--
9/19/2000	--		38.68	12.0	**27.00**	15.70	22.98	8,400	420	38	470	220	5,600	--	--
12/21/2000	--		38.68	12.0	**27.00**	16.02	22.66	--	--	--	--	--	--	--	--

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

Station #2111, 1156 Davis St, San Leandro, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-7 Cont.															
3/13/2001	--		38.68	12.0	27.00	14.18	24.50	<2,000	154	63	46.3	127	75,000/160,00	--	--
9/18/2001	--		38.68	12.0	27.00	17.02	21.66	<100,000	1,900	<1,000	<1,000	2,800	90,000/370,00	--	--
12/28/2001	--		38.68	12.0	27.00	14.81	23.87	<20,000	<200	<200	<200	<200	84,000/72,000	--	--
3/14/2002	--		38.68	12.0	27.00	14.60	24.08	<50,000	<500	<500	<500	<500	85,000/85,000	--	--
4/23/2002	--		38.68	12.0	27.00	13.94	24.74	<20,000	530	200	220	800	67,000	--	--
7/17/2002	NP	d	38.68	12.0	27.00	16.27	22.41	26,000	720	<250	<250	860	120,000	6.9	6.9
10/9/2002	NP	d	38.68	12.0	27.00	17.16	21.52	110,000	1,500	4,400	820	5,400	97,000/120,000	6.8	6.8
1/13/2003	NP	f	38.68	12.0	27.00	13.82	24.86	<50,000	<500	<500	<500	2,200	33,000	6.6	6.6
04/07/03	NP		38.68	12.0	27.00	14.52	24.16	<2,500	30	<25	<25	<25	710	7.0	7.0
7/9/2003	--		38.68	12.0	27.00	15.97	22.71	66,000	<500	<500	<500	<500	36,000	6.7	6.7
02/05/2004	NP	m	38.54	12.0	27.00	14.75	23.79	55,000	300	<250	<250	<250	34,000	1.0	6.7
04/05/2004	NP		38.54	12.0	27.00	14.63	23.91	62,000	520	<250	<250	380	37,000	1.0	6.7
07/13/2004	NP		38.54	12.0	27.00	16.31	22.23	<100,000	<1,000	<1,000	<1,000	<1,000	56,000	0.7	6.7
11/04/2004	--		38.54	12.0	27.00	16.46	22.08	70,000	<500	<500	<500	<500	71,000	2.0	6.6
01/20/2005	NP	n	38.54	12.0	27.00	14.05	24.49	34,000	<250	<250	<250	<250	36,000	0.6	6.3
04/11/2005	NP		38.54	12.0	27.00	12.55	25.99	<2,500	46	<25	<25	<25	1,200	0.7	6.8
08/01/2005	NP		38.54	12.0	27.00	15.11	23.43	<25,000	<250	<250	<250	<250	4,800	1.78	7.3
10/21/2005	NP	p	38.54	12.0	27.00	15.65	22.89	14,000	350	<100	<100	110	12,000	1.41	6.6
01/18/2006	NP		38.54	12.0	27.00	12.60	25.94	16,000	310	<100	<100	110	13,000	0.87	6.7
04/14/2006	NP		38.54	12.0	27.00	12.09	26.45	<10,000	<100	<100	<100	<100	4,700	0.88	6.9
7/19/2006	NP	q	38.54	12.0	27.00	13.58	24.96	1,300	23	<10	18	26	1,600	1.1	6.8
10/24/2006	P		38.54	12.0	27.00	15.13	23.41	6,800	100	<5.0	16	15	14,000	--	6.93
1/15/2007	P	n	38.54	12.0	27.00	14.43	24.11	2,500	<100	<100	<100	<100	3,900	2.12	7.44
4/18/2007	NP	n	38.54	12.0	27.00	14.30	24.24	3,000	50	<50	<50	<50	2,700	4.47	7.22
7/17/2007	NP	n	38.54	12.0	27.00	23.75	14.79	560	<25	<25	<25	<25	890	4.23	7.41
10/11/2007	NP	t (GRO)	38.54	12.0	27.00	16.18	22.36	210	<2.5	<2.5	<2.5	<2.5	370	2.99	7.33
1/8/2008	NP	n	38.54	12.0	27.00	13.90	24.64	5,100	45	<25	<25	<25	6,100	2.50	7.23
4/8/2008	NP		38.54	12.0	27.00	14.22	24.32	270	0.50	<0.50	1.2	0.66	1,200	1.67	7.17
8/20/2008	**NP**		**38.54**	**12.0**	**27.00**	**16.57**	**21.97**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**39**	**2.12**	**7.04**
MW-8															

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

Station #2111, 1156 Davis St, San Leandro, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-8 Cont.															
02/05/2004	P	m	38.91	--	--	15.61	23.30	3,600	<25	<25	<25	<25	1,900	6.9	6.8
04/05/2004	P		38.91	--	--	15.64	23.27	1,900	<10	<10	<10	<10	1,200	3.2	6.7
07/13/2004	P		38.91	--	--	17.22	21.69	<1,000	<10	<10	<10	<10	760	1.6	6.7
11/04/2004	P		38.91	--	--	17.19	21.72	960	<5.0	<5.0	<5.0	<5.0	820	1.8	6.7
01/20/2005	P		38.91	--	--	15.25	23.66	<2,500	<25	<25	<25	<25	1,400	1.5	6.4
04/11/2005	P		38.91	--	--	14.17	24.74	700	<5.0	<5.0	<5.0	<5.0	610	1.1	7.1
08/01/2005	P		38.91	--	--	16.10	22.81	<1,000	<10	<10	<10	<10	900	2.58	7.7
10/21/2005	P	n	38.91	--	--	17.18	21.73	530	<5.0	<5.0	<5.0	<5.0	490	1.4	6.7
01/18/2006	P		38.91	--	--	13.60	25.31	<500	<5.0	<5.0	<5.0	<5.0	500	2.28	6.6
04/14/2006	P		38.91	--	--	12.36	26.55	<500	<5.0	<5.0	<5.0	<5.0	300	1.97	6.6
7/19/2006	P		38.91	--	--	14.75	24.16	4,500	<25	<25	<25	<25	4,200	1.2	6.6
10/24/2006	--	s	--	--	--	--	--	--	--	--	--	--	--	--	--
1/15/2007	P		38.91	--	--	15.67	23.24	<50	<0.50	<0.50	<0.50	<0.50	67	1.35	6.68
4/18/2007	P	n	38.91	--	--	15.53	23.38	100	0.51	<0.50	<0.50	<0.50	130	1.49	6.86
7/17/2007	NP	n	38.91	--	--	16.76	22.15	63	<0.50	<0.50	<0.50	<0.50	96	1.85	6.97
10/11/2007	P		38.91	--	--	16.99	21.92	100	0.52	<0.50	<0.50	<0.50	130	1.67	7.18
1/8/2008	P	n	38.91	--	--	14.83	24.08	51	<0.50	<0.50	<0.50	<0.50	49	1.30	6.88
4/8/2008	P		38.91	--	--	15.38	23.53	<50	<0.50	<0.50	<0.50	<0.50	32	1.60	6.77
8/20/2008	**P**		**38.91**	**--**	**--**	**17.80**	**21.11**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**13**	**1.18**	**6.94**

ABBREVIATIONS:
-- = Not analyzed/applicable/measured/available
< = Not detected at or above specified laboratory reporting limit
DO = Dissolved oxygen
DTW = Depth to water in ft bgs
ft bgs = feet below ground surface
ft MSL = feet above mean sea level
GRO = Gasoline range organics
GWE = Groundwater elevation in ft MSL
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 elevation in ft MSL
TPH-g = Total petroleum hydrocarbons as gasoline
µg/L = Micrograms per liter

FOOTNOTES:
a = Product sheen noted.
b = Well was sampled after batch extraction event.
c = Chromatogram Pattern: Gasoline C6-C10 for GRO/TPH-g.
d = Hydrocarbon pattern was present in the requested fuel quantitation range but did not resemble the pattern of the requested fuel for GRO/TPH-g.
e = Discrete peak @C6-C7 for GRO/TPH-g.
f = This sample was analyzed beyond the EPA recommended holding time for TPH-g, benzene, toluene, ethylbenzene, and total xylenes (BTEX), and MTBE. The results may still be useful for their intended purpose.
g = Well not sampled due to the detection of free product (FP).
h = GWE adjusted for FP: (thickness of FP x 0.8) + measured GWE.
j = The closing calibration for benzene and total xylenes was outside acceptance limits by 1%. This should be considered in evaluating the result. The average % difference for all analytes met the 15% requirement and the QC suggested that calibration linearity was not a factor.
k = The closing calibration was outside acceptance limits by 6%. This should be considered in evaluating the result. The average % difference for all analytes met the 15% requirement and the QC suggested that calibration linearity was not a factor.
l = Toluene and MTBE were not confirmed using a secondary column in accordance to client contract.
m = TOC elevations re-surveyed to NAVD '88 on February 23, 2004.
n = Hydrocarbon result for GRO partly due to indiv. peak(s) in quantitative range.
o = Light to moderate sheen.
p = Result for MTBE partly due to individual peak(s) in quant. range.
q = Gauged with tubing in well.
r = Calib. verif. is within method limits but outside contract limits.
s = Well inaccessible.
t = Initial analysis within holding time but required dilution.

NOTES:
Beginning with the second quarter 2003 sampling event (04/07/03), TPH-g, BTEX, and MTBE analyzed by EPA method 8260B. Prior to 04/07/03, TPH-g was analyzed by EPA method 8015 modified and MTBE was analyzed by EPA methods 8020/ 8260B.

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.

Values for DO and pH were obtained through field measurements.

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

Table 2. Summary of Fuel Additives Analytical Data

Station #2111, 1156 Davis St, San Leandro, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-1									
4/7/2003	<100	<20	1,100	<0.50	<0.50	<0.50	--	--	
7/9/2003	<5,000	<1,000	690	<25	<25	<25	--	--	
02/05/2004	<5,000	<1,000	1,100	<25	<25	32	<25	<25	
04/05/2004	<5,000	<1,000	1,700	<25	<25	38	<25	<25	a
07/13/2004	<2,000	780	730	<10	<10	19	<10	<10	a
11/04/2004	<1,000	<200	380	<5.0	<5.0	12	<5.0	<5.0	
01/20/2005	<1,000	<200	570	<5.0	<5.0	17	<5.0	<5.0	a
04/11/2005	<5,000	<1,000	1,100	<25	<25	34	<25	<25	
08/01/2005	<2,000	<400	1,400	<10	<10	40	<10	<10	
10/21/2005	<5,000	<1,000	970	<25	<25	<25	<25	<25	
01/18/2006	<1,500	<100	330	<2.5	<2.5	9.7	<2.5	<2.5	
04/14/2006	<1,500	<100	310	<2.5	<2.5	9.3	<2.5	<2.5	
7/19/2006	<1,500	<100	180	<2.5	<2.5	3.2	<2.5	<2.5	
10/24/2006	<1,500	<100	360	<2.5	<2.5	10	<2.5	<2.5	
1/15/2007	<1,500	<100	220	<2.5	<2.5	6.8	<2.5	<2.5	
4/18/2007	<1,500	<100	150	<2.5	<2.5	<2.5	<2.5	<2.5	
7/17/2007	<600	<40	94	<1.0	<1.0	2.3	<1.0	<1.0	
10/11/2007	<300	<20	62	<0.50	<0.50	<0.50	<0.50	<0.50	
1/8/2008	<300	74	90	<0.50	<0.50	2.5	<0.50	<0.50	a
4/8/2008	<300	57	110	<0.50	<0.50	2.6	<0.50	<0.50	
8/20/2008	**<300**	**<10**	**3.3**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-2									
04/05/2004	<1,000	<200	750	<5.0	<5.0	<5.0	<5.0	<5.0	
07/13/2004	<10,000	12,000	5,800	<50	<50	<50	<50	<50	a
08/31/2004	--	--	--	--	--	--	--	--	a
01/20/2005	<10,000	<2,000	7,000	<50	<50	<50	<50	<50	a
04/11/2005	<10,000	<2,000	2,700	<50	<50	<50	<50	<50	
08/01/2005	<10,000	<2,000	2,700	<50	<50	<50	<50	<50	
01/18/2006	<30,000	<2,000	1,600	<50	<50	<50	<50	<50	
04/14/2006	<30,000	<2,000	2,100	<50	<50	<50	<50	<50	
7/19/2006	<6,000	<400	930	<10	<10	<10	<10	<10	

Table 2. Summary of Fuel Additives Analytical Data

Station #2111, 1156 Davis St, San Leandro, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-2 Cont.									
1/15/2007	<6,000	1,900	1,400	<10	<10	<10	<10	<10	
4/18/2007	<6,000	1,200	1,100	<10	<10	<10	<10	<10	
7/17/2007	<6,000	1,000	1,300	<10	<10	<10	<10	<10	
10/11/2007	<6,000	1,300	1,000	<10	<10	<10	<10	<10	
1/8/2008	<6,000	2,600	1,300	<10	<10	<10	<10	<10	a
4/8/2008	<300	970	690	<0.50	<0.50	3.3	<0.50	<0.50	
8/20/2008	**<6,000**	**470**	**190**	**<10**	**<10**	**<10**	**<10**	**<10**	
MW-3									
4/7/2003	<100	<20	75	<0.50	<0.50	6.5	--	--	
7/9/2003	<100	<20	52	<0.50	<0.50	4.2	--	--	
02/05/2004	<100	<20	37	<0.50	<0.50	3.1	<0.50	<0.50	
04/05/2004	<100	<20	53	<0.50	<0.50	3.7	<0.50	<0.50	a
07/13/2004	<100	44	35	<0.50	<0.50	3.2	<0.50	<0.50	
11/04/2004	<100	<20	25	<0.50	<0.50	2.2	<0.50	<0.50	
01/20/2005	<100	<20	27	<0.50	<0.50	2.6	<0.50	<0.50	
04/11/2005	<100	<20	21	<0.50	<0.50	2.0	<0.50	<0.50	
08/01/2005	<100	<20	23	<0.50	<0.50	1.9	<0.50	<0.50	
10/21/2005	<100	<20	19	<0.50	<0.50	2.0	<0.50	<0.50	
01/18/2006	<300	<20	13	<0.50	<0.50	1.3	<0.50	<0.50	
04/14/2006	<300	<20	6.7	<0.50	<0.50	0.61	<0.50	<0.50	
7/19/2006	<300	<20	11	<0.50	<0.50	0.72	<0.50	<0.50	r
10/24/2006	<300	<20	33	<0.50	<0.50	2.8	<0.50	<0.50	
1/15/2007	<300	<20	29	<0.50	<0.50	2.9	<0.50	<0.50	
4/18/2007	<300	<20	9.5	<0.50	<0.50	0.90	<0.50	<0.50	
7/17/2007	<300	<20	19	<0.50	<0.50	1.5	<0.50	<0.50	
10/11/2007	<300	<20	5.3	<0.50	<0.50	<0.50	<0.50	<0.50	
1/8/2008	<300	<20	8.9	<0.50	<0.50	0.84	<0.50	<0.50	a
4/8/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/20/2008	**<300**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-4									

Table 2. Summary of Fuel Additives Analytical Data

Station #2111, 1156 Davis St, San Leandro, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-4 Cont.									
4/7/2003	<100	<20	24	<0.50	<0.50	7.3	--	--	
7/9/2003	<100	<20	34	<0.50	<0.50	9.8	--	--	
02/05/2004	<100	<20	22	<0.50	<0.50	6.2	<0.50	<0.50	
04/05/2004	<100	<20	27	<0.50	<0.50	7.2	<0.50	<0.50	a
07/13/2004	<100	26	27	<0.50	<0.50	7.4	<0.50	<0.50	a
11/04/2004	<100	<20	19	<0.50	<0.50	5.1	<0.50	<0.50	
01/20/2005	<100	<20	18	<0.50	<0.50	5.2	<0.50	<0.50	
04/11/2005	<100	<20	14	<0.50	<0.50	4.0	<0.50	<0.50	
08/01/2005	<100	<20	18	<0.50	<0.50	3.9	<0.50	<0.50	
10/21/2005	<100	<20	15	<0.50	<0.50	4.6	<0.50	<0.50	
01/18/2006	<300	<20	8.9	<0.50	<0.50	2.5	<0.50	<0.50	
04/14/2006	<300	<20	4.2	<0.50	<0.50	1.3	<0.50	<0.50	
7/19/2006	<300	<20	3.4	<0.50	<0.50	0.69	<0.50	<0.50	r
10/24/2006	<300	<20	3.5	<0.50	<0.50	0.91	<0.50	<0.50	
1/15/2007	<300	<20	3.8	<0.50	<0.50	0.98	<0.50	<0.50	
4/18/2007	<300	<20	5.6	<0.50	<0.50	1.1	<0.50	<0.50	
7/17/2007	<300	<20	6.6	<0.50	<0.50	1.7	<0.50	<0.50	
10/11/2007	<300	<20	0.81	<0.50	<0.50	<0.50	<0.50	<0.50	
1/8/2008	<300	<20	1.2	<0.50	<0.50	<0.50	<0.50	<0.50	a
4/8/2008	<300	<10	1.7	<0.50	<0.50	<0.50	<0.50	<0.50	
8/20/2008	**<300**	**<10**	**0.70**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-5									
4/7/2003	<20,000	<4,000	3,700	<100	<100	<100	--	--	
7/9/2003	<10,000	<2,000	6,500	<50	<50	<50	--	--	
02/05/2004	<10,000	<2,000	7,900	<50	<50	<50	<50	<50	a
04/05/2004	<5,000	<1,000	2,000	<25	<25	<25	<25	<25	a
07/13/2004	<10,000	3,200	4,000	<50	<50	<50	<50	<50	a
11/04/2004	<10,000	<2,000	6,300	<50	<50	<50	<50	<50	
01/20/2005	<10,000	<2,000	6,900	<50	<50	<50	<50	<50	a
04/11/2005	<10,000	3,600	2,600	<50	<50	<50	<50	<50	
08/01/2005	<200	1,600	130	<1.0	<1.0	<1.0	<1.0	<1.0	

Table 2. Summary of Fuel Additives Analytical Data

Station #2111, 1156 Davis St, San Leandro, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-5 Cont.									
10/21/2005	<500	1,400	86	<2.5	<2.5	<2.5	<2.5	<2.5	
01/18/2006	<1,500	2,200	100	<2.5	<2.5	<2.5	<2.5	<2.5	
04/14/2006	<1,500	2,100	240	<2.5	<2.5	<2.5	<2.5	<2.5	
7/19/2006	<1,500	2,800	84	<2.5	<2.5	<2.5	<2.5	<2.5	r
10/24/2006	<300	1,200	17	<0.50	<0.50	<0.50	<0.50	<0.50	a
1/15/2007	<300	990	36	<0.50	<0.50	<0.50	<0.50	<0.50	
4/18/2007	<1,500	2,000	16	<2.5	<2.5	<2.5	<2.5	<2.5	
7/17/2007	<1,500	1,100	6.6	<2.5	<2.5	<2.5	<2.5	<2.5	
10/11/2007	<300	750	4.8	<0.50	<0.50	<0.50	<0.50	<0.50	
1/8/2008	<300	220	5.6	<0.50	<0.50	<0.50	<0.50	<0.50	a
4/8/2008	<300	300	8.0	<0.50	<0.50	<0.50	<0.50	<0.50	
8/20/2008	**<600**	**520**	**3.6**	**<1.0**	**<1.0**	**<1.0**	**<1.0**	**<1.0**	
MW-6									
4/7/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
7/9/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
07/13/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a
08/01/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
7/19/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	r
7/17/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/20/2008	**<300**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-7									
4/7/2003	<5,000	<1,000	710	<25	<25	<25	--	--	
7/9/2003	<100,000	<20,000	36,000	<500	<500	<500	--	--	
02/05/2004	<50,000	<10,000	34,000	<250	<250	<250	<250	<250	
04/05/2004	<50,000	<10,000	37,000	<250	<250	<250	<250	<250	
07/13/2004	<200,000	<40,000	56,000	<1,000	<1,000	1,300	<1,000	<1,000	
11/04/2004	<100,000	<20,000	71,000	<500	<500	<500	<500	<500	
01/20/2005	<50,000	<10,000	36,000	<250	<250	<250	<250	<250	a
04/11/2005	<5,000	<1,000	1,200	<25	<25	<25	<25	<25	
08/01/2005	<50,000	<10,000	4,800	<250	<250	<250	<250	<250	

Table 2. Summary of Fuel Additives Analytical Data

Station #2111, 1156 Davis St, San Leandro, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-7 Cont.									
10/21/2005	<20,000	24,000	12,000	<100	<100	<100	<100	<100	
01/18/2006	<60,000	15,000	13,000	<100	<100	<100	<100	<100	
04/14/2006	<60,000	<4,000	4,700	<100	<100	<100	<100	<100	
7/19/2006	<6,000	720	1,600	<10	<10	<10	<10	<10	
10/24/2006	<3,000	10,000	14,000	<5.0	<5.0	31	<5.0	<5.0	a
1/15/2007	<60,000	9,300	3,900	<100	<100	<100	<100	<100	
4/18/2007	<30,000	<2,000	2,700	<50	<50	<50	<50	<50	
7/17/2007	<15,000	<1,000	890	<25	<25	<25	<25	<25	
10/11/2007	<1,500	150	370	<2.5	<2.5	<2.5	<2.5	<2.5	
1/8/2008	<15,000	1,400	6,100	<25	<25	32	<25	<25	
4/8/2008	<300	700	1,200	<0.50	<0.50	5.1	<0.50	<0.50	
8/20/2008	**<300**	**34**	**39**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-8									
02/05/2004	<5,000	<1,000	1,900	<25	<25	<25	<25	<25	
04/05/2004	<2,000	<400	1,200	<10	<10	12	<10	<10	a
07/13/2004	<2,000	770	760	<10	<10	<10	<10	<10	a
11/04/2004	<1,000	<200	820	<5.0	<5.0	9.6	<5.0	<5.0	
01/20/2005	<5,000	<1,000	1,400	<25	<25	<25	<25	<25	a
04/11/2005	<1,000	<200	610	<5.0	<5.0	8.1	<5.0	<5.0	
08/01/2005	<2,000	<400	900	<10	<10	<10	<10	<10	
10/21/2005	<1,000	<200	490	<5.0	<5.0	<5.0	<5.0	<5.0	
01/18/2006	<3,000	<200	500	<5.0	<5.0	5.2	<5.0	<5.0	
04/14/2006	<3,000	<200	300	<5.0	<5.0	<5.0	<5.0	<5.0	
7/19/2006	<15,000	<1,000	4,200	<25	<25	45	<25	<25	
1/15/2007	<300	52	67	<0.50	<0.50	0.88	<0.50	<0.50	
4/18/2007	<300	120	130	<0.50	<0.50	1.9	<0.50	<0.50	
7/17/2007	<300	110	96	<0.50	<0.50	1.2	<0.50	<0.50	
10/11/2007	<300	350	130	<0.50	<0.50	1.7	<0.50	<0.50	
1/8/2008	<300	59	49	<0.50	<0.50	0.80	<0.50	<0.50	
4/8/2008	<300	110	32	<0.50	<0.50	<0.50	<0.50	<0.50	
8/20/2008	**<300**	**62**	**13**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	

ABBREVIATIONS:
-- = 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 = The continuing calibration verification for ethanol was outside of client contractual acceptance limits. However, it was within method acceptance limits. The data should still be considered useful for its intended purpose.

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

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

Table 3. Historical Ground-Water Flow Direction and Gradient

Station #2111, 1156 Davis St, San Leandro, CA

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
7/20/2000	West-Northwest	0.006
9/19/2000	West-Northwest	0.004
12/21/2000	West-Northwest	0.004
3/13/2001	West-Northwest	0.005
5/30/2001	West-Northwest	0.004
9/18/2001	West-Northwest	0.003
12/28/2001	West-Northwest	0.003
3/14/2002	West	0.004
4/23/2002	West	0.006
7/17/2002	West	0.003
10/9/2002	West	0.002
1/13/2003	Southwest	0.0043
4/7/2003	West-Northwest	0.009 to 0.011
7/9/2003	West-Northwest	0.004
10/1/2003	West	0.002
2/5/2004	West	0.004
4/5/2004	West-Southwest	0.004
7/13/2004	West-Southwest	0.003
11/4/2004	West	0.003
1/20/2005	West	0.009
4/11/2005	North to West	0.009 to 0.01
8/1/2005	West to Northwest	0.006 to 0.004
10/21/2005	West	0.008
1/18/2006	North and West	0.01
4/14/2006	South	0.008
7/19/2006	Northwest to Southwest	0.004 to 0.008
10/24/2006	West	0.003
1/15/2007	Southwest	0.004
4/18/2007	West	0.009
7/17/2007	Southeast	0.05
10/11/2007	West	0.01
1/8/2008	West	0.008
4/8/2008	West	0.006
8/20/2008	**West**	**0.006**

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. Approximate Cumulative Floating Product Recovered
Station #2111, 1156 Davis Street, San Leandro, CA

Well Designation	Product Recovery Field Date	Floating Product Thickness (feet)	Floating Product Recovered (gallons)
MW-2	06/28/99	0.45	0.30
MW-2	06/30/99	0.015	0.01
MW-2	07/07/99	0.06	0.04
MW-2	07/23/99	0.008	0.01
MW-2	08/25/99	0.02	0.01
MW-2	09/21/99	0.01	0.01
MW-2	11/10/99	ND	0.00
MW-2	02/09/00	ND	0.00
MW-2	04/23/02	ND	0.00
MW-2	07/17/02	Sheen	0.00
MW-2	10/9/2002 (1)	NA	0.00
MW-2	01/13/03	0.26	0.13
MW-2	02/14/03	ND	0.00
MW-2	03/24/03	ND	0.00
MW-2	04/07/03	0.05	0.00
MW-2	05/23/03	ND	0.00
MW-2	06/24/03	0.03	0.01
MW-2	07/09/03	0.07	0.03
MW-2	07/31/03	0.05	0.03
MW-2	09/04/03	0.02	0.01
MW-2	10/01/03	0.07	0.02
MW-2	11/12/03	0.59	0.36
MW-2	12/11/03	0.05	0.07
MW-2	02/05/04	0.13	0.02
MW-2	02/16/04	0.02	0.01
MW-2	03/11/04	ND	0.00
MW-2	03/30/04	ND	0.00
MW-2	04/05/04	ND	0.00
MW-2	07/13/04	ND	0.00
MW-2	08/31/04	ND	0.00
MW-2	09/07/04	ND	0.00
MW-2	11/04/04	0.22	0.14
MW-2	11/29/04	0.02	0.05
MW-2	12/15/04	0.24	0.16
MW-2	01/20/05	ND	0.00
MW-2	02/04/05	Sheen	0.00
MW-2	03/23/05	Sheen	0.00
MW-2	04/11/05	ND	0.00
MW-2	05/12/05	ND	0.00
MW-2	06/20/05	ND	0.00
MW-2	08/01/05	ND	0.00
MW-2	08/24/05	ND	0.00
MW-2	09/16/05	ND	0.00
MW-2	10/21/05	Sheen	0.00
MW-2	01/18/06	Sheen	0.00
MW-2	04/14/06	Sheen	0.00
MW-2	07/19/06	ND	0.00
MW-2	10/24/06 (1)	NA	0.00
MW-2	01/15/07	ND	0.00
MW-2	04/18/07	ND	0.00
MW-2	07/17/07	ND	0.00
MW-2	10/11/07	ND	0.00
MW-2	01/08/08	ND	0.00
MW-2	04/24/08	ND	0.00
MW-2	**08/20/08**	**ND**	**0.00**
Approximate Cumulative Floating Product Recovered (gallons):			**1.44**

FOOTNOTES:
(1) Free product encountered, but unable to gauge.
ND Non-detect
NA Not applicable

Table 5

Soil Vapor Extraction System and Ground-Water Extraction System
Monthly Discharge Analytical Results Summary

ARCO Service Station No. 2111
1156 Davis Street, San Leandro, California

Date Sampled	Sampling Port	Matrix	GRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	MtBE
	SVE-Influent	Air (mg/m^3)	77	<0.5	<0.5	<0.5	<0.5	---	---	9.4
	SVE A/S-Effluent	Air (mg/m^3)	<10	0.19	<0.10	0.10	<0.20	---	---	5.1
	SVE-Effluent	Air (mg/m^3)	<10	<0.10	<0.10	<0.10	<0.20	---	---	<0.50
1/29/2007										
	GWE-Influent	Water (µg/L)	2,000	35	<12	23	14	<12	1,800	1,300
	GWE A/S-Effluent	Water (µg/L)	92	<0.50	<0.50	<0.50	<0.50	<0.50	1,900	150
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
	SVE-Influent	Air (mg/m^3)	400	10[2]	<0.50	4.7	2.9[2]	---	---	21
	SVE A/S-Effluent	Air (mg/m^3)	<10	<0.10	<0.10	<0.10	<0.20	---	---	<0.50
	SVE-Effluent	Air (mg/m^3)	<10	<0.10	<0.10	<0.10	<0.20	---	---	<0.50
2/5/2007										
	GWE-Influent	Water (µg/L)	1,400[1]	25	<5.0	15	7.9	7.5	1,700	1,600
	GWE A/S-Effluent	Water (µg/L)	320[1]	<0.50	<0.50	<0.50	<0.50	0.65	1,600	170
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
	SVE-Influent	Air (mg/m^3)	100	2.3[2]	<0.50	1.2	1.6	---	---	26
	SVE A/S-Effluent	Air (mg/m^3)	11	0.10	<0.10	0.13	<0.20	---	---	10
	SVE-Effluent	Air (mg/m^3)	<10	0.17	<0.10	0.28	<0.20	---	---	<0.50
3/5/2007										
	GWE-Influent	Water (µg/L)	1,500[1]	20	<5.0	16	15	5.6	1,600	1,600
	GWE A/S-Effluent	Water (µg/L)	220[1]	<0.50	<0.50	<0.50	<0.50	<0.50	1,600	200
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
	SVE-Influent	Air (mg/m^3)	190	4.3[2]	<0.50	1.1	2.5	---	---	30
	SVE A/S-Effluent	Air (mg/m^3)	<10	<0.10	<0.10	<0.10	<0.20	---	---	5.2
	SVE-Effluent	Air (mg/m^3)	<10	<0.10	<0.10	<0.10	<0.20	---	---	<0.50
4/2/2007										
	GWE-Influent[4]	Water (µg/L)	850	<5.0	<5.0	<5.0	8.5	5.7	870	1,100
	GWE A/S-Effluent	Water (µg/L)	94[1]	<5.0	<5.0	<5.0	<5.0	<5.0	710	120
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
	SVE-Influent	Air (mg/m^3)	160	<0.50	<0.50	<0.50	0.97	---	---	18
	SVE A/S-Effluent	Air (mg/m^3)	<50	<0.50	<0.50	<0.50	<0.50	---	---	11
	SVE-Effluent	Air (mg/m^3)	<50	<0.50	<0.50	<0.50	<0.50	---	---	<0.50
5/1/2007										
	GWE-Influent[4]	Water (µg/L)	760	<5.0	<5.0	<5.0	<5.0	5.0	680	880
	GWE A/S-Effluent	Water (µg/L)	76[1]	<0.50	<0.50	<0.50	<0.50	<0.50	640	66
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
	SVE-Influent	Air (mg/m^3)	330	0.56	0.89	1.8	2.6	---	---	14
	SVE A/S-Effluent	Air (mg/m^3)	<50	<0.50	0.67	<0.50	1.3	---	---	3.7
	SVE-Effluent	Air (mg/m^3)	<50	<0.50	<0.50	<0.50	<0.50	---	---	<0.50
6/4/2007										
	GWE-Influent[4]	Water (µg/L)	430	<5.0	<5.0	8.5	6.7	<5.0	340	560
	GWE A/S-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	290	17
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
	SVE-Influent	Air (mg/m^3)	180	<0.50	<0.50	<0.50	<1.0	---	---	11
	SVE A/S-Effluent	Air (mg/m^3)	<10	<0.10	<0.10	<0.10	<0.20	---	---	0.87
	SVE-Effluent	Air (mg/m^3)	<10	<0.10	<0.10	<0.10	<0.20	---	---	<0.50
7/2/2007										
	GWE-Influent[4]	Water (µg/L)	320	<5.0	<5.0	<5.0	<5.0	<5.0	<200	430
	GWE A/S-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	84	35
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
	SVE-Influent	Air (mg/m^3)	660	<1.0	<1.0	1.2	2.2	---	---	11
	SVE A/S-Effluent	Air (mg/m^3)	11	0.25	<0.10	0.21	0.22	---	---	11
	SVE-Effluent	Air (mg/m^3)	<10	<0.10	<0.10	<0.10	<0.20	---	---	<0.50
8/1/2007										
	GWE-Influent[4]	Water (µg/L)	440	9.4	<5.0	<5.0	<5.0	<5.0	590	450
	GWE A/S-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	28	6.8
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
	SVE-Influent	Air (mg/m^3)	1,200	0.79	<0.50	1.5	3.8	---	---	14
	SVE A/S-Effluent	Air (mg/m^3)	<50	<0.50	<0.50	<0.50	<0.50	---	---	5.1
	SVE-Effluent	Air (mg/m^3)	<50	<0.50	<0.50	<0.50	<0.50	---	---	<0.50
9/5/2007										
	GWE-Influent[4]	Water (µg/L)	410	9.5	<5.0	6.3	9.9	<5.0	960	570
	GWE A/S-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	830	37
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
	SVE-Influent	Air (mg/m^3)	1,300	1.2	<0.50	2.6	5.2	---	---	14
	SVE A/S-Effluent	Air (mg/m^3)	<10	<0.50	<0.50	<0.50	<0.50	---	---	2.6
	SVE-Effluent	Air (mg/m^3)	<10	<0.50	<0.50	<0.50	<0.50	---	---	2.2
10/1/2007										
	GWE-Influent[4]	Water (µg/L)	500	6.9	<5.0	9.1	20	<5.0	940	540
	GWE A/S-Effluent	Water (µg/L)	60	<0.50	<0.50	<0.50	<0.50	<0.50	970	71
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50

Table 5

Soil Vapor Extraction System and Ground-Water Extraction System
Monthly Discharge Analytical Results Summary

ARCO Service Station No. 2111
1156 Davis Street, San Leandro, California

Date Sampled	Sampling Port	Matrix	GRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	MtBE
	SVE-Influent	Air (mg/m^3)	1,000	2.0	<0.50	4.0	5.3	---	---	23
	SVE A/S-Effluent	Air (mg/m^3)	13	<0.50	<0.50	<0.50	<0.50	---	---	15
	SVE-Effluent	Air (mg/m^3)	<10	<0.50	<0.50	<0.50	<0.50	---	---	<0.50
11/6/2007										
	GWE-Influent[4]	Water (µg/L)	1,100	20	<5.0	20	24	6.9	1,300	920
	GWE A/S-Effluent	Water (µg/L)	120	<0.50	<0.50	<0.50	<0.50	<0.50	1,100	93
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
	SVE-Influent	Air (mg/m^3)	830	<0.50	<0.50	1.0	1.2	---	---	2.5
	SVE A/S-Effluent	Air (mg/m^3)	<10	<0.50	<0.50	<0.50	<0.50	---	---	<0.50
	SVE-Effluent	Air (mg/m^3)	<10	<0.50	<0.50	<0.50	<0.50	---	---	<0.50
12/5/2007										
	GWE-Influent[4]	Water (µg/L)	80	0.69	<0.50	1.0	1.1	<0.50	21	74
	GWE A/S-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	0.61	<20	2.7
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
	SVE-Influent	Air (mg/m^3)	410	2.2	1.5	2.9	3.9	---	---	44
	SVE A/S-Effluent	Air (mg/m^3)	<50	<0.50	<0.50	<0.50	<0.50	---	---	14
	SVE-Effluent	Air (mg/m^3)	<50	<0.50	<0.50	<0.50	<0.50	---	---	<0.50
1/7/2008										
	GWE-Influent	Water (µg/L)	830[1]	12	3.2	7.8	8.5	6.8	1,900	1,300
	GWE A/S-Effluent	Water (µg/L)	83	<0.50	<0.50	<0.50	<0.50	0.60	590	110
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
	SVE-Influent	Air (mg/m^3)	<50	0.17	0.017	0.12	0.046	---	---	3.1
	SVE A/S-Effluent	Air (mg/m^3)	<50	0.32	0.024	0.20	0.10	---	---	5.1
	SVE-Effluent	Air (mg/m^3)	<50	<0.0016	0.0032	<0.0022	<0.0043	---	---	0.098
2/5/2008										
	GWE-Influent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	18	98
	GWE A/S-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	3.7
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50
	SVE-Influent	Air (mg/m^3)	62	0.81	0.033	0.33	0.10	---	---	26
	SVE A/S-Effluent	Air (mg/m^3)	<50	0.0024	0.024	0.0025	0.0055	---	---	0.27
	SVE-Effluent	Air (mg/m^3)	<50	<0.0016	0.026	<0.0022	<0.0043	---	---	0.13
3/5/2008										
	GWE-Influent	Water (µg/L)	860	40	<0.50	39	12	5.0	1,800	880
	GWE A/S-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1,500	19
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50
	SVE-Influent	Air (mg/m^3)	620	1.6	0.037	1.3	0.61	---	---	21
	SVE A/S-Effluent	Air (mg/m^3)	<50	0.098	0.021	0.13	0.10	---	---	9.7
	SVE-Effluent	Air (mg/m^3)	<50	0.0089	0.033	0.0052	0.024	---	---	0.014
4/1/2008										
	GWE-Influent	Water (µg/L)	410	16	<2.5	12	7.7	5.1	2,300	860
	GWE A/S-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1,700	38
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50
	SVE-Influent	Air (mg/m^3)	920	0.99	1.7	2.1	0.82	---	---	27
	SVE A/S-Effluent	Air (mg/m^3)	<50	0.0046	0.0072	0.0032	0.0054	---	---	5.1
	SVE-Effluent	Air (mg/m^3)	<50	<0.0016	0.0023	<0.0022	<0.0043	---	---	16
5/6/2008										
	GWE-Influent	Water (µg/L)	500	<20	<20	<20	<20	<20	3,800	2,000
	GWE A/S-Effluent	Water (µg/L)	<50	<10	<10	<10	<10	<10	1,200	85
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50
	SVE-Influent	Air (mg/m^3)	230	0.13	<0.019	0.13	0.11	---	---	10
	SVE A/S-Effluent	Air (mg/m^3)	<50	<0.0016	0.015	<0.0022	<0.0043	---	---	0.88
	SVE-Effluent	Air (mg/m^3)	<50	<0.0016	<0.0019	<0.0022	<0.0043	---	---	1.4
6/2/2008										
	GWE-Influent	Water (µg/L)	87	<5.0	<5.0	<5.0	<5.0	<5.0	310	340
	GWE A/S-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	250	19
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50
	SVE-Influent	Air (mg/m^3)	**1,200**	**1.5**	**20**	**5.8**	**36**	---	---	**9.3**
	SVE A/S-Effluent	Air (mg/m^3)	<50	**0.0051**	**0.046**	**0.0081**	**0.081**	---	---	**0.86**
	SVE-Effluent	Air (mg/m^3)	<50	<0.0016	**0.0047**	<0.0022	<0.0043	---	---	**0.39**
7/1/2008										
	GWE-Influent	Water (µg/L)	**660**	**9.2**	**85**	**14**	**210**	<5.0	**410**	**400**
	GWE A/S-Effluent	Water (µg/L)	<50	<1.0	<1.0	<1.0	<1.0	<1.0	**400**	**23**
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50
	SVE-Influent	Air (mg/m^3)	**1100**	**0.62**	**0.40**	**1.9**	**3.5**	---	---	**10**
	SVE A/S-Effluent	Air (mg/m^3)	<50	<0.0016	**0.0096**	<0.0022	<0.0043	---	---	**0.40**
	SVE-Effluent	Air (mg/m^3)	<50	<0.0016	**0.0071**	<0.0022	<0.0043	---	---	<0.0072
8/5/2008										
	GWE-Influent	Water (µg/L)	**80**	<5.0	<5.0	<5.0	**10**	<5.0	**930**	**370**
	GWE A/S-Effluent	Water (µg/L)	<50	<1.0	<1.0	<1.0	<1.0	<1.0	**550**	**12**
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50

Table 5

Soil Vapor Extraction System and Ground-Water Extraction System
Monthly Discharge Analytical Results Summary

ARCO Service Station No. 2111
1156 Davis Street, San Leandro, California

Date Sampled	Sampling Port	Matrix	GRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	MtBE
	SVE-Influent	Air (mg/m^3)	**1,300**	**0.67**	**0.31**	**1.9**	**4.0**	**---**	**---**	**13**
	SVE A/S-Effluent	Air (mg/m^3)	<50	**0.0043**	**0.014**	**0.0042**	**0.015**	---	---	**1.1**
	SVE-Effluent	Air (mg/m^3)	<50	<0.0016	**0.0065**	<0.0022	<0.0087	**---**	---	<0.0072
9/2/2008										
	GWE-Influent	Water (µg/L)	**77**	<5.0	<5.0	<5.0	**8.6**	<5.0	**1,100**	**380**
	GWE A/S-Effluent	Water (µg/L)	<50	<1.0	<1.0	<1.0	<1.0	<1.0	**450**	**16**
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50

Notes:

SVE	= Soil Vapor Extration
GWE	= Groundwater Extration
mg/m3	= milligrams per meter cubed
mg/L	= milligrams per liter
GRO	= gasoline range organics
MtBE	= methyl teritary butyl ether
TBA	= tert-Butyl alcohol
--	= Not sampled.

[1] = Hydrocarbon result partly due to individual peak(s) in quantitation rang
[2] = Primary and confirm results varied by > 40% RPI
[3] = Sample taken from VOA vial with air bubble > 6 millimeters in diamete
[4] = Incorrect GWE influent concentrations were recorded in previously submitted report

Table 6
Ground-Water Extraction System Performance Data

ARCO Service Station No.2111
1156 Davis Street, San Leandro, California

						GRO				Benzene				MTBE			
Sample ID	Date Sampled	Notes	Totalizer Value (gallons)	Monthly Volume (gallons)	Average Discharge Rate (gpm)	Influent Concen-tration (µg/L)	Removal Rate (lbs/day)	Net Removed (pounds)	Removed To Date (pounds)	Influent Concen-tration (µg/L)	Removal Rate (lbs/day)	Net Removed (pounds)	Removed To Date (pounds)	Influent Concen-tration (µg/L)	Removal Rate (lbs/day)	Net Removed (pounds)	Removed To Date (pounds)
INFL	01/29/07		3,000	NA	NA	2,000	0.00	0.000	0.000	35	0.0E+00	0.000	0.000	1,300	0.0E+00	0.000	0.000
INFL	02/05/07		33,400	30,400	3.02	1,400	0.06	0.431	0.431	25.0	1.1E-03	0.008	0.008	1,600.00	5.3E-02	0.368	0.368
INFL	03/05/07		130,565	97,165	2.41	1,500	0.04	1.175	1.606	20.0	6.5E-04	0.018	0.026	1,600.00	4.6E-02	1.297	1.664
INFL	04/02/07	a	170,596	40,031	0.99	850	0.01	0.392	1.998	<5.0	1.3E-04	0.004	0.030	1,100	1.6E-02	0.451	2.115
INFL	05/01/07	a	225,297	54,701	1.31	760	0.01	0.367	2.366	<5.0	2.0E-05	0.001	0.030	880	1.6E-02	0.452	2.567
INFL	06/04/07	a	429,450	204,153	4.17	430	0.03	1.013	3.379	<5.0	1.3E-04	0.004	0.034	560	3.6E-02	1.226	3.792
INFL	07/02/07	a	480,377	50,927	1.26	320	0.01	0.159	3.538	<5.0	3.8E-05	0.001	0.035	430	7.5E-03	0.210	4.003
INFL	08/01/07	a	580,301	99,924	2.31	440	0.01	0.317	3.855	9.4	1.7E-04	0.005	0.040	450	1.2E-02	0.367	4.369
INFL	09/05/07	a	589,944	9,643	0.19	410	0.00	0.034	3.889	9.5	2.2E-05	0.001	0.041	570	1.2E-03	0.041	4.410
INFL	10/01/07	a	592,403	2,459	0.07	500	0.00	0.009	3.898	6.9	6.5E-06	0.000	0.041	540	4.4E-04	0.011	4.422
INFL	11/06/07	a	615,161	22,758	0.44	1,100	0.00	0.152	4.050	20.0	7.1E-05	0.003	0.044	920	3.8E-03	0.139	4.560
INFL	12/05/07	a	633,121	17,960	0.43	80	0.00	0.088	4.138	0.69	5.3E-05	0.002	0.045	74	2.6E-03	0.074	4.635
INFL	01/07/08		635,200	2,079	0.04	830	0.00	0.008	4.146	12.0	3.3E-06	0.000	0.046	1,300	3.6E-04	0.012	4.647
INFL	02/05/08		642,841	7,641	0.18	<50	0.00	0.027	4.173	<0.50	1.3E-05	0.000	0.046	98	1.5E-03	0.045	4.691
INFL	03/05/08		646,123	3,282	0.08	860	0.00	0.012	4.186	40.0	1.9E-05	0.001	0.047	880	4.6E-04	0.013	4.705
INFL	04/01/08		719,174	73,051	1.88	410	0.01	0.387	4.572	16.0	6.3E-04	0.017	0.064	860	2.0E-02	0.530	5.235
INFL	05/06/08		806,356	87,182	1.73	500	0.01	0.331	4.903	<20	2.7E-04	0.009	0.073	2,000	3.0E-02	1.040	6.274
INFL	06/02/08		949,693	143,337	3.69	87	0.01	0.351	5.254	<5.0	2.8E-04	0.007	0.081	340	5.2E-02	1.399	7.673
INFL	**07/01/08**		**1,028,841**	**79,148**	**1.90**	**660**	**0.01**	**0.247**	**5.501**	**9.2**	**1.3E-04**	**0.004**	**0.084**	**400**	**8.4E-03**	**0.244**	**7.917**
INFL	**08/05/08**		**1,037,580**	**8,739**	**0.17**	**80**	**0.00**	**0.027**	**5.528**	**<5.0**	**1.2E-05**	**0.000**	**0.085**	**370**	**8.0E-04**	**0.028**	**7.945**
INFL	**09/02/08**		**1,052,669**	**15,089**	**0.37**	**77**	**0.00**	**0.010**	**5.537**	**<5.0**	**1.1E-05**	**0.000**	**0.085**	**380**	**1.7E-03**	**0.047**	**7.993**
REPORTING PERIOD: THIRD QUARTER 2008																	
PERIOD WATER DISCHARGED (gal):				**102,976**	**as of 9/2/2008**												
AVERAGE DISCHARGE RATE (gpm)				**1.14**													
PERIOD POUNDS REMOVED:								**0.283**				**0.005**				**0.319**	
PERIOD GALLONS REMOVED:								**0.046**				**0.001**				**0.052**	
TOTAL POUNDS REMOVED:									**5.537**				**0.085**				**7.993**
TOTAL GALLONS REMOVED:				**1,052,669**					**0.908**				**0.012**				**1.293**
ESTIMATED PERCENT CARBON LOADING:					**22.7%**												

Explanations:

µg/L = Micrograms per liter
gpm = Gallons per minute
lbs/day = Pounds per day
GRO = Gasoline range organics
MtBE = Methyl tertiary butyl ether
Density of gasoline = 6.1 pounds per gallon
Density of benzene = 7.34 pounds per gallon
Density of MtBE = 6.18 pounds per gallon
NA = Not applicable

Notes:

a = Influent concentrations were recorded incorrectly in previously submitted reports

Assumptions:

1) Primary carbon loading = 2,000 pounds of carbon (includes primary carbon unit only)
2) Percent carbon loading calculation assumes a loading isotherm of 3% by weight

Table 7
Ground-Water Extraction System Effluent Data

ARCO Service Station No. 2111
1156 Davis Street, San Leandro, California

Sample ID	Date Sampled	Notes	Totalizer Value (gallons)	Monthly Volume (gallons)	Average Discharge Rate (gpm)	Effluent Concentrations						
						GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Xylenes (µg/L)	TBA (µg/L)	MtBE (µg/L)
EFFL	01/29/07		3,000	NA	NA	<50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
EFFL	02/05/07		33,400	30,400	3.02	<50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
EFFL	03/05/07		130,565	97,165	2.41	<50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
EFFL	04/02/07		170,596	40,031	0.99	<50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
EFFL	05/01/07		225,297	54,701	1.31	<50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
EFFL	06/04/07		429,450	204,153	4.17	<50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
EFFL	07/02/07		480,377	50,927	1.26	<50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
EFFL	08/01/07		580,301	99,924	2.31	<50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
EFFL	09/05/07		589,944	9,643	0.19	<50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
EFFL	10/01/07		592,403	2,459	0.07	<50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
EFFL	11/06/07		615,161	22,758	0.44	<50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
EFFL	12/05/07		633,121	17,960	0.43	<50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
EFFL	01/07/08		635,200	2,079	0.04	<50	<0.50	<0.50	<0.50	<0.50	<20	<0.50
EFFL	02/05/08		642,841	7,641	0.18	<50	<0.50	<0.50	<0.50	<0.50	<10	<0.50
EFFL	03/05/08		646,123	3,282	0.08	<50	<0.50	<0.50	<0.50	<0.50	<10	<0.50
EFFL	04/01/08		719,174	73,051	1.88	<50	<0.50	<0.50	<0.50	<0.50	<10	<0.50
EFFL	05/06/08		806,356	87,182	1.73	<50	<0.50	<0.50	<0.50	<0.50	<10	<0.50
EFFL	06/02/08		949,693	143,337	3.69	<50	<0.50	<0.50	<0.50	<0.50	<10	<0.50
EFFL	**07/01/08**		1,028,841	79,148	1.90	<50	<0.50	<0.50	<0.50	<0.50	<10	<0.50
EFFL	**08/05/08**		1,037,580	8,739	0.17	<50	<0.50	<0.50	<0.50	<0.50	<10	<0.50
EFFL	**09/02/08**		1,052,669	15,089	0.37	<50	<0.50	<0.50	<0.50	<0.50	<10	<0.50

REPORTING PERIOD: THIRD QUARTER 2008
PERIOD WATER DISCHARGED (gal): 102,976 as of 09/02/2008
AVERAGE DISCHARGE RATE (gpm) 1.14

Explanations:

µg/L = Micrograms per liter
mg/L = Milligrams per liter
gpm = Gallons per minute
GRO = Gasoline Range Organics
MtBE = Methyl tertiary butyl ether
NA = Data not available

Table 8
OPERATIONAL UPTIME INFORMATION OF THE SOIL VAPOR EXTRACTION SYSTEM

ARCO Service Station No. 2111
1156 Davis Street, San Leandro, California

Date	Hr. Meter Reading	No. of Days Between Sampling Dates			Cumulative Days		Percent Uptime
		Total Days	Uptime	Days Down	Total Days	Uptime	
01/29/07	13.6	NA	NA	NA	NA	NA	NA
02/05/07	178.7	7	6.9	0.1	7	6.90	98%
03/05/07	437.6	28	10.8	17.2	35	17.7	39%
04/02/07	490.7	28	2.2	25.8	63	19.9	8%
05/01/07	594.2	29	4.3	24.7	92	24.2	15%
06/04/07	981.7	34	16.1	17.9	126	40.4	47%
07/02/07	1128.4	28	6.1	21.9	154	46.5	22%
08/01/07	1430.1	30	12.6	17.4	184	59.0	42%
09/05/07	1460.4	35	1.3	33.7	219	60.3	4%
10/01/07	1466.1	26	0.2	25.8	245	60.5	1%
11/06/07	1500.0	36	1.4	34.6	281	62.0	4%
12/05/07	1544.0	29	1.8	27.2	310	63.8	6%
01/07/08	1546.0	33	0.1	32.9	343	63.9	0%
02/05/08	1556.0	29	0.4	28.6	372	64.3	1%
03/05/08	1561.0	29	0.2	28.8	401	64.5	1%
04/01/08	1562.0	27	0.0	27.0	428	64.5	0%
05/06/08	1564.0	35	0.1	34.9	463	64.6	0%
06/02/08	1973.0	27	17.0	10.0	490	81.7	63%
07/01/08	**2212.0**	**29**	**10.0**	**19.0**	**519**	**91.6**	**34%**
08/05/08	**2241.0**	**35**	**1.2**	**33.8**	**554**	**92.8**	**3%**
09/02/08	**2275.0**	**28**	**1.4**	**26.6**	**582**	**94.2**	**5%**

NA = Not applicable

Table 9
SOIL VAPOR EXTRACTION SYSTEM FLOW RATES AND AIR SAMPLE ANALYTICAL RESULTS

ARCO Service Station No. 2111
1156 Davis Street, San Leandro, California

Date	Flow Rate (cfm)	Vacuum (in Hg)	Sampling Port	Analytes (mg/m^3)					
				GRO	Benzene	Toluene	Ethylbenzene	Xylenes	MtBE
01/29/07	198	21.0	Influent	77	<0.5	<0.5	<0.5	<1.0	9.4
			A/S-Effluent	<10	0.19	<0.10	0.10	<0.20	5.1
			Effluent	<10	<0.10	<0.10	<0.10	<0.20	<0.50
02/05/07	200	19.0	Influent	400	10	<0.5	4.7	2.9	21
			A/S-Effluent	<10	<0.10	<0.10	<0.10	<0.20	<0.50
			Effluent	<10	<0.10	<0.10	<0.10	<0.20	<0.50
03/05/07	180	24.0	Influent	100	2.3	<0.50	1.2	1.6	26
			A/S-Effluent	11	0.10	<0.10	0.13	<0.20	10
			Effluent	<10	0.17	<0.10	0.28	<0.20	<0.50
04/02/07	180	NR	Influent	190	4.3	<0.50	1.1	2.5	30
			A/S-Effluent	<10	<0.10	<0.10	<0.10	<0.20	5.2
			Effluent	<10	<0.10	<0.10	<0.10	<0.20	<0.50
05/01/07	180	NR	Influent	160	<0.50	<0.50	<0.50	0.97	18
			A/S-Effluent	<50	<0.50	<0.50	<0.50	<0.50	11
			Effluent	<50	<0.50	<0.50	<0.50	<0.50	<0.50
06/04/07	190	NR	Influent	330	0.56	0.89	1.8	2.6	14
			A/S-Effluent	<50	<0.50	0.67	<0.50	1.3	3.7
			Effluent	<50	<0.50	<0.50	<0.50	<0.50	<0.50
07/02/07	200	NR	Influent	180	<0.50	<0.50	<0.50	<1.0	11
			A/S-Effluent	<10	<0.10	<0.10	<0.10	<0.20	0.87
			Effluent	<10	<0.10	<0.10	<0.10	<0.20	<0.50
08/01/07	200	NR	Influent	660	<1.0	<1.0	1.2	2.2	11
			A/S-Effluent	11	0.25	<0.10	0.21	0.22	11
			Effluent	<10	<0.10	<0.10	<0.10	<0.20	<0.50
09/05/07	190	NR	Influent	1,200	0.79	<0.50	1.5	3.8	14
			A/S-Effluent	<50	<0.50	<0.50	<0.50	<0.50	5.1
			Effluent	<50	<0.50	<0.50	<0.50	<0.50	<0.50
10/01/07	190	NR	Influent	1,300	1.2	<0.50	2.6	5.2	14
			A/S-Effluent	<10	<0.50	<0.50	<0.50	<0.50	2.6
			Effluent	<10	<0.50	<0.50	<0.50	<0.50	2.2
11/06/07	190	NR	Influent	1,000	2.0	<0.50	4.0	5.3	23
			A/S-Effluent	13	<0.50	<0.50	<0.50	<0.50	15
			Effluent	<10	<0.50	<0.50	<0.50	<0.50	<0.50
12/05/07	190	NR	Influent	830	<0.50	<0.50	1.0	1.2	2.5
			A/S-Effluent	<10	<0.50	<0.50	<0.50	<0.50	<0.50
			Effluent	<10	<0.50	<0.50	<0.50	<0.50	<0.50
01/07/08	200	NR	Influent	410	2.2	1.5	2.9	3.9	44
			A/S-Effluent	<50	<0.50	<0.50	<0.50	<0.50	14
			Effluent	<50	<0.50	<0.50	<0.50	<0.50	<0.50
02/05/08	190	NR	Influent	<50	0.17	0.017	0.12	0.046	3.1
			A/S-Effluent	<50	0.32	0.024	0.20	0.10	5.1
			Effluent	<50	<0.0016	0.0032	<0.0022	<0.0043	0.098
03/05/08	190	NR	Influent	62	0.81	0.033	0.33	0.10	26
			A/S-Effluent	<50	0.0024	0.024	0.0025	0.0055	0.27
			Effluent	<50	<0.0016	0.026	<0.0022	<0.0043	0.13
04/01/08	180	NR	Influent	620	1.6	0.037	1.3	0.61	21
			A/S-Effluent	<50	0.098	0.021	0.13	0.10	9.7
			Effluent	<50	0.0089	0.033	0.0052	0.024	0.014
05/06/08	190	NR	Influent	920	0.99	1.7	2.1	0.82	27
			A/S-Effluent	<50	0.0046	0.0072	0.0032	0.0054	5.1
			Effluent	<50	<0.0016	0.0023	<0.0022	<0.0043	16
06/02/08	180	NR	Influent	230	0.13	<0.019	0.13	0.11	10
			A/S-Effluent	<50	<0.0016	0.015	<0.0022	<0.0043	0.88
			Effluent	<50	<0.0016	<0.0019	<0.0022	<0.0043	1.4

Table 9
SOIL VAPOR EXTRACTION SYSTEM FLOW RATES AND AIR SAMPLE ANALYTICAL RESULTS

ARCO Service Station No. 2111
1156 Davis Street, San Leandro, California

Date	Flow Rate (cfm)	Vacuum (in Hg)	Sampling Port	Analytes (mg/m^3)					
				GRO	Benzene	Toluene	Ethylbenzene	Xylenes	MtBE
07/01/08	140	NR	Influent	**1,200**	**1.5**	**20**	**5.8**	**36**	**9.3**
			A/S-Effluent	<50	**0.0051**	**0.046**	**0.0081**	**0.081**	**0.86**
			Effluent	<50	<0.0016	**0.0047**	<0.0022	<0.0043	**0.39**
08/05/08	180	NR	Influent	**1,100**	**0.62**	**0.40**	**1.9**	**3.5**	**10**
			A/S-Effluent	<50	<0.0016	**0.0096**	<0.0022	<0.0043	**0.40**
			Effluent	<50	<0.0016	**0.0071**	<0.0022	<0.0043	<0.0072
09/02/08	180	NR	Influent	**1,300**	**0.67**	**0.31**	**1.9**	**4.0**	**13**
			A/S-Effluent	<50	**0.0043**	**0.014**	**0.0042**	**0.015**	**1.1**
			Effluent	<50	<0.0016	**0.0065**	<0.0022	<0.0087	<0.0072

Notes:

mg/m^3	= milligrams per cubic meter	NR	= not recorded
in Hg	= inches of mercury		
cfm	= cubic feet per second		
GRO	= gasoline range organics		
MtBE	= methyl tertiary butyl ether		

Table 10

SOIL VAPOR EXTRACTION AND EMISSION RATES

ARCO Service Station No. 2111
1156 Davis Street, San Leandro, California

Date	Extraction Rate from Wells (lbs/day)		Emissions Rate to Atmosphere (lbs/day)		Destruction Removal Efficiency, %		Cumulative GRO Removal (lbs)	
	GRO	Benzene	GRO	Benzene	GRO	Benzene	Period	Total
1/29/2007	1.35	0.00	0.09	0.00	93.5%	80.0%	1.35	1.35
2/5/2007	7.10	0.18	0.09	0.00	98.8%	99.5%	29.18	30.53
3/5/2007	1.60	0.04	0.08	0.00	95.0%	92.6%	47.00	77.53
4/2/2007	3.04	0.07	0.08	0.00	97.4%	98.8%	5.10	82.63
5/1/2007*	2.56	0.00	0.40	0.00	84.4%	0.0%	12.03	94.66
6/4/2007*	5.28	0.01	0.42	0.00	92.0%	55.4%	63.06	157.72
7/2/2007	3.20	0.00	0.09	0.00	97.2%	80.0%	25.84	183.56
8/1/2007	11.72	0.01	0.09	0.00	99.2%	90.0%	94.00	277.56
9/5/2007*	20.25	0.01	0.42	0.00	97.9%	68.4%	20.78	298.34
10/1/2007	21.94	0.02	0.08	0.00	99.6%	79.2%	4.22	302.56
11/6/2007	16.87	0.03	0.08	0.00	99.5%	87.5%	27.17	329.72
12/5/2007*	14.01	0.00	0.08	0.00	99.4%	0.0%	27.79	357.51
1/7/2008	7.28	0.04	0.44	0.00	93.9%	88.6%	1.06	358.58
2/5/2008**	0.42	0.00	0.42	0.00	0.0%	99.5%	1.54	360.12
3/5/2008**	1.05	0.01	0.42	0.00	59.7%	99.9%	0.15	360.27
4/1/2008[1]	9.91	0.03	0.40	0.00	96.0%	99.4%	0.00	360.27
5/6/2008[1]	15.52	0.02	0.42	0.00	97.3%	99.9%	1.06	361.33
6/2/2008[1]	3.68	0.00	0.40	0.00	89.1%	99.4%	163.61	524.93
7/1/2008	**14.92**	**0.02**	**0.31**	**0.00**	**97.9%**	**99.9%**	**92.60**	**617.53**
8/5/2008	**17.58**	**0.01**	**0.40**	**0.00**	**97.7%**	**99.9%**	**19.64**	**637.17**
9/2/2008	**20.78**	**0.01**	**0.40**	**0.00**	**98.1%**	**99.9%**	**27.18**	**664.34**

Air Permit Limits
DRE shall be at least 95%
Daily emmission rates will not exceed two lbs. VOC in any one day

Sample Calculations

Ext. Rate from Wells (lbs/day) = $\frac{70 \text{ cuft}}{\text{min}} \times \frac{3100 \text{ mg}}{\text{cu meter}} \times \frac{0.028 \text{ cumeter}}{\text{cuft}} \times \frac{\text{lb}}{454{,}000 \text{ mg}} \times \frac{1{,}440 \text{ min}}{\text{day}}$

= 19.27 lbs/day

Dest. Removal Efficiency, % = $\frac{19.27 - (<0.12)}{19.27} \times 100 = 99.35\%$

Notes
* = Benzene results negligible, DRE not a true representation
** = GRO results negligible, DRE not a true representation
[1] = Cumulative GRO removed was incorrectly tabulated in the Second Quarter 2008 report. The current values have been corrected.

Figure 1
Cumulative GWE Mass Removal for GRO, Benzene, and MTBE
Station #2111, 1156 Davis Street, San Leandro, California

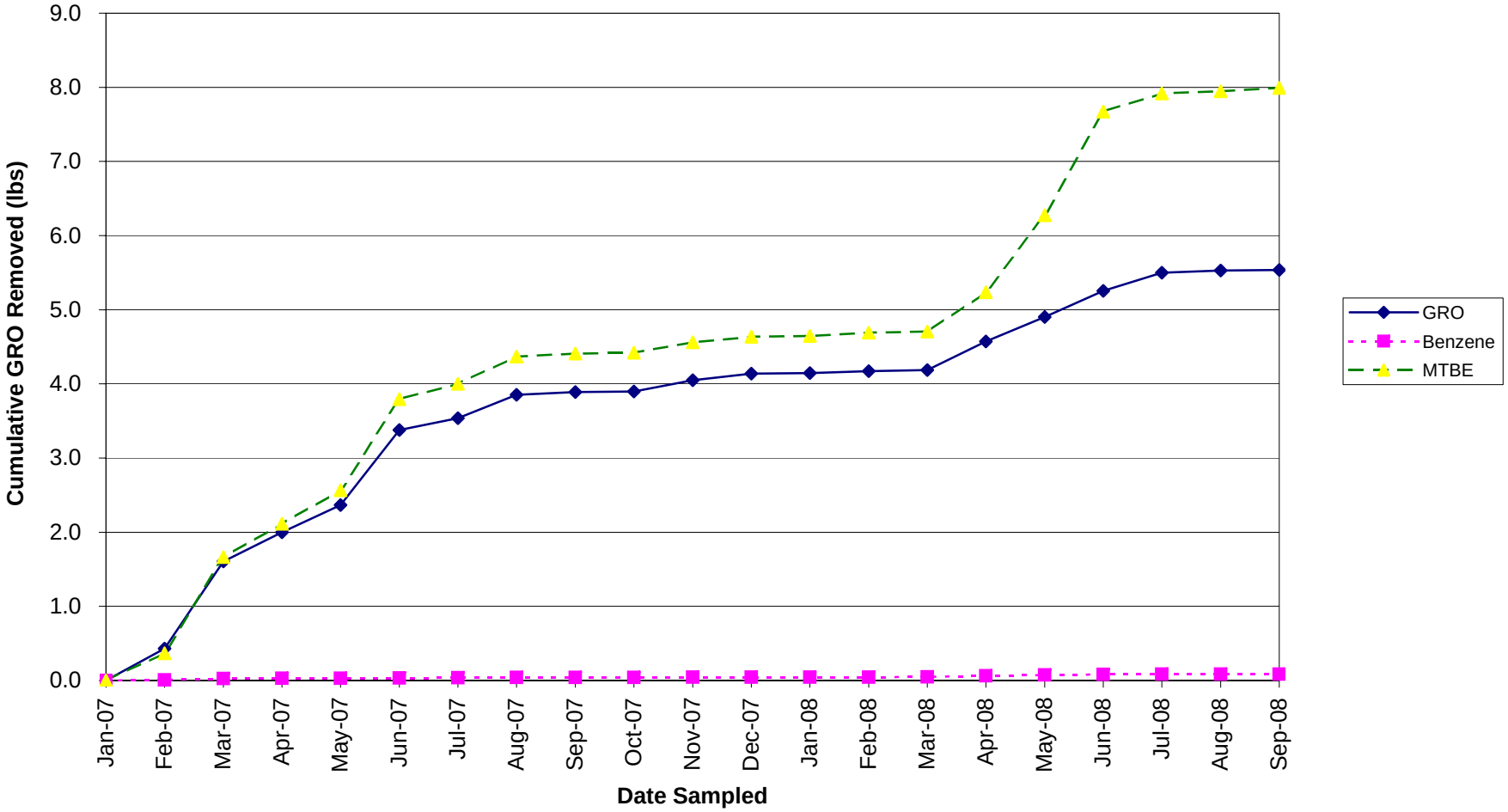


Figure 2
GWE Influent Concentrations for GRO, Benzene, and MTBE
Station #2111, 1156 Davis Street, San Leandro, California

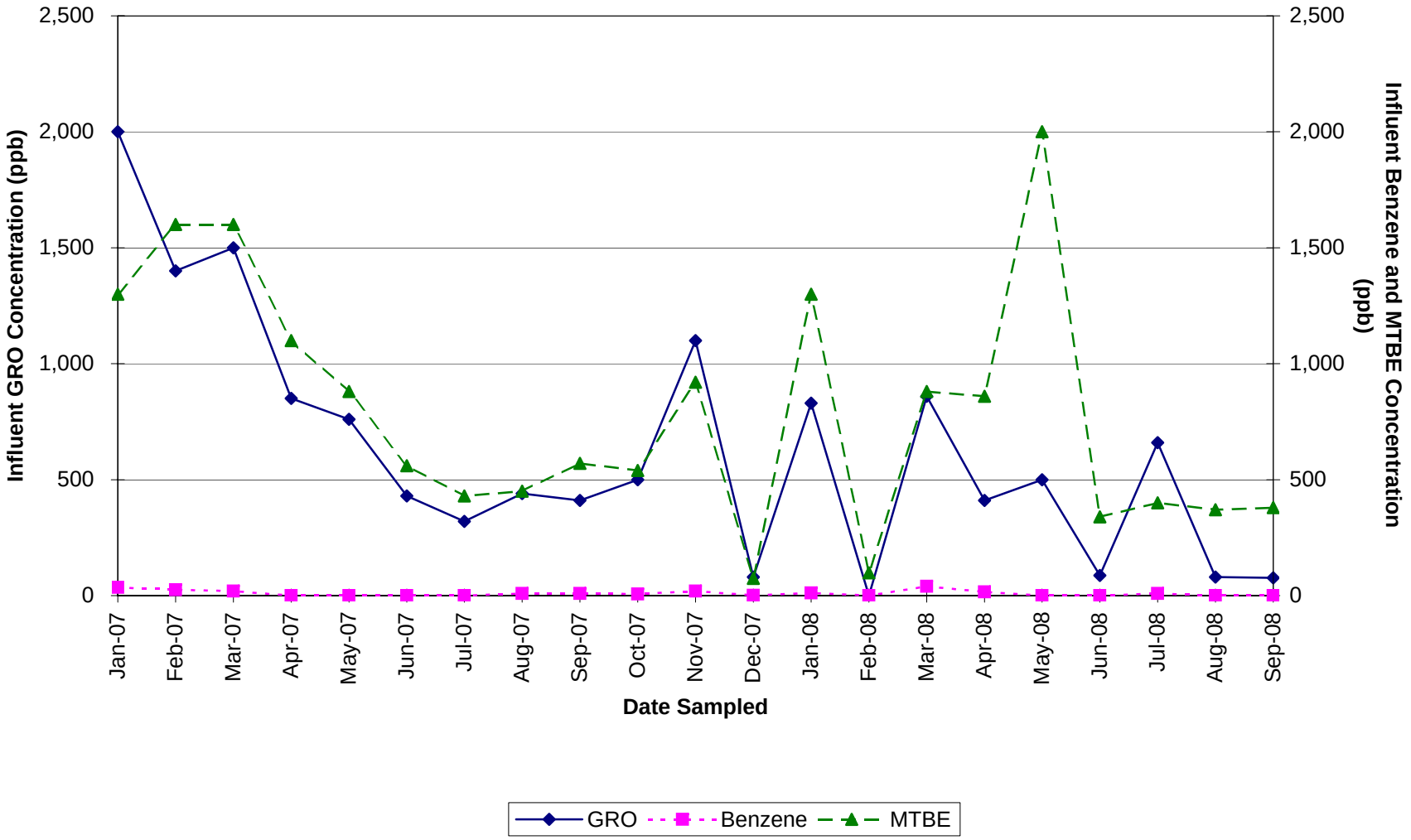


Figure 3
SVE System Influent Concentration vs.Time
Station #2111, 1156 Davis Street, San Leandro, California

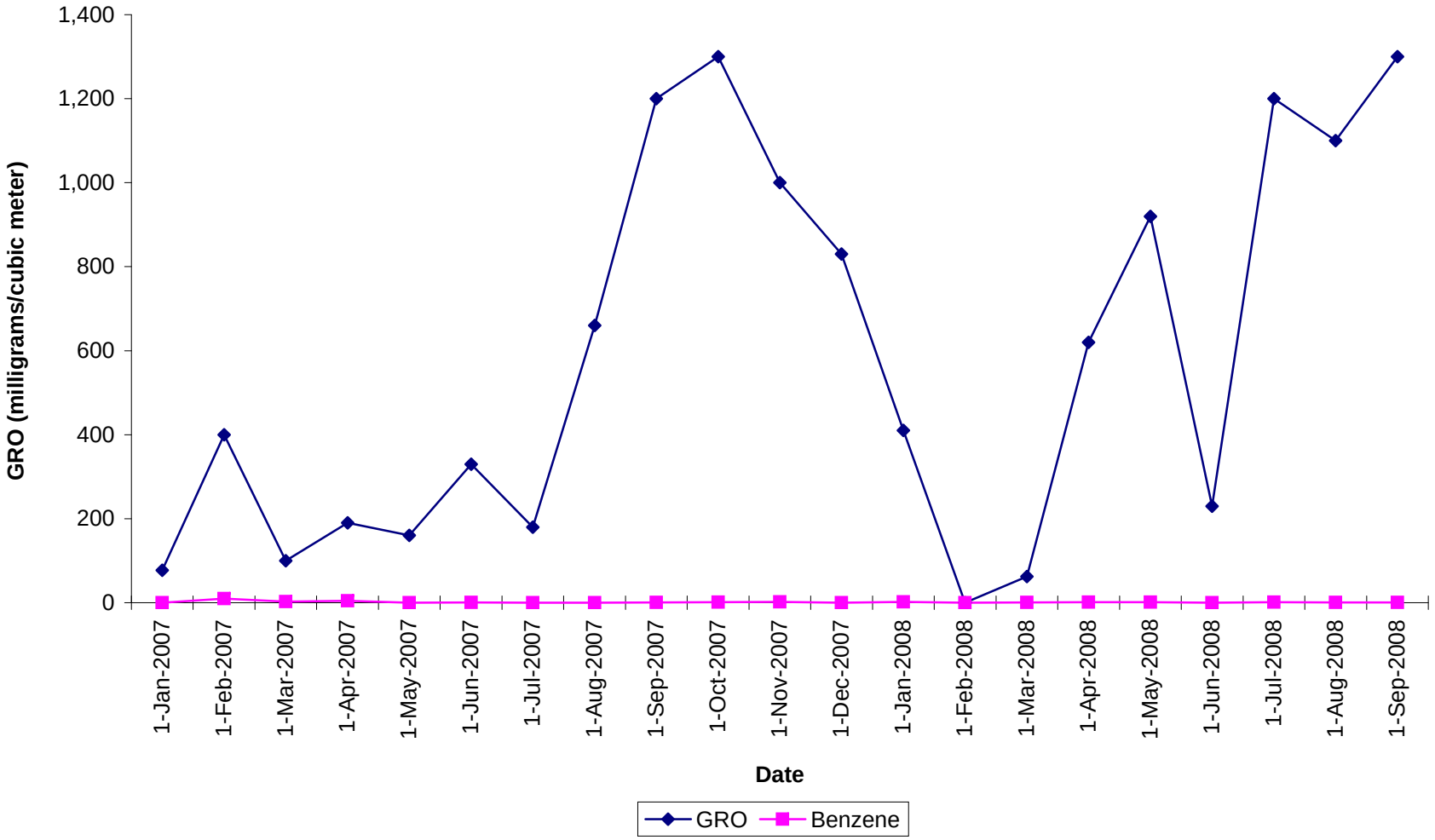
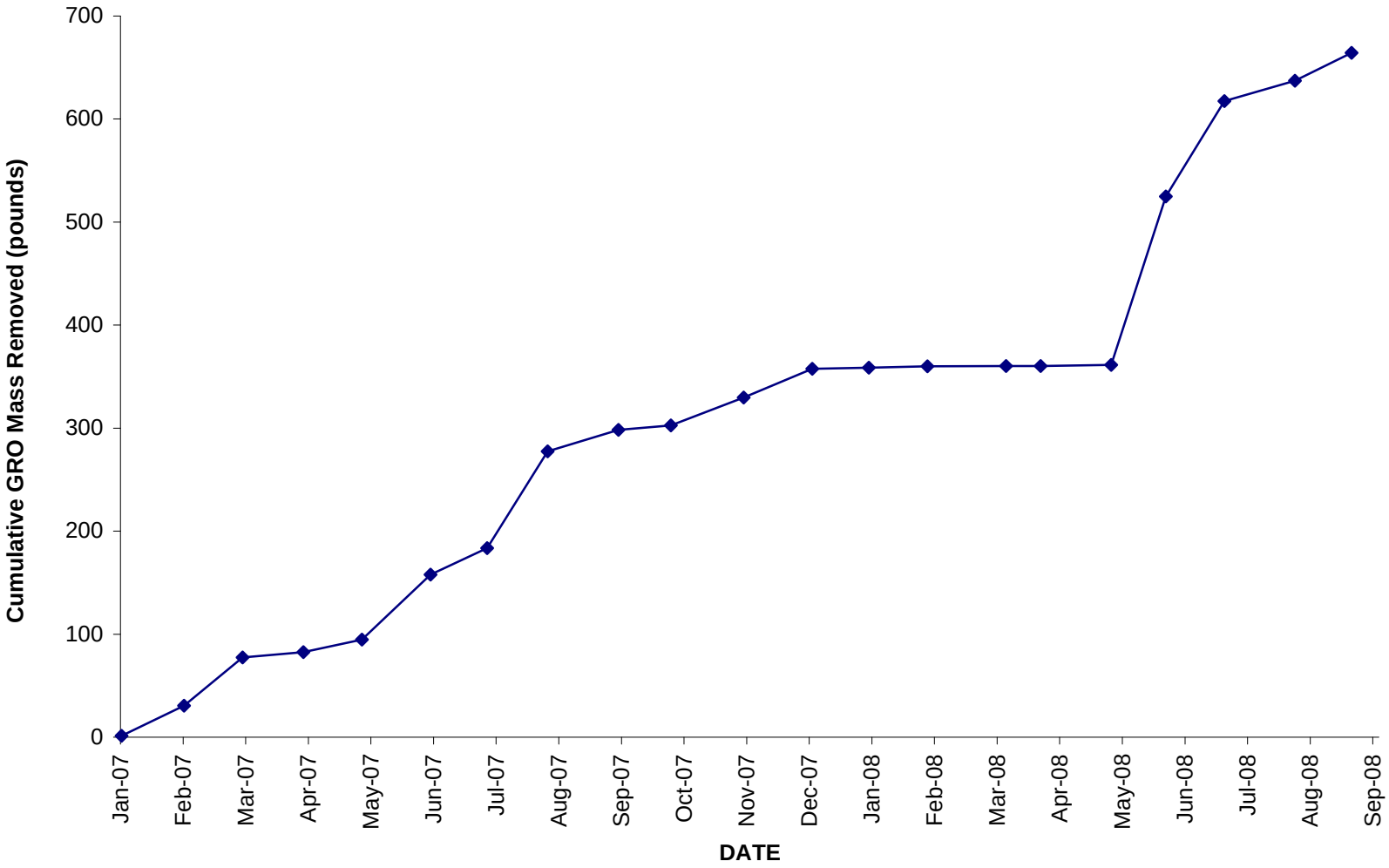


Figure 4
SVE System Cumulative GRO Mass Removed vs. Time
Station #2111, 1156 Davis Street, San Leandro, California



APPENDIX A

STRATUS GROUND-WATER SAMPLING DATA PACKAGE
(INCLUDES FIELD DATA SHEETS, LABORATORY ANALYTICAL REPORT WITH CHAIN-OF-CUSTODY DOCUMENTATION, AND FIELD PROCEDURES)

STRATUS
ENVIRONMENTAL, INC.

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

September 5, 2008

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

Re: Groundwater Sampling Data Package, BP Service Station No. 2111, located at 1156 Davis Street., San Leandro, California.

General Information

Data Submittal Prepared / Reviewed by: Becky Carroll / Jay Johnson
Phone Number: (530) 676-6000
On-Site Supplier Representatives: Chris Grant

Sampling Date: August 20, 2008
Arrival: 14:00 *Departure:* 17:00
Weather Conditions: Clear
Unusual Field Conditions: None noted.
Scope of Work Performed: Quarterly monitoring and sampling.
Variations from Work Scope: None noted.

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

Sincerely,

STRATUS ENVIRONMENTAL, INC.

Jay R. Johnson, P.G.
Project Manager

Attachments:

- Field Data Sheets
- Chain of Custody Documentation
- Certified Analytical Results
- Field Procedures for Groundwater sampling

CC: Mr. Paul Supple, BP/ARCO

STRATUS ENVIRONMENTAL, INC.

Site Address 1156 Davis Street
City San Leandro
Sampled by: CG
Signature

Site Number Arco 2111
Project Number E-2111-03
Project PM Jay Johnson
DATE 08/20/08

ORIGINAL

Water Level Data					Purge Volume Calculations					Purge Method				Sample Record			Field Da
Well ID	Time	~~Depth to Product~~ (feet) Type of Sam	Depth to Water (feet)	Total Depth (feet)	Water column (feet)	Diameter (inches)	Multiplier	3 casing volumes (gallons)	Actual water purged (gallons)	No Purge	Bailer	Pump	other	DTW at sample time (feet)	Sample I.D	Sample Time	DO (mg/L)
MW-1		12.50	18.32	26.06	—	4	2	—	—	X	Sample only			18.32	MW-1	1447	2.37
MW-2		12.00	16.66	26.51	—	4	2	—	—	X	Sample only			16.66	MW-2	1537	1.54
MW-3		12.00	17.65	26.22	—	4	2	—	—	X	Sample only			17.65	MW-3	1430	2.85
MW-4		10.00	16.65	21.52	—	4	2	—	—	X	Sample only			16.65	MW-4	1614	2.36
MW-5		9.50	16.11	23.61	—	2	.5	—	—	X	Sample only			16.11	MW-5	1651	1.65
MW-6		10.00	15.59	20.45	—	2	.5	—	—	X	Sample only			15.59	MW-6	1629	1.66
MW-7		12.00	16.57	26.27	—	4	2	—	—	X	Sample only			16.57	MW-7	1556	2.12
MW-8		18.00	17.80	39.05	21.75	2	.5	10.86	11		X			17.45	MW-8	1521	1.18

Multiplier
2" = 0.5 3" = 1.0 4" = 2.0 6" = 4.4

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

CALIBRATION DATE
pH 8/13/08 CG
Conductivity /
DO /

STRATUS ENVIRONMENTAL, INC.

Site Address 1156 Davis St ORIGINAL
City San Leandro
Site Sampled by CG

Site Number Arco 2111
Project No. E-2111-03
Project PM Jay Johnson
Date Sampled 08/20/08

Well ID MW-3 — purge start time BAILER (NP) 1430 — no odor

	Temp C	pH	cond	gallons
time	21.3	7.62	561	Ø
time				
time				
time				
purge stop time				

Well ID MW-8 — purge start time BAILER 1521 — no odor

	Temp C	pH	cond	gallons
time	15.6	6.96	565	Ø
time	19.4	6.93	563	5.5
time	20.6	6.94	555	11
time				
purge stop time				

Well ID MW-7 — purge start time BAILER (NP) 1556 — no odor

	Temp C	pH	cond	gallons
time	21.4	7.04	654	Ø
time				
time				
time				
purge stop time				

Well ID MW-6 — purge start time BAILER (NP) 1629 — no odor

	Temp C	pH	cond	gallons
time	21.9	6.83	680	Ø
time				
time				
time				
purge stop time				

Well ID MW-1 — purge start time BAILER (NP) 1447 — no odor

	Temp C	pH	cond	gallons
time	20.6	6.95	587	6
time				
time				
time				
pugre stop time				

Well ID MW-2 — purge start time BAILER (NP) 1537 — odor

	Temp C	pH	cond	gallons
time	20.8	6.91	684	6
time				
time				
time				
purge stop time				

Well ID MW-4 — purge start time BAILER (NP) 1614 — no odor

	Temp C	pH	cond	gallons
time	21.4	6.90	653	Ø
time				
time				
time				
purge stop time				

Well ID MW-5 — purge start time BAILER (NP) 1651 — no odor

	Temp C	pH	cond	gallons
time	21.0	6.86	647	6
time				
time				
time				
purge stop time				

WELLHEAD OBSERVATION FORM

Site Name/Number: Arco 2111 *Date:* 08/20/08 *Technican:* C. Grant

STRATUS ENVIRONMENTAL, INC.

Well I.D.	Box in Good Condition? X = Yes Blank = No	Lock Missing? X = Yes (replaced) Blank = No	Water in Wellbox? X = Yes Blank = No	Water Level Relative to Cap? A = Above cap B = Below cap L = Level w/cap	Well Cap? I = Intact M = Missing or Compromised (replaced)	Bolts Missing? X = Yes Blank = No	Bolts Stripped? X = Yes Blank = No	Bolt Holes Stripped? X = Yes Blank = No	Cracked or Broken Lid? X = Yes Blank = No	Cracked or Broken Box? X = Yes Blank = No	Grout Level more than 1ft below TOC? X = Yes Blank = No	Additional Comments (such as missing lid, concrete needs replacement, or other - explain)
MW-1	X											
MW-2	X											
MW-3	X											
MW-4	X											
MW-5								K-2				
MW-6	X											
MW-7	X											
MW-8	X											

DRUM INVENTORY

Drums on site? Yes No (circle)

Type and # Steel: _____ Plastic: _____

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

_____

_____

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

_____

_____

(updated 3-28-08, SS)

GENERAL SITE CONDITIONS

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

_____

_____

_____

_____

_____

_____

NO. 674103

NON-HAZARDOUS WASTE DATA FORM

TO BE COMPLETED BY GENERATOR

SITE: 1156 DAVIS ST

NAME BP WEST COAST PRODUCTS LLC ARCO #2111

ADDRESS P.O. BOX 80249

CITY, STATE, ZIP RANCHO SANTA MARGARITA, CA 92688

EPA I.D. NO. NOT REQUIRED

PROFILE NO.

PHONE NO. ( )

CONTAINERS: No. _____ VOLUME 11 gal WEIGHT _____

TYPE: ☐ TANK TRUCK ☐ DUMP TRUCK ☐ DRUMS ☐ CARTONS ☐ OTHER _____

WASTE DESCRIPTION NON-HAZARDOUS WATER

GENERATING PROCESS WELL PURGING/DECON WATER

COMPONENTS OF WASTE	PPM	%	COMPONENTS OF WASTE	PPM	%
1. WATER		99-100%	5.		
2. TPH		<1%	6.		
3.			7. BESI#		
4.			8.		

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

HANDLING INSTRUCTIONS: WEAR ALL APPROPRIATE PROTECTIVE CLOTHINGS

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS.

Larry Moothart BESI for BP — TYPED OR PRINTED FULL NAME & SIGNATURE

08/24/06 — DATE

TRANSPORTER

Transporter #1 Transporter #2

NAME STRATUS ENVIRONMENTAL

ADDRESS 3330 CAMERON PARK DR

CITY, STATE, ZIP CAMERON PARK, CA 95682

PHONE NO. 530-676-2031

TRUCK, UNIT, I.D. NO.

EPA I.D. NO.

SERVICE ORDER NO.

PICK UP DATE

Chris Grant — TYPED OR PRINTED FULL NAME & SIGNATURE

08/24/06 — DATE

TSD FACILITY

NAME INSTRAT, INC

ADDRESS 1105 AIRPORT RD #C

CITY, STATE, ZIP RIO VISTA, CA 94571

PHONE NO. 530-753-1829

EPA I.D. NO.

DISPOSAL METHOD

☐ LANDFILL ☐ OTHER _____

TYPED OR PRINTED FULL NAME & SIGNATURE

DATE

GEN	OLD/NEW	L A	TONS	
TRANS		S B		
C/Q		RT/CD	HWDF NONE	DISCREPANCY

Atlantic Richfield Company

A BP affiliated company

Chain of Custody Record

Project Name: ARCO 2111
BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > Alameda > 2111
State or Lead Regulatory Agency:
Requested Due Date (mm/dd/yy): STD / TAT

On-site Time: 1400	Temp: 80
Off-site Time: 1700	Temp: 81
Sky Conditions: clear	
Meteorological Events: —	
Wind Speed: —	Direction: —

Lab Name: Cal Science	
Address: 7440 Lincoln way	
Garden Grove Ca. 92841-1427	
Lab PM: Linda Sharpenberg	
Tele/Fax: 714-895-5494 714-895-7501 (fax)	
BP/AR PM Contact: Paul Supple	
Address: 2010 Crow Canyon Place, Suite 150	
San Ramon, CA	
Tele/Fax: 925-275-3506	

BP/AR Facility No.:	2111
BP/AR Facility Address:	1156 Davis Street, San Leandro
Site Lat/Long:	
California Global ID No.:	T0600101764
Enfos Project No.:	G0C28-0029
Provision or OOC (circle one)	Provision
Phase/WBS:	04-Monitoring
Sub Phase/Task:	03-Analytical
Cost Element:	01-Contractor labor

Consultant/Contractor:	Stratus Environmental, Inc.
Address:	3330 Cameron Park Drive, Suite 550
	Cameron Park, CA 95682
Consultant/Contractor Project No.:	E2111-03
Consultant/Contractor PM:	Jay Johnson
Tele/Fax:	(530) 676-6000 / (530) 676-6005
Report Type & QC Level:	Level 1 with EDF
E-mail EDD To:	shayes@stratusinc.net
Invoice to:	Atlantic Richfield Co.

Lab Bottle Order No:

Item No.	Sample Description	Time	Date 2008	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: * GRO	* BTEX	* 5 oxy's*	* EDB	* 1,2 DCA	* Ethanol	Sample Point Lat/Long and Comments
1	MW-1	1447	08/20		X			6				X		X	X	X	X	X	X	*all by 8260
2	MW-2	1537																		
3	MW-3	1430																		
4	MW-4	1614																		
5	MW-5	1651																		
6	MW-6	1629																		
7	MW-7	1556																		
8	MW-8	1521																		
9																				
10	TB-2111-08202008	1700	08/20		X			1												~~HOLD~~ OK "on hold"

Sampler's Name: C. Grant	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Stratus Envr.	[signature] / Stratus	8/22	1220	[signature] CEL	8-22-08	1220
Shipment Date: 08/22/08						
Shipment Method:						
Shipment Tracking No:						

Special Instructions: Please cc results to rmiller@broadbentinc.com

Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: ____ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Calscience Environmental Laboratories, Inc.

September 05, 2008

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

Subject: **Calscience Work Order No.: 08-08-2138**
Client Reference: ARCO 2111

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 8/23/2008 and analyzed in accordance with the attached chain-of-custody.

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

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

Sincerely,

Calscience Environmental
Laboratories, Inc.
Linda Scharpenberg
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 08/23/08
Work Order No: 08-08-2138
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: ARCO 2111

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-1	**08-08-2138-1-D**	**08/20/08 14:47**	**Aqueous**	**GC 4**	**08/28/08**	**08/29/08 14:03**	**080828B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	58	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-2	**08-08-2138-2-D**	**08/20/08 15:37**	**Aqueous**	**GC 4**	**08/28/08**	**08/29/08 14:36**	**080828B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	990	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	60	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-3	**08-08-2138-3-D**	**08/20/08 14:30**	**Aqueous**	**GC 4**	**08/28/08**	**08/29/08 15:09**	**080828B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	61	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-4	**08-08-2138-4-D**	**08/20/08 16:14**	**Aqueous**	**GC 4**	**08/28/08**	**08/29/08 15:41**	**080828B02**

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

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	08/23/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-08-2138
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: ARCO 2111

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-5	**08-08-2138-5-D**	**08/20/08 16:51**	**Aqueous**	**GC 4**	**08/28/08**	**08/29/08 16:28**	**080828B02**

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-6	**08-08-2138-6-D**	**08/20/08 16:29**	**Aqueous**	**GC 4**	**08/28/08**	**08/29/08 17:01**	**080828B02**

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-7	**08-08-2138-7-D**	**08/20/08 15:56**	**Aqueous**	**GC 4**	**08/28/08**	**08/29/08 17:33**	**080828B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	61	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-8	**08-08-2138-8-D**	**08/20/08 15:21**	**Aqueous**	**GC 4**	**08/28/08**	**08/29/08 18:06**	**080828B02**

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

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	08/23/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-08-2138
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: ARCO 2111

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-695-247**	**N/A**	**Aqueous**	**GC 4**	**08/28/08**	**08/29/08 04:11**	**080828B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	57	38-134			

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 08/23/08
Work Order No: 08-08-2138
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: ARCO 2111

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-1	**08-08-2138-1-A**	**08/20/08 14:47**	**Aqueous**	**GC/MS BB**	**08/29/08**	**08/29/08 20:00**	**080829L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	3.3	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	96	73-157			Dibromofluoromethane	109	82-142		
Toluene-d8	102	82-112			1,4-Bromofluorobenzene	93	75-105		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-2	**08-08-2138-2-A**	**08/20/08 15:37**	**Aqueous**	**GC/MS BB**	**08/28/08**	**08/29/08 08:18**	**080828L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	21	10	20		Methyl-t-Butyl Ether (MTBE)	190	10	20	
1,2-Dibromoethane	ND	10	20		Tert-Butyl Alcohol (TBA)	470	200	20	
1,2-Dichloroethane	ND	10	20		Diisopropyl Ether (DIPE)	ND	10	20	
Ethylbenzene	ND	10	20		Ethyl-t-Butyl Ether (ETBE)	ND	10	20	
Toluene	ND	10	20		Tert-Amyl-Methyl Ether (TAME)	ND	10	20	
Xylenes (total)	ND	10	20		Ethanol	ND	6000	20	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	110	73-157			Dibromofluoromethane	117	82-142		
Toluene-d8	105	82-112			1,4-Bromofluorobenzene	95	75-105		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-3	**08-08-2138-3-A**	**08/20/08 14:30**	**Aqueous**	**GC/MS BB**	**08/28/08**	**08/29/08 04:57**	**080828L02**

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	73-157			Dibromofluoromethane	107	82-142		
Toluene-d8	103	82-112			1,4-Bromofluorobenzene	98	75-105		

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 08/23/08
Work Order No: 08-08-2138
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: ARCO 2111

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-4	**08-08-2138-4-A**	**08/20/08 16:14**	**Aqueous**	**GC/MS BB**	**08/28/08**	**08/29/08 08:51**	**080828L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	0.70	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	73-157			Dibromofluoromethane	114	82-142		
Toluene-d8	104	82-112			1,4-Bromofluorobenzene	97	75-105		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-5	**08-08-2138-5-A**	**08/20/08 16:51**	**Aqueous**	**GC/MS BB**	**08/28/08**	**08/29/08 09:25**	**080828L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.0	2		Methyl-t-Butyl Ether (MTBE)	3.6	1.0	2	
1,2-Dibromoethane	ND	1.0	2		Tert-Butyl Alcohol (TBA)	520	50	5	
1,2-Dichloroethane	ND	1.0	2		Diisopropyl Ether (DIPE)	ND	1.0	2	
Ethylbenzene	ND	1.0	2		Ethyl-t-Butyl Ether (ETBE)	ND	1.0	2	
Toluene	ND	1.0	2		Tert-Amyl-Methyl Ether (TAME)	ND	1.0	2	
Xylenes (total)	ND	1.0	2		Ethanol	ND	600	2	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	107	73-157			Dibromofluoromethane	112	82-142		
Toluene-d8	103	82-112			1,4-Bromofluorobenzene	96	75-105		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-6	**08-08-2138-6-A**	**08/20/08 16:29**	**Aqueous**	**GC/MS BB**	**08/28/08**	**08/29/08 09:58**	**080828L02**

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	112	73-157			Dibromofluoromethane	118	82-142		
Toluene-d8	105	82-112			1,4-Bromofluorobenzene	95	75-105		

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 08/23/08
Work Order No: 08-08-2138
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: ARCO 2111

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-7	**08-08-2138-7-A**	**08/20/08 15:56**	**Aqueous**	**GC/MS BB**	**08/29/08**	**08/29/08 20:34**	**080829L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	39	25	50	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	34	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	104	73-157			Dibromofluoromethane	114	82-142		
Toluene-d8	103	82-112			1,4-Bromofluorobenzene	97	75-105		

MW-8	**08-08-2138-8-A**	**08/20/08 15:21**	**Aqueous**	**GC/MS BB**	**08/28/08**	**08/29/08 11:05**	**080828L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	13	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	62	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	102	73-157			Dibromofluoromethane	111	82-142		
Toluene-d8	103	82-112			1,4-Bromofluorobenzene	96	75-105		

Method Blank	**099-12-703-418**	**N/A**	**Aqueous**	**GC/MS BB**	**08/28/08**	**08/29/08 04:24**	**080828L02**

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	73-157			Dibromofluoromethane	101	82-142		
Toluene-d8	103	82-112			1,4-Bromofluorobenzene	93	75-105		

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	08/23/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-08-2138
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L
Project: ARCO 2111		Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-420**	**N/A**	**Aqueous**	**GC/MS BB**	**08/29/08**	**08/29/08 16:37**	**080829L01**

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	95	73-157			Dibromofluoromethane	101	82-142		
Toluene-d8	105	82-112			1,4-Bromofluorobenzene	96	75-105		

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

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 08/23/08
Work Order No: 08-08-2138
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project ARCO 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-08-2136-5	**Aqueous**	**GC 4**	**08/28/08**	**08/29/08**	**080828S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	88	85	38-134	3	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 08/23/08
Work Order No: 08-08-2138
Preparation: EPA 5030B
Method: EPA 8260B

Project ARCO 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-3	**Aqueous**	**GC/MS BB**	**08/28/08**	**08/29/08**	**080828S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	106	107	86-122	0	0-8	
Carbon Tetrachloride	103	95	78-138	8	0-9	
Chlorobenzene	102	104	90-120	2	0-9	
1,2-Dibromoethane	92	92	70-130	0	0-30	
1,2-Dichlorobenzene	101	102	89-119	1	0-10	
1,1-Dichloroethene	92	96	52-142	4	0-23	
Ethylbenzene	97	100	70-130	3	0-30	
Toluene	105	107	85-127	2	0-12	
Trichloroethene	102	104	78-126	2	0-10	
Vinyl Chloride	126	120	56-140	5	0-21	
Methyl-t-Butyl Ether (MTBE)	101	94	64-136	6	0-28	
Tert-Butyl Alcohol (TBA)	106	112	27-183	5	0-60	
Diisopropyl Ether (DIPE)	117	107	78-126	9	0-16	
Ethyl-t-Butyl Ether (ETBE)	103	89	67-133	14	0-21	
Tert-Amyl-Methyl Ether (TAME)	93	93	63-141	0	0-21	
Ethanol	103	104	11-167	1	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 08/23/08
Work Order No: 08-08-2138
Preparation: EPA 5030B
Method: EPA 8260B

Project ARCO 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-08-2136-1	**Aqueous**	**GC/MS BB**	**08/29/08**	**08/29/08**	**080829S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	108	104	86-122	4	0-8	
Carbon Tetrachloride	99	100	78-138	1	0-9	
Chlorobenzene	104	102	90-120	2	0-9	
1,2-Dibromoethane	98	94	70-130	4	0-30	
1,2-Dichlorobenzene	103	101	89-119	3	0-10	
1,1-Dichloroethene	100	103	52-142	3	0-23	
Ethylbenzene	96	98	70-130	2	0-30	
Toluene	109	108	85-127	0	0-12	
Trichloroethene	103	97	78-126	6	0-10	
Vinyl Chloride	122	122	56-140	0	0-21	
Methyl-t-Butyl Ether (MTBE)	97	91	64-136	5	0-28	
Tert-Butyl Alcohol (TBA)	103	100	27-183	3	0-60	
Diisopropyl Ether (DIPE)	113	97	78-126	15	0-16	
Ethyl-t-Butyl Ether (ETBE)	101	98	67-133	3	0-21	
Tert-Amyl-Methyl Ether (TAME)	97	93	63-141	4	0-21	
Ethanol	107	112	11-167	5	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.	Date Received: N/A
3330 Cameron Park Drive, Suite 550	Work Order No: 08-08-2138
Cameron Park, CA 95682-8861	Preparation: EPA 5030B
	Method: EPA 8015B (M)

Project: ARCO 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-247	**Aqueous**	**GC 4**	**08/28/08**	**08/29/08**	**080828B02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	97	91	78-120	7	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 08-08-2138
Preparation: EPA 5030B
Method: EPA 8260B

Project: ARCO 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-418	**Aqueous**	**GC/MS BB**	**08/28/08**	**08/29/08**	**080828L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	107	104	87-117	82-122	3	0-7	
Carbon Tetrachloride	105	103	78-132	69-141	1	0-8	
Chlorobenzene	101	102	88-118	83-123	1	0-8	
1,2-Dibromoethane	94	101	80-120	73-127	8	0-20	
1,2-Dichlorobenzene	99	103	88-118	83-123	4	0-8	
1,1-Dichloroethene	113	110	71-131	61-141	3	0-14	
Ethylbenzene	98	100	80-120	73-127	2	0-20	
Toluene	107	107	85-127	78-134	1	0-7	
Trichloroethene	105	104	85-121	79-127	1	0-11	
Vinyl Chloride	130	131	64-136	52-148	1	0-10	
Methyl-t-Butyl Ether (MTBE)	103	103	67-133	56-144	0	0-16	
Tert-Butyl Alcohol (TBA)	101	98	34-154	14-174	4	0-19	
Diisopropyl Ether (DIPE)	119	117	80-122	73-129	2	0-8	
Ethyl-t-Butyl Ether (ETBE)	109	105	73-127	64-136	4	0-11	
Tert-Amyl-Methyl Ether (TAME)	98	98	69-135	58-146	0	0-12	
Ethanol	100	96	34-124	19-139	4	0-44	

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

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

Date Received: N/A
Work Order No: 08-08-2138
Preparation: EPA 5030B
Method: EPA 8260B

Project: ARCO 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-420	**Aqueous**	**GC/MS BB**	**08/29/08**	**08/29/08**	**080829L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	106	107	87-117	82-122	0	0-7	
Carbon Tetrachloride	100	103	78-132	69-141	2	0-8	
Chlorobenzene	100	104	88-118	83-123	4	0-8	
1,2-Dibromoethane	91	95	80-120	73-127	4	0-20	
1,2-Dichlorobenzene	100	103	88-118	83-123	4	0-8	
1,1-Dichloroethene	106	103	71-131	61-141	3	0-14	
Ethylbenzene	99	101	80-120	73-127	2	0-20	
Toluene	108	111	85-127	78-134	3	0-7	
Trichloroethene	102	104	85-121	79-127	2	0-11	
Vinyl Chloride	126	122	64-136	52-148	3	0-10	
Methyl-t-Butyl Ether (MTBE)	95	100	67-133	56-144	5	0-16	
Tert-Butyl Alcohol (TBA)	103	104	34-154	14-174	1	0-19	
Diisopropyl Ether (DIPE)	112	113	80-122	73-129	2	0-8	
Ethyl-t-Butyl Ether (ETBE)	101	98	73-127	64-136	2	0-11	
Tert-Amyl-Methyl Ether (TAME)	95	99	69-135	58-146	4	0-12	
Ethanol	108	83	34-124	19-139	26	0-44	

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.

Glossary of Terms and Qualifiers

Work Order Number: 08-08-2138

Qualifier	Definition
AX	Sample too dilute to quantify surrogate.
AY	Matrix interference suspected.
BA	Relative percent difference out of control.
BA,AY	Relative percent difference out of control, 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.
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.
ET	Sample was extracted past end of recommended max. holding time.
EY	Result exceeds normal dynamic range; reported as a min est.
GN	Surrogate recovery is outside of control limits.
GS	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	Surrogate recovery below the acceptance limit.
LH	Surrogate recovery above the acceptance limit.
LM,AY	MS and/or MSD above acceptance limits. See Blank Spike (LCS). Matrix interfence suspected.
LN,AY	MS and/or MSD below acceptance limits. See Blank Spike (LCS). Matrix interfence suspected.
LQ	LCS recovery above method control limits.

Work Order Number: 08-08-2138

Qualifier	Definition
LR	LCS recovery below method control limits.
MB	Analyte present in the method blank.
MG	Analyte is a suspected lab contaminate.
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.

Atlantic Richfield Company

A BP affiliated company

Chain of Custody Record

2139

Project Name: ARCO 2111
BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > Alameda > 2111
State or Lead Regulatory Agency:
Requested Due Date (mm/dd/yy): STD/TAT

On-site Time:	1400	Temp:	83
Off-site Time:	1700	Temp:	81
Sky Conditions:	clear		
Meteorological Events:	—		
Wind Speed:	—	Direction:	—

Lab Name:	Cal Science
Address:	7440 Lincoln way
	Garden Grove Ca. 92841-1427
Lab PM:	Linda Sharpenberg
Tele/Fax:	714-895-5494 714-895-7501 (fax)
BP/AR PM Contact:	Paul Supple
Address:	2010 Crow Canyon Place, Suite 150
	San Ramon, CA
Tele/Fax:	925-275-3506

BP/AR Facility No.:	2111
BP/AR Facility Address:	1156 Davis Street, San Leandro
Site Lat/Long:	
California Global ID No.:	T0600101764
Enfos Project No.:	G0C28-0029
Provision or OOC (circle one)	Provision
Phase/WBS:	04-Monitoring
Sub Phase/Task:	03-Analytical
Cost Element:	01-Contractor labor

Consultant/Contractor:	Stratus Environmental, Inc.
Address:	3330 Cameron Park Drive, Suite 550
	Cameron Park, CA 95682
Consultant/Contractor Project No.:	E2111-03
Consultant/Contractor PM:	Jay Johnson
Tele/Fax:	(530) 676-6000 / (530) 676-6005
Report Type & QC Level:	Level 1 with EDF
E-mail EDD To:	shayes@stratusinc.net
Invoice to:	Atlantic Richfield Co.

Lab Bottle Order No:

Item No.	Sample Description	Time	Date 2008	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: * GRO	* BTEX	* 5 oxy's*	* EDB	* 1,2 DCA	* Ethanol	Sample Point Lat/Long and Comments (*Oxy= MTBE,TAME,ETBE,DIPE,TBA)
1	MW-1	1447	08/20		X			6				X		X	X	X	X	X	X	* all by 8260
2	MW-2	1537	"		"			"				"		"	"	"	"	"	"	
3	MW-3	1430	"		"			"				"		"	"	"	"	"	"	
4	MW-4	1614	"		"			"				"		"	"	"	"	"	"	
5	MW-5	1651	"		"			"				"		"	"	"	"	"	"	
6	MW-6	1629	"		"			"				"		"	"	"	"	"	"	
7	MW-7	1556	"		"			"				"		"	"	"	"	"	"	
8	MW-8	1521	"		"			"				"		"	"	"	"	"	"	
~~9~~																				
9 ~~10~~	TB-2111-08202008	1700	08/20		X			2												~~HOLD~~ on "on hold"

Sampler's Name:	C. Grant
Sampler's Company:	Stratus Envr.
Shipment Date:	08/22/08
Shipment Method:	
Shipment Tracking No:	810230709

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Stratus	8/22	1220	CEL	8/22/08	1220
to GSO	8/22/08	1730	CEL	08-23-08	9:10

Special Instructions: Please cc results to rmiller@broadbentinc.com

Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP COC Rev. 5 10/11/2006

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 0 8 - 2 1 3 8

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: STATUS DATE: 08-22-08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature (For Air & Filter Only).
___ ___ . ___ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

___ ___ . ___ °C Temperature blank.
0 3 . 2 °C IR Thermometer.
_____ Ambient temperature (For Air & Filter Only).

Initial: TD

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: ✓ No (Not Intact) : _____ Not Present: _____

Initial: TD

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			✓

Initial: TD

COMMENTS:

ATTACHMENT

FIELD PROCEDURES FOR GROUNDWATER SAMPLING

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

Equipment Calibration

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

Groundwater and Liquid-Phase Petroleum Hydrocarbon Depth Assessment

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

Subjective Analysis of Groundwater

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

Monitoring Well Sampling

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

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

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

Groundwater Sample Labeling and Preservation

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

Sample Identification and Chain-of-Custody Procedures

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

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

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

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

Equipment Cleaning

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

APPENDIX B

GEOTRACKER UPLOAD CONFIRMATIONS

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:	**3Q08 GEO_WELL 2111**
Facility Global ID:	**T0600101764**
Facility Name:	**ARCO #2111**
File Name:	**GEO_WELL.zip**
Organization Name:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**10/23/2008 11:27:59 AM**
Confirmation Number:	**3877919077**

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A EDF FILE

SUCCESS

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

Submittal Type:	**GWM_R**
Submittal Title:	**3Q08 GW Monitoring**
Facility Global ID:	**T0600101764**
Facility Name:	**ARCO #2111**
File Name:	**08082138.zip**
Organization Name:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**10/23/2008 11:36:38 AM**
Confirmation Number:	**9766178965**

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VIEW DETECTIONS REPORT

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A EDF FILE

SUCCESS

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Submittal Type:	**SWI_R**
Submittal Title:	**Monthly System Sampling 0708**
Facility Global ID:	**T0600101764**
Facility Name:	**ARCO #2111**
File Name:	**08070164a.zip**
Organization Name:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**10/23/2008 11:49:46 AM**
Confirmation Number:	**7560164511**

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STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

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Submittal Type:	**SWI_R**
Submittal Title:	**Monthly System Sampling 0808**
Facility Global ID:	**T0600101764**
Facility Name:	**ARCO #2111**
File Name:	**08080357.zip**
Organization Name:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**10/23/2008 11:42:14 AM**
Confirmation Number:	**1727077662**

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STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A EDF FILE

SUCCESS

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

Submittal Type:	**SWI_R**
Submittal Title:	**Monthly System Sampling 0908**
Facility Global ID:	**T0600101764**
Facility Name:	**ARCO #2111**
File Name:	**08090162.zip**
Organization Name:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**10/23/2008 11:43:38 AM**
Confirmation Number:	**9892796397**

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APPENDIX C

STRATUS REMEDIATION SYSTEM OPERATION AND MAINTENANCE DATA PACKAGES (INCLUDES FIELD DATA SHEETS, LABORATORY REPORTS, AND CHAIN-OF-CUSTODY DOCUMENTATION)

STRATUS
ENVIRONMENTAL, INC.

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

August 5, 2008

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

Re: Remediation System Operation and Maintenance Data Package, ARCO Service Station No. 2111, located at 1156 Davis Street, San Leandro, California.

General Information

Data Submittal Prepared / Reviewed by: Sandy Hayes and Kiran Nagaraju / Jay Johnson

Phone Number: (530) 676-6007 / (530) 676-6000

On-Site Supplier Representatives: Chris Hill and Greg Wilkins

Number of Site Visits: 4 (July 1, 7, 23, and 29, 2008)

System Overview: Dual Phase Extraction System, Air Stripper, and Groundwater Extraction and Treatment System (GETS).

Operational Status: Continuous operation

Scope of Work Performed: Conduct routine system operation and maintenance, and record field measurements. Influent, mid-fluent, and effluent air and water samples were collected on July 1, 2008. Carbon sample was collected on July 7, 2008.

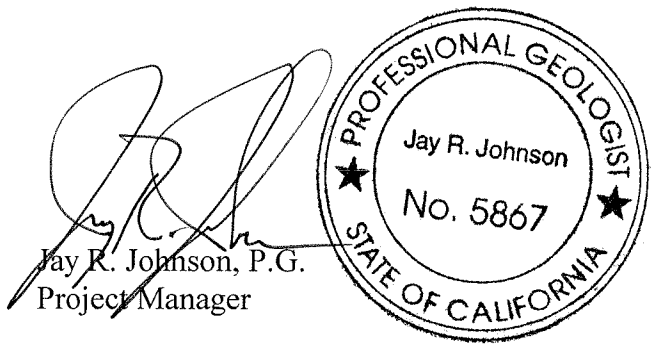
Variations from Scope of Work: The remediation systems were found non-functioning on July 1, 2008, due to a high-water level alarm in the air stripper tank. The remediation systems were re-started momentarily on July 1, 2008 and shutdown after sampling, pending receipt of analytical results and compliance verification. GRO (32 parts per million volume [ppmv]) and MTBE (3.4 ppmv) were reported in the mid-fluent air sample collected on July 1, 2008. Hence, a carbon sample (vapor phase) was collected on June 7, 2008, for profiling and disposal purposes. Stratus oversaw EnviroSupply & Service Inc. conduct the carbon change-out on July 23, 2008, and the remediation systems were re-started on the same day.

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

Sincerely,

STRATUS ENVIRONMENTAL, INC.

Kiran Nagaraju
Project Engineer



Jay R. Johnson, P.G.
Project Manager

Attachments:

- Field Data Sheets
- Chain of Custody Documentation
- Certified Analytical Results

CC: Paul Supple, BP/ARCO

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Date: 07-01-08
Onsite Time: 0727
Offsite Time: 1100
Equipment Manufacturer/Model#

Technician: G. Wilkins
Weather Conditions: Overcast
Ambient Temperature: 50's

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒ High H2O Level
System Status Upon Departure: Operational ☐ Non-Operational ☒ High PID Readings
Electric Meter Reading: N/M
Hour Meter Reading: 02212.0
Totalizer Reading Prior to Air Stripper: 462230
PID Calibration Date: 07-01-08
Totalizer Reading After Air Stripper: 1061760

Field Measurements

Parameter	Influent (after blower, 2111DPEAINF)	Air Stripper (2111ASAEFF)	System Influent (2111ASYSINF)	Stack Air Flow (2111AEFF)	Comments
Differential Pressure, "wc		24			
Air Velocity, FPM		1474			
Pipe Diameter, inches					
Air Flow Rate, cfm			140		
Applied Vacuum, "wc	20 Hg	.40	NA	NA	
Temperature, deg F		123.2	107		
PID Readings, ppmv	351	21.4	183	.20	PID for GAC-1: 245

Other Readings/Measurements

Well ID	% Open	Applied Vac., "Hg	Total depth, feet bgs	Stinger Depth, feet bgs			
V-1	50	16					
V-2	"	15					
V-3	"	15					
MW-1	Closed						
MW-3	100	17					
MW-7	"	14					
MW-8	Closed						

Signature: [signature]
Date: 07-01-08

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Sampling Information (monthly)			
Sample ID	Date & Time	Sample ID	Date & Time
02111DPEAINF	0919	02111AGAC1	0921
02111ASAEFF	0925	02111AEFF	0923
02111ASYSINF	0917		
Analyses Required: GRO, BTEX, and MTBE			

Operation & Maintenance Notes
Took samples Air & water
Shut system down

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8015
BTEX	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B
MTBE	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B

Signature: [signature]

Date: 07-01-08

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Groundwater Treatment System

ORIGINAL

Date: 07-01-08
Onsite Time: 0727
Offsite Time: 1100

Technician: G. Wilkins
Weather Conditions: overcast
Ambient Temperature 50's

System Status Upon Arrival: ☐ Operational ☒ Non-operational High H2O Level
System Status At Departure: ☐ Operational ☒ Non-operational High PID readings
Transfer Pump: ☒ Operational ☐ Non-operational

Transfer Pump Hour Meter Reading: N/M

Effluent Flow Totalizer Reading: 0102884

No. of Carbon Vessels: 2

Lead Carbon Vessel Pressure (psi): 22

Effluent Water Characteristics
(Quarterly by Field Instrument)

pH:	7.65
Temperature:	18.2

Well ID	Hour Meter Reading	Totalizer Reading	Total Depth	Pump Depth	
MW-2	N/A	[illegible]			
		282508			

TB 1035

Sampling Information

Sample ID	Date & Time	Sample ID	Date & Time
02111DPEWINF	0955	02111MW2WINF	0940
02111ASWINF	0950		
02111ASWEFF	0935		
02111WGAC1	0945		
02111WEFF	0930		

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO, BTEX, & 5-Oxys	Monthly	INF& EFF	EPA Method 8260B

Notes:

Signature: [signature] Date: 07-01-08

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Date: 07-07-08
Onsite Time: 0654
Offsite Time: 0812
Equipment Manufacturer/Model#

Technician: G. Wilkins
Weather Conditions: Clear
Ambient Temperature: 60's

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒
System Status Upon Departure: Operational ☐ Non-Operational ☒
Electric Meter Reading: N/M
Hour Meter Reading: 2214.7
Totalizer Reading Prior to Air Stripper: 463470
PID Calibration Date: N/A
Totalizer Reading After Air Stripper: 1062950

Field Measurements

Parameter	Influent (after blower, 2111DPEAINF)	Air Stripper (2111ASAEFF)	System Influent (2111ASYSINF)	Stack Air Flow (2111AEFF)	Comments
Differential Pressure, "wc		N/A			
Air Velocity, FPM		N/A		N/A	
Pipe Diameter, inches		4	4	6	
Air Flow Rate, cfm					
Applied Vacuum, "wc	N/A	N/A	NA	NA	
Temperature, deg F		N/A	N/A	N/A	
PID Readings, ppmv	N/A	N/A	N/A	N/A	PID for GAC-1: N/A

Other Readings/Measurements

Well ID	% Open	Applied Vac., "Hg	Total depth, feet bgs	Stinger Depth, feet bgs			
V-1	50	0					
V-2	"	"					
V-3	"	"					
MW-1	closed						
MW-3	100						
MW-7	"						
MW-4	closed						

Signature: [signature]
Date: 07-07-08

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Sampling Information (monthly)			
Sample ID	Date & Time	Sample ID	Date & Time
02111DPEAINF	N/A	02111AGAC1	N/A
02111ASAEFF	/	02111AEFF	/
02111ASYSINF	/		
Analyses Required: GRO, BTEX, and MTBE			

Operation & Maintenance Notes
Took carbon sample from primary vessel on air system

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8015
BTEX	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B
MTBE	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B

Signature: [signature]

Date: 07-07-08

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Groundwater Treatment System

ORIGINAL

Date: 07-07-08
Onsite Time: 0654
Offsite Time: 0812

Technician: C. Wilkins
Weather Conditions: Clear
Ambient Temperature: 60's

System Status Upon Arrival: ☐ Operational ☒ Non-operational — System shut down 070108
System Status At Departure: ☐ Operational ☒ Non-operational
Transfer Pump: ☐ Operational ☒ Non-operational

Transfer Pump Hour Meter Reading: N/A
Effluent Flow Totalizer Reading: 1029035
No. of Carbon Vessels: 2
Lead Carbon Vessel Pressure (psi): N/A

Effluent Water Characteristics
(Quarterly by Field Instrument)
pH: N/A
Temperature: N/A

Well ID	Hour Meter Reading	Totalizer Reading	Total Depth	Pump Depth	
MW-2	N/A	282743			

Sampling Information

Sample ID	Date & Time	Sample ID	Date & Time
02111DPEWINF	N/A	02111MW2WINF	N/A
02111ASWINF			
02111ASWEFF			
02111WGAC1			
02111WEFF			

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO, BTEX, & 5-Oxys	Monthly	INF& EFF	EPA Method 8260B

Notes:

Signature: [signature] Date: 07-07-08

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Date: 07-23-08
Onsite Time: 0730
Offsite Time: 1200
Equipment Manufacturer/Model#

Technician: G. W. Wilkins
Weather Conditions: Clear
Ambient Temperature: 70's

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒
System Status Upon Departure: Operational ☒ Non-Operational ☐
Electric Meter Reading: N/M
Hour Meter Reading: 2214.7
Totalizer Reading Prior to Air Stripper: 463470
PID Calibration Date: ~~7-21-08~~ 7-21-08
Totalizer Reading After Air Stripper: 1062950

Field Measurements

Parameter	Influent (after blower, 2111DPEAINF)	Air Stripper (2111ASAEFF)	System Influent (2111ASYSINF)	Stack Air Flow (2111AEFF)	Comments
Differential Pressure, "wc		' 21			
Air Velocity, FPM		' 1308			
Pipe Diameter, inches					
Air Flow Rate, cfm			' 120		
Applied Vacuum, "wc	' 21	' .42	NA	NA	
Temperature, deg F		' 129.9	' 116		
PID Readings, ppmv	' 239	' 1.0	' 95	' ~~20~~	PID for GAC-1: ' 0

Other Readings/Measurements

Well ID	% Open	Applied Vac., "Hg	Total depth, feet bgs	Stinger Depth, feet bgs			
V-1	50	19					
V-2	〃	19					
V-3	〃	18					
MW-1	Closed						
MW-3	100	19					
MW-7	〃	19					
MW-8	Closed						

Signature: [signature] Date: 07-25-08

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Sampling Information (monthly)			
Sample ID	Date & Time	Sample ID	Date & Time
02111DPEAINF	N/A	02111AGAC1	N/A
02111ASAEFF		02111AEFF	
02111ASYSINF			
Analyses Required: GRO, BTEX, and MTBE			

Operation & Maintenance Notes
Enviroupply did change out of 2 Carbon Cylinders for Air system
Restarted system

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8015
BTEX	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B
MTBE	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B

Signature: [signature] Date: 07-23.08

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Groundwater Treatment System

ORIGINAL

Date: 07-23-08
Onsite Time: 0730
Offsite Time:

Technician: C. Wilkins
Weather Conditions: Clear
Ambient Temperature 70's

System Status Upon Arrival: ☐ Operational ☒ Non-operational
System Status At Departure: ☒ Operational ☐ Non-operational
Transfer Pump: ☒ Operational ☐ Non-operational

Transfer Pump Hour Meter Reading: N/A

Effluent Flow Totalizer Reading: 1029035

No. of Carbon Vessels: 2

Lead Carbon Vessel Pressure (psi): 21

Effluent Water Characteristics
(Quarterly by Field Instrument)
pH: N/A
Temperature: N/A

Well ID	Hour Meter Reading	Totalizer Reading	Total Depth	Pump Depth	
MW-2	N/A	282743			

Sampling Information

Sample ID	Date & Time	Sample ID	Date & Time
02111DPEWINF	N/A	02111MW2WINF	N/A
02111ASWINF			
02111ASWEFF			
02111WGAC1			
02111WEFF			

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO, BTEX, & 5-Oxys	Monthly	INF& EFF	EPA Method 8260B

Notes:

Signature: [signature] Date: 07-23-08

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Date: 72908
Onsite Time: 0430
Offsite Time: 0532
Equipment Manufacturer/Model#

Technician: CHILL
Weather Conditions: Cloudy
Ambient Temperature: 50

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒ High H2O
System Status Upon Departure: Operational ☒ Non-Operational ☐
Electric Meter Reading: NM
Hour Meter Reading: 2216
Totalizer Reading Prior to Air Stripper: 464447
PID Calibration Date: 7-29-08
Totalizer Reading After Air Stripper: 1063800

Field Measurements

Parameter	Influent (after blower, 2111DPEAINF)	Air Stripper (2111ASAEFF)	System Influent (2111ASYSINF)	Stack Air Flow (2111AEFF)	Comments
Differential Pressure, "wc		20			
Air Velocity, FPM		2688			
Pipe Diameter, inches					
Air Flow Rate, cfm			180		
Applied Vacuum, "wc	22"Hg	.34	NA	NA	
Temperature, deg F		121	90		
PID Readings, ppmv	231	1	94	0	PID for GAC-1: 0

Other Readings/Measurements

Well ID	% Open	Applied Vac., "Hg	Total depth, feet bgs	Stinger Depth, feet bgs			
V-1	50	17					
V-2	50	17					
V-3	50	17					
MW-1	0						
MW-3	100	20					
MW-7	100	17					
MW5	0						

Signature: Chilled
Date: 72908

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Sampling Information (monthly)			
Sample ID	Date & Time	Sample ID	Date & Time
02111DPEAINF		02111AGAC1	
02111ASAEFF		02111AEFF	
02111ASYSINF			
Analyses Required: GRO, BTEX, and MTBE			

Operation & Maintenance Notes
Change Filters
Reset - Clean - Strippers

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8015
BTEX	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B
MTBE	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B

Signature: _____ Date: 7/29/04

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Groundwater Treatment System

ORIGINAL

Date: 72908
Onsite Time: 0434
Offsite Time: 0932

Technician: CHILL
Weather Conditions: Cloudy
Ambient Temperature: 60

System Status Upon Arrival: ☐ Operational ☒ Non-operational High H2O col/mete
System Status At Departure: ☒ Operational ☐ Non-operational
Transfer Pump: ☒ Operational ☐ Non-operational

Transfer Pump Hour Meter Reading: _____

Effluent Flow Totalizer Reading: 1029743

No. of Carbon Vessels: 2

Lead Carbon Vessel Pressure (psi): 28

Effluent Water Characteristics
(Quarterly by Field Instrument)
pH: _____
Temperature: _____

Well ID	Hour Meter Reading	Totalizer Reading	Total Depth	Pump Depth	
MW-2		252996			

Sampling Information			
Sample ID	Date & Time	Sample ID	Date & Time
02111DPEWINF		02111MW2WINF	
02111ASWINF			
02111ASWEFF			
02111WGAC1			
02111WEFF			

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO, BTEX, & 5-Oxys	Monthly	INF& EFF	EPA Method 8260B

Notes:

Signature: _____ Date: 72908

Atlantic Richfield Company
bp
A BP affiliated company

ORIGINAL

Chain of Custody Record

RUSH

Project Name: ARCO Facility No. 2111
BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > Alameda
State or Lead Regulatory Agency: Alameda County Environmental Health
Requested Due Date (mm/dd/yy): 24 hours for Effluent & STD for others

On-site Time:	0727	Temp:	50's
Off-site Time:		Temp:	
Sky Conditions:	Overcast		
Meteorological Events:	MIST		
Wind Speed:	—	Direction:	—

Lab Name:	Calscience Environmental Laboratories, Inc.
Address:	7440 Lincoln Way
	Garden Grove, CA 92841
Lab PM:	Linda Scharpenberg
Tele/Fax:	714-895-5494/ 714-895-7501
BP/AR PM Contact:	Paul Supple
Address:	2010 Crow Canyon Place, Suite 150
	San Ramon, CA
Tele/Fax:	925-275-3506/925-275-3815

BP/AR Facility No.:	2111
BP/AR Facility Address:	1156 Davis St., San Leandro
Site Lat/Long:	
California Global ID No.:	T0600101764
Enfos Project No.:	G0C28-0029
Provision or OOC (circle one)	Provision
Phase/WBS:	03-O&M
Sub Phase/Task:	03-Analytical
Cost Element:	Subcontractor Cost

Consultant/Contractor:	Stratus Environmental, Inc.
Address:	3330 Cameron Park Drive, Suite 550
	Cameron Park, CA 95682
Consultant/Contractor Project No.:	E2111-03
Consultant/Contractor PM:	Jay Johnson
Tele/Fax:	(530) 676-6000 / (530) 676-6005
Report Type & QC Level:	Level 1 with EDF
E-mail EDD To:	shayes@stratusinc.net
Invoice to:	Atlantic Richfield Co.

Lab Bottle Order No:

Item No.	Sample Description	Time	Date 2008	Matrix: Soil/Solid	Water/Liquid	Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	H_2SO_4	HNO_3	HCl	Methanol	Requested Analysis: GRO	BTEX	MTBE	5-oxygenates	Turnaround Time: 24-hours	Standard	Sample Point Lat/Long and Comments
1	02111DPEAINF	0919	07/01			x		2	x					x	x	x			x	5-oxygenates requested are MTBE, DIPE, ETBE, TAME, and TBA.
2	02111ASAEFF	0925	"			x		2	x					x	x	x			x	
3	02111ASYSINF	0917	"			x		2	x					x	x	x			x	
4	02111AGAC1	0921	"			x		2	x					x	x	x			x	
5	02111AEFF	0923	"			x		2	x					x	x	x		x		
6	02111DPEWINF	0955	"		x			6				x		x	x		x		x	
7	02111ASWINF	0950	"		x			6				x		x	x		x		x	
8	02111ASWEFF	0935	"		x			6				x		x	x		x		x	
9	02111WGAC1	0945	"		x			6				x		x	x		x		x	
10	02111WEFF	0930	"		x			6				x		x	x		x	x		
11	02111MW2WINF	0940	"		x			6				x		x	x		x		x	
	TB2111070120008	1035	07/01		X			2				X								- ON HOLD

Sampler's Name:	O. Wilkins
Sampler's Company:	Stratus Environmental, Inc.
Shipment Date:	07-01-08
Shipment Method:	GSO
Shipment Tracking No:	

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
	070108	1500			

Special Instructions: Please cc results to bpedf@broadbentinc.com

Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

ORIGINAL

Atlantic Richfield Company

bp A BP affiliated company

Chain of Custody Record

RUSH

Page ___ of ___

Project Name: ARCO Facility No. 2111
BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > Alameda
State or Lead Regulatory Agency: Alameda County Environmental Health
Requested Due Date (mm/dd/yy): 24 hours for Effluent & STD for others

On-site Time:	0700 Temp: 50's
Off-site Time:	0815 Temp: 60's
Sky Conditions:	Clear
Meteorological Events:	—
Wind Speed:	— Direction: —

Lab Name:	Calscience Environmental Laboratories, Inc.
Address:	7440 Lincoln Way
	Garden Grove, CA 92841
Lab PM:	Linda Scharpenberg
Tele/Fax:	714-895-5494/ 714-895-7501
BP/AR PM Contact:	Paul Supple
Address:	2010 Crow Canyon Place, Suite 150
	San Ramon, CA
Tele/Fax:	925-275-3506/925-275-3815
Lab Bottle Order No:	

BP/AR Facility No.:	2111
BP/AR Facility Address:	1156 Davis St., San Leandro
Site Lat/Long:	
California Global ID No.:	T0600101764
Enfos Project No.:	G0C28-0029
Provision or OOC (circle one)	Provision
Phase/WBS:	03-O&M
Sub Phase/Task:	03-Analytical
Cost Element:	Subcontractor Cost

Consultant/Contractor:	Stratus Environmental, Inc.
Address:	3330 Cameron Park Drive, Suite 550
	Cameron Park, CA 95682
Consultant/Contractor Project No.:	E2111-03
Consultant/Contractor PM:	Jay Johnson
Tele/Fax:	(530) 676-6000 / (530) 676-6005
Report Type & QC Level:	Level 1 with EDF
E-mail EDD To:	shayes@stratusinc.net
Invoice to:	Atlantic Richfield Co.

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: TCLP by 8260	Turnaround Time: 24-hours	Turnaround Time: Standard	Sample Point Lat/Long and Comments
1	02111-A-CARBOY	0720	7/7/08	X				1	X					X		X	TCLP includes analysis for vinyl chloride, 1,2-dichloroethene, chloroform, 1,2-dichloroethane, methyl ethyl ketone butanone, carbon tetrachloride, trichloroethene, benzene, tetrachloroethene, and chlorobenzene.
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	

Sampler's Name:	Greg Wilkins
Sampler's Company:	Stratus Environmental, Inc.
Shipment Date:	07-07-08
Shipment Method:	GSO
Shipment Tracking No:	

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
	070708	1500			

Special Instructions: Please cc results to bpedf@broadbentinc.com

Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: ___ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Calscience
Environmental
Laboratories, Inc.

July 15, 2008

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

Subject: **Calscience Work Order No.:** **08-07-0164**
Client Reference: **ARCO Facility No. 2111**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 7/2/2008 and analyzed in accordance with the attached chain-of-custody.

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

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

Sincerely,

Linda Scharpenberg

Calscience Environmental
Laboratories, Inc.
Linda Scharpenberg
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	07/02/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-07-0164
Cameron Park, CA 95682-8861		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ppm (v/v)
Project: ARCO Facility No. 2111			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111DPEAINF	**08-07-0164-1-A**	**07/01/08 09:19**	**Air**	**GC/MS DD**	**N/A**	**07/02/08 19:41**	**080702L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	1.1	0.075	150		Xylenes (total)	18	0.15	150	
Toluene	8.5	0.30	600		Methyl-t-Butyl Ether (MTBE)	4.8	0.30	150	
Ethylbenzene	2.9	0.075	150						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	94	57-129			1,2-Dichloroethane-d4	93	47-137		
Toluene-d8	98	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASAEFF	**08-07-0164-2-A**	**07/01/08 09:25**	**Air**	**GC/MS DD**	**N/A**	**07/02/08 20:37**	**080702L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.0016	0.00050	1		Xylenes (total)	0.019	0.0010	1	
Toluene	0.012	0.00050	1		Methyl-t-Butyl Ether (MTBE)	0.24	0.040	20	
Ethylbenzene	0.0019	0.00050	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	97	57-129			1,2-Dichloroethane-d4	92	47-137		
Toluene-d8	101	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASYSINF	**08-07-0164-3-A**	**07/01/08 09:17**	**Air**	**GC/MS DD**	**N/A**	**07/02/08 21:31**	**080702L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.47	0.038	75		Xylenes (total)	8.3	0.075	75	
Toluene	5.3	0.15	300		Methyl-t-Butyl Ether (MTBE)	2.6	0.15	75	
Ethylbenzene	1.3	0.038	75						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	96	57-129			1,2-Dichloroethane-d4	92	47-137		
Toluene-d8	98	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111AGAC1	**08-07-0164-4-A**	**07/01/08 09:21**	**Air**	**GC/MS DD**	**N/A**	**07/02/08 22:28**	**080702L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0050	10		Xylenes (total)	ND	0.010	10	
Toluene	ND	0.0050	10		Methyl-t-Butyl Ether (MTBE)	3.4	0.40	200	
Ethylbenzene	ND	0.0050	10						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	97	57-129			1,2-Dichloroethane-d4	88	47-137		
Toluene-d8	99	78-156							

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	07/02/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-07-0164
Cameron Park, CA 95682-8861		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ppm (v/v)
Project: ARCO Facility No. 2111			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111AEFF	**08-07-0164-5-A**	**07/01/08 09:23**	**Air**	**GC/MS DD**	**N/A**	**07/02/08 17:54**	**080702L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.00050	1		Xylenes (total)	ND	0.0010	1	
Toluene	0.0012	0.00050	1		Methyl-t-Butyl Ether (MTBE)	0.11	0.040	20	
Ethylbenzene	ND	0.00050	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	94	57-129			1,2-Dichloroethane-d4	92	47-137		
Toluene-d8	98	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-09-002-7,336**	**N/A**	**Air**	**GC/MS DD**	**N/A**	**07/02/08 16:38**	**080702L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.00050	1		Xylenes (total)	ND	0.0010	1	
Toluene	ND	0.00050	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0020	1	
Ethylbenzene	ND	0.00050	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	92	57-129			1,2-Dichloroethane-d4	92	47-137		
Toluene-d8	97	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-09-002-7,343**	**N/A**	**Air**	**GC/MS DD**	**N/A**	**07/03/08 14:09**	**080703L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.00050	1		Xylenes (total)	ND	0.0010	1	
Toluene	ND	0.00050	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0020	1	
Ethylbenzene	ND	0.00050	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	96	57-129			1,2-Dichloroethane-d4	92	47-137		
Toluene-d8	98	78-156							

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	07/02/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-07-0164
Cameron Park, CA 95682-8861	Preparation:	N/A
	Method:	EPA TO-3M

Project: ARCO Facility No. 2111

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111DPEAINF	**08-07-0164-1-A**	**07/01/08 09:19**	**Air**	**GC 19**	**N/A**	**07/02/08 14:59**	**080702L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	740	65	5		ppm (v/v)

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASAEFF	**08-07-0164-2-A**	**07/01/08 09:25**	**Air**	**GC 19**	**N/A**	**07/02/08 11:52**	**080702L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	13	1		ppm (v/v)

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASYSINF	**08-07-0164-3-A**	**07/01/08 09:17**	**Air**	**GC 19**	**N/A**	**07/02/08 13:43**	**080702L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	320	13	1		ppm (v/v)

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111AGAC1	**08-07-0164-4-A**	**07/01/08 09:21**	**Air**	**GC 19**	**N/A**	**07/02/08 14:20**	**080702L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	32	13	1		ppm (v/v)

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111AEFF	**08-07-0164-5-A**	**07/01/08 09:23**	**Air**	**GC 19**	**N/A**	**07/02/08 12:28**	**080702L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	13	1		ppm (v/v)

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-693-59**	**N/A**	**Air**	**GC 19**	**N/A**	**07/02/08 08:12**	**080702L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	13	1		ppm (v/v)

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	07/02/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-07-0164
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L
Project: ARCO Facility No. 2111		Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111DPEWINF	**08-07-0164-6-A**	**07/01/08 09:55**	**Aqueous**	**GC/MS BB**	**07/09/08**	**07/10/08 05:32**	**080709L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	10	20		Tert-Butyl Alcohol (TBA)	560	200	20	
Ethylbenzene	29	10	20		Diisopropyl Ether (DIPE)	ND	10	20	
Toluene	150	10	20		Ethyl-t-Butyl Ether (ETBE)	ND	10	20	
Xylenes (total)	330	10	20		Tert-Amyl-Methyl Ether (TAME)	ND	10	20	
Methyl-t-Butyl Ether (MTBE)	390	10	20						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	115	73-157			Dibromofluoromethane	111	82-142		
Toluene-d8	100	82-112			1,4-Bromofluorobenzene	99	75-105		

02111ASWINF	08-07-0164-7-A	07/01/08 09:50	Aqueous	GC/MS BB	07/09/08	07/10/08 06:04	080709L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	9.2	5.0	10		Tert-Butyl Alcohol (TBA)	410	100	10	
Ethylbenzene	14	5.0	10		Diisopropyl Ether (DIPE)	ND	5.0	10	
Toluene	85	5.0	10		Ethyl-t-Butyl Ether (ETBE)	ND	5.0	10	
Xylenes (total)	210	5.0	10		Tert-Amyl-Methyl Ether (TAME)	ND	5.0	10	
Methyl-t-Butyl Ether (MTBE)	400	5.0	10						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	126	73-157			Dibromofluoromethane	116	82-142		
Toluene-d8	100	82-112			1,4-Bromofluorobenzene	101	75-105		

02111ASWEFF	08-07-0164-8-A	07/01/08 09:35	Aqueous	GC/MS BB	07/09/08	07/10/08 06:36	080709L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.0	2		Tert-Butyl Alcohol (TBA)	400	20	2	
Ethylbenzene	ND	1.0	2		Diisopropyl Ether (DIPE)	ND	1.0	2	
Toluene	ND	1.0	2		Ethyl-t-Butyl Ether (ETBE)	ND	1.0	2	
Xylenes (total)	ND	1.0	2		Tert-Amyl-Methyl Ether (TAME)	ND	1.0	2	
Methyl-t-Butyl Ether (MTBE)	23	1.0	2						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	120	73-157			Dibromofluoromethane	113	82-142		
Toluene-d8	94	82-112			1,4-Bromofluorobenzene	97	75-105		

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	07/02/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-07-0164
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: ARCO Facility No. 2111			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111WGAC1	**08-07-0164-9-A**	**07/01/08 09:45**	**Aqueous**	**GC/MS BB**	**07/09/08**	**07/10/08 07:08**	**080709L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	114	73-157			Dibromofluoromethane	108	82-142		
Toluene-d8	100	82-112			1,4-Bromofluorobenzene	96	75-105		

02111WEFF	**08-07-0164-10-B**	**07/01/08 09:30**	**Aqueous**	**GC/MS BB**	**07/02/08**	**07/02/08 14:18**	**080702L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	97	73-157			Dibromofluoromethane	97	82-142		
Toluene-d8	100	82-112			1,4-Bromofluorobenzene	98	75-105		

02111MW2WINF	**08-07-0164-11-A**	**07/01/08 09:40**	**Aqueous**	**GC/MS BB**	**07/09/08**	**07/10/08 07:40**	**080709L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	17	10	20		Tert-Butyl Alcohol (TBA)	550	200	20	
Ethylbenzene	10	10	20		Diisopropyl Ether (DIPE)	ND	10	20	
Toluene	ND	10	20		Ethyl-t-Butyl Ether (ETBE)	ND	10	20	
Xylenes (total)	ND	10	20		Tert-Amyl-Methyl Ether (TAME)	ND	10	20	
Methyl-t-Butyl Ether (MTBE)	300	10	20						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	120	73-157			Dibromofluoromethane	113	82-142		
Toluene-d8	100	82-112			1,4-Bromofluorobenzene	94	75-105		

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received: 07/02/08
3330 Cameron Park Drive, Suite 550	Work Order No: 08-07-0164
Cameron Park, CA 95682-8861	Preparation: EPA 5030B
	Method: EPA 8260B
	Units: ug/L
Project: ARCO Facility No. 2111	Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-304**	**N/A**	**Aqueous**	**GC/MS BB**	**07/02/08**	**07/02/08 13:46**	**080702L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	98	73-157		Dibromofluoromethane	96	82-142	
Toluene-d8	99	82-112		1,4-Bromofluorobenzene	95	75-105	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-313**	**N/A**	**Aqueous**	**GC/MS BB**	**07/09/08**	**07/10/08 02:53**	**080709L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	112	73-157		Dibromofluoromethane	100	82-142	
Toluene-d8	98	82-112		1,4-Bromofluorobenzene	100	75-105	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	07/02/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-07-0164
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: ARCO Facility No. 2111

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111DPEWINF	**08-07-0164-6-E**	**07/01/08 09:55**	**Aqueous**	**GC 4**	**07/05/08**	**07/05/08 19:39**	**080705B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	1100	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	70	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASWINF	**08-07-0164-7-E**	**07/01/08 09:50**	**Aqueous**	**GC 4**	**07/05/08**	**07/05/08 20:12**	**080705B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	660	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	52	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASWEFF	**08-07-0164-8-E**	**07/01/08 09:35**	**Aqueous**	**GC 4**	**07/05/08**	**07/05/08 20:45**	**080705B01**

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111WGAC1	**08-07-0164-9-E**	**07/01/08 09:45**	**Aqueous**	**GC 4**	**07/05/08**	**07/05/08 21:18**	**080705B01**

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

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	07/02/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-07-0164
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: ARCO Facility No. 2111 — Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111WEFF	**08-07-0164-10-E**	**07/01/08 09:30**	**Aqueous**	**GC 4**	**07/02/08**	**07/02/08 17:44**	**080701B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	69	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111MW2WINF	**08-07-0164-11-E**	**07/01/08 09:40**	**Aqueous**	**GC 4**	**07/05/08**	**07/05/08 21:51**	**080705B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	330	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	61	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-695-183**	**N/A**	**Aqueous**	**GC 4**	**07/01/08**	**07/02/08 08:17**	**080701B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	69	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-695-185**	**N/A**	**Aqueous**	**GC 4**	**07/05/08**	**07/05/08 10:18**	**080705B01**

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

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

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

Stratus Environmental, inc.	Date Received:	07/02/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-07-0164
Cameron Park, CA 95682-8861	Preparation:	N/A
	Method:	EPA TO-3M

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
02111ASYSINF	**Air**	**GC 19**	**N/A**	**07/02/08**	**080702D01**

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	320	280	13	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	07/02/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-07-0164
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02111WEFF	**Aqueous**	**GC/MS BB**	**07/02/08**	**07/02/08**	**080702S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	94	96	86-122	2	0-8	
Carbon Tetrachloride	95	96	78-138	1	0-9	
Chlorobenzene	97	97	90-120	1	0-9	
1,2-Dibromoethane	97	93	70-130	4	0-30	
1,2-Dichlorobenzene	97	98	89-119	1	0-10	
1,1-Dichloroethene	87	88	52-142	1	0-23	
Ethylbenzene	96	96	70-130	1	0-30	
Toluene	95	98	85-127	3	0-12	
Trichloroethene	98	97	78-126	0	0-10	
Vinyl Chloride	95	100	56-140	5	0-21	
Methyl-t-Butyl Ether (MTBE)	95	86	64-136	10	0-28	
Tert-Butyl Alcohol (TBA)	96	97	27-183	1	0-60	
Diisopropyl Ether (DIPE)	91	89	78-126	2	0-16	
Ethyl-t-Butyl Ether (ETBE)	93	89	67-133	5	0-21	
Tert-Amyl-Methyl Ether (TAME)	97	94	63-141	3	0-21	
Ethanol	107	129	11-167	18	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	07/02/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-07-0164
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-07-0332-3	**Aqueous**	**GC/MS BB**	**07/09/08**	**07/10/08**	**080709S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	115	113	86-122	1	0-8	
Carbon Tetrachloride	134	133	78-138	0	0-9	
Chlorobenzene	111	107	90-120	4	0-9	
1,2-Dibromoethane	111	104	70-130	6	0-30	
1,2-Dichlorobenzene	110	111	89-119	1	0-10	
1,1-Dichloroethene	122	124	52-142	2	0-23	
Ethylbenzene	116	119	70-130	2	0-30	
Toluene	112	112	85-127	0	0-12	
Trichloroethene	118	115	78-126	3	0-10	
Vinyl Chloride	96	106	56-140	10	0-21	
Methyl-t-Butyl Ether (MTBE)	114	120	64-136	3	0-28	
Tert-Butyl Alcohol (TBA)	113	96	27-183	11	0-60	
Diisopropyl Ether (DIPE)	108	109	78-126	1	0-16	
Ethyl-t-Butyl Ether (ETBE)	112	109	67-133	2	0-21	
Tert-Amyl-Methyl Ether (TAME)	113	109	63-141	4	0-21	
Ethanol	32	88	11-167	93	0-64	4

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 07/02/08
Work Order No: 08-07-0164
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-06-2501-12	**Aqueous**	**GC 4**	**07/01/08**	**07/02/08**	**080701S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	80	79	38-134	1	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	07/02/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-07-0164
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-07-0168-2	**Aqueous**	**GC 4**	**07/05/08**	**07/05/08**	**080705S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	78	75	38-134	5	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 08-07-0164
Preparation: N/A
Method: EPA TO-15

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-09-002-7,336	Air	GC/MS DD	N/A	07/02/08	080702L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	99	108	60-156	9	0-40	
Toluene	98	107	56-146	9	0-43	
Ethylbenzene	104	113	52-154	9	0-38	
p/m-Xylene	94	103	42-156	9	0-41	
o-Xylene	96	104	52-148	9	0-38	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.		Date Received:	N/A
3330 Cameron Park Drive, Suite 550		Work Order No:	08-07-0164
Cameron Park, CA 95682-8861		Preparation:	N/A
		Method:	EPA TO-15

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-09-002-7,343	Air	GC/MS DD	N/A	07/03/08	080703L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	99	118	60-156	18	0-40	
Toluene	89	108	56-146	19	0-43	
Ethylbenzene	97	118	52-154	19	0-38	
p/m-Xylene	86	103	42-156	19	0-41	
o-Xylene	86	105	52-148	19	0-38	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.		Date Received:	N/A
3330 Cameron Park Drive, Suite 550		Work Order No:	08-07-0164
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-304	**Aqueous**	**GC/MS BB**	**07/02/08**	**07/02/08**	**080702L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	94	96	87-117	2	0-7	
Carbon Tetrachloride	95	98	78-132	3	0-8	
Chlorobenzene	98	101	88-118	3	0-8	
1,2-Dibromoethane	94	101	80-120	6	0-20	
1,2-Dichlorobenzene	97	97	88-118	0	0-8	
1,1-Dichloroethene	89	88	71-131	1	0-14	
Ethylbenzene	99	102	80-120	3	0-20	
Toluene	96	97	85-127	1	0-7	
Trichloroethene	98	100	85-121	2	0-11	
Vinyl Chloride	96	98	64-136	2	0-10	
Methyl-t-Butyl Ether (MTBE)	87	91	67-133	3	0-16	
Tert-Butyl Alcohol (TBA)	89	90	34-154	1	0-19	
Diisopropyl Ether (DIPE)	90	88	80-122	1	0-8	
Ethyl-t-Butyl Ether (ETBE)	89	91	73-127	2	0-11	
Tert-Amyl-Methyl Ether (TAME)	94	96	69-135	1	0-12	
Ethanol	108	81	34-124	28	0-44	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.		Date Received:	N/A
3330 Cameron Park Drive, Suite 550		Work Order No:	08-07-0164
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-313	Aqueous	GC/MS BB	07/09/08	07/10/08	080709L02

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	107	110	87-117	3	0-7	
Carbon Tetrachloride	130	129	78-132	1	0-8	
Chlorobenzene	110	106	88-118	3	0-8	
1,2-Dibromoethane	112	114	80-120	2	0-20	
1,2-Dichlorobenzene	107	109	88-118	2	0-8	
1,1-Dichloroethene	113	124	71-131	9	0-14	
Ethylbenzene	110	110	80-120	0	0-20	
Toluene	109	111	85-127	2	0-7	
Trichloroethene	118	122	85-121	3	0-11	X
Vinyl Chloride	90	98	64-136	8	0-10	
Methyl-t-Butyl Ether (MTBE)	108	114	67-133	5	0-16	
Tert-Butyl Alcohol (TBA)	103	91	34-154	12	0-19	
Diisopropyl Ether (DIPE)	103	104	80-122	1	0-8	
Ethyl-t-Butyl Ether (ETBE)	106	109	73-127	2	0-11	
Tert-Amyl-Methyl Ether (TAME)	115	119	69-135	3	0-12	
Ethanol	99	99	34-124	0	0-44	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.		Date Received:	N/A
3330 Cameron Park Drive, Suite 550		Work Order No:	08-07-0164
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-183	Aqueous	GC 4	07/01/08	07/02/08	080701B02

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

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.		Date Received:	N/A
3330 Cameron Park Drive, Suite 550		Work Order No:	08-07-0164
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-185	Aqueous	GC 4	07/05/08	07/05/08	080705B01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	81	82	78-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-07-0164

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

Atlantic Richfield Company
bp A BP affiliated company

Chain of Custody Record

RUSH 0164

Project Name: ARCO Facility No. 2111
BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > Alameda
State or Lead Regulatory Agency: Alameda County Environmental Health
Requested Due Date (mm/dd/yy): 24 hours for Effluent & STD for others

On-site Time: 0727	Temp: 50's
Off-site Time:	Temp:
Sky Conditions: overcast	
Meteorological Events: MIST	
Wind Speed: —	Direction: —

Lab Name: Calscience Environmental Laboratories, Inc.	BP/AR Facility No.: 2111	Consultant/Contractor: Stratus Environmental, Inc.
Address: 7440 Lincoln Way	BP/AR Facility Address: 1156 Davis St., San Leandro	Address: 3330 Cameron Park Drive, Suite 550
Garden Grove, CA 92841	Site Lat/Long:	Cameron Park, CA 95682
Lab PM: Linda Scharpenberg	California Global ID No.: T0600101764	Consultant/Contractor Project No.: E2111-03
Tele/Fax: 714-895-5494/ 714-895-7501	Enfos Project No.: G0C28-0029	Consultant/Contractor PM: Jay Johnson
BP/AR PM Contact: Paul Supple	Provision or OOC (circle one) Provision	Tele/Fax: (530) 676-6000 / (530) 676-6005
Address: 2010 Crow Canyon Place, Suite 150	Phase/WBS: 03-O&M	Report Type & QC Level: Level 1 with EDF
San Ramon, CA	Sub Phase/Task: 03-Analytical	E-mail EDD To: shayes@stratusinc.net
Tele/Fax: 925-275-3506/925-275-3815	Cost Element: Subcontractor Cost	Invoice to: Atlantic Richfield Co.

Lab Bottle Order No:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: GRO	Requested Analysis: BTEX	Requested Analysis: MTBE	Requested Analysis: 5-oxygenates	Turnaround Time: 24-hours	Turnaround Time: Standard	Sample Point Lat/Long and Comments
1	02111DPEAINF	0919	07/01/2008			x		2	x					x	x	x			x	5-oxygenates requested are MTBE, DIPE, ETBE, TAME, and TBA.
2	02111ASAEFF	0925	"			x		2	x					x	x	x			x	
3	02111ASYSINF	0917	"			x		2	x					x	x	x			x	
4	02111AGAC1	0921	"			x		2	x					x	x	x			x	
5	02111AEFF	0923	"			x		2	x					x	x	x		x		
6	02111DPEWINF	0955	"		x			6				x		x	x		x		x	
7	02111ASWINF	0950	"		x			6				x		x	x		x		x	
8	02111ASWEFF	0935	"		x			6				x		x	x		x		x	
9	02111WGAC1	0945	"		x			6				x		x	x		x		x	
10	02111WEFF	0930	"		x			6				x		x	x		x	x		
11	02111MW2WINF	0940	"		x			6				x		x	x		x		x	
12	TBZ111070I2008	1035	07/01/2008	X				2				x								- ON HOLD

Sampler's Name:	O. Wilkins	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date / Time
Sampler's Company:	Stratus Environmental, Inc.		070108	1500		
Shipment Date:	07-01-08					
Shipment Method:	GSO					
Shipment Tracking No:	925539173 7					7/2/08 1030

Special Instructions: Please cc results to bpedf@broadbentinc.com

Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP COC Rev. 5 10/11/2006

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 07 - 0164

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Status DATE: 7/20/07

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature (For Air & Filter Only).
___ ___ . ___ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

03.8 °C Temperature blank.
___ ___ . ___ °C IR Thermometer.
✓ Ambient temperature (For Air & Filter Only).

Initial: [illegible]

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: ✓ No (Not Intact) : _____ Not Present: _____

Initial: [illegible]

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation	✓		

Initial: [illegible]

COMMENTS:

Calscience
Environmental
Laboratories, Inc.

July 11, 2008

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

Subject: **Calscience Work Order No.:** **08-07-0564**
Client Reference: **ARCO Facility No. 2111**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 7/8/2008 and analyzed in accordance with the attached chain-of-custody.

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

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

Sincerely,

Calscience Environmental
Laboratories, Inc.
Linda Scharpenberg
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	07/08/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-07-0564
Cameron Park, CA 95682-8861		Preparation:	EPA 1311
		Method:	EPA 8260B
		Units:	ug/L
Project: ARCO Facility No. 2111			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111A CARBON	**08-07-0564-1-A**	**07/07/08 07:20**	**Solid**	**GC/MS M**	**07/08/08**	**07/10/08 15:49**	**080710L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	50	1		1,2-Dichloroethane	ND	50	1	
2-Butanone	ND	1000	1		1,1-Dichloroethene	ND	100	1	
Carbon Tetrachloride	ND	50	1		Tetrachloroethene	ND	100	1	
Chlorobenzene	ND	100	1		Trichloroethene	ND	100	1	
Chloroform	ND	100	1		Vinyl Chloride	ND	50	1	
1,4-Dichlorobenzene	ND	100	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	109	82-130		1,2-Dichloroethane-d4	114	75-141	
Toluene-d8	99	83-113		1,4-Bromofluorobenzene	96	70-118	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	07/08/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-07-0564
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: ARCO Facility No. 2111			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-006-26,202**	**N/A**	**Aqueous**	**GC/MS M**	**07/08/08**	**07/10/08 14:29**	**080710L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	50	1		1,2-Dichloroethane	ND	50	1	
2-Butanone	ND	1000	1		1,1-Dichloroethene	ND	100	1	
Carbon Tetrachloride	ND	50	1		Tetrachloroethene	ND	100	1	
Chlorobenzene	ND	100	1		Trichloroethene	ND	100	1	
Chloroform	ND	100	1		Vinyl Chloride	ND	50	1	
1,4-Dichlorobenzene	ND	100	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	110	82-130		1,2-Dichloroethane-d4	114	75-141	
Toluene-d8	99	83-113		1,4-Bromofluorobenzene	94	70-118	

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

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 07/08/08
Work Order No: 08-07-0564
Preparation: EPA 1311
Method: EPA 8260B

Project ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-07-0565-1	**Solid**	**GC/MS M**	**07/08/08**	**07/10/08**	**080710S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	111	108	88-118	2	0-7	
Carbon Tetrachloride	100	95	67-145	4	0-11	
Chlorobenzene	100	105	88-118	5	0-7	
1,2-Dibromoethane	104	103	70-130	1	0-30	
1,2-Dichlorobenzene	102	98	86-116	4	0-8	
1,1-Dichloroethene	72	101	70-130	34	0-25	BA
Ethylbenzene	107	110	70-130	3	0-30	
Toluene	112	108	87-123	4	0-8	
Trichloroethene	98	99	79-127	1	0-10	
Vinyl Chloride	111	109	69-129	2	0-13	
Methyl-t-Butyl Ether (MTBE)	101	97	71-131	4	0-13	
Tert-Butyl Alcohol (TBA)	82	86	36-168	4	0-45	
Diisopropyl Ether (DIPE)	118	116	81-123	1	0-9	
Ethyl-t-Butyl Ether (ETBE)	114	111	72-126	3	0-12	
Tert-Amyl-Methyl Ether (TAME)	108	106	72-126	3	0-12	
Ethanol	102	104	53-149	2	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 08-07-0564
Preparation: EPA 5030B
Method: EPA 8260B

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-26,202	Aqueous	GC/MS M	07/10/08	07/10/08	080710L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	107	105	84-120	2	0-8	
Carbon Tetrachloride	95	96	63-147	1	0-10	
Chlorobenzene	99	100	89-119	1	0-7	
1,2-Dibromoethane	100	109	80-120	8	0-20	
1,2-Dichlorobenzene	96	97	89-119	1	0-9	
1,1-Dichloroethene	109	97	77-125	12	0-16	
Ethylbenzene	103	105	80-120	1	0-20	
Toluene	107	105	83-125	1	0-9	
Trichloroethene	96	99	89-119	4	0-8	
Vinyl Chloride	104	103	63-135	1	0-13	
Methyl-t-Butyl Ether (MTBE)	99	114	82-118	14	0-13	BA
Tert-Butyl Alcohol (TBA)	110	110	46-154	0	0-32	
Diisopropyl Ether (DIPE)	108	115	81-123	6	0-11	
Ethyl-t-Butyl Ether (ETBE)	108	113	74-122	4	0-12	
Tert-Amyl-Methyl Ether (TAME)	102	107	76-124	4	0-10	
Ethanol	104	112	60-138	7	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-07-0564

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

Atlantic Richfield Company
bp
A BP affiliated company

Chain of Custody Record

RUSH

0564

Page ___ of ___

Project Name: ARCO Facility No. 2111
BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > Alameda
State or Lead Regulatory Agency: Alameda County Environmental Health
Requested Due Date (mm/dd/yy): 24 hours for Effluent & STD for others

On-site Time:	0700	Temp:	50's
Off-site Time:	0815	Temp:	60's
Sky Conditions:	Clear		
Meteorological Events:	—		
Wind Speed:	—	Direction:	—

Lab Name: Calscience Environmental Laboratories, Inc.	BP/AR Facility No.: 2111	Consultant/Contractor: Stratus Environmental, Inc.
Address: 7440 Lincoln Way	BP/AR Facility Address: 1156 Davis St., San Leandro	Address: 3330 Cameron Park Drive, Suite 550
Garden Grove, CA 92841	Site Lat/Long:	Cameron Park, CA 95682
Lab PM: Linda Scharpenberg	California Global ID No.: T0600101764	Consultant/Contractor Project No.: E2111-03
Tele/Fax: 714-895-5494/ 714-895-7501	Enfos Project No.: G0C28-0029	Consultant/Contractor PM: Jay Johnson
BP/AR PM Contact: Paul Supple	Provision or OOC (circle one) Provision	Tele/Fax: (530) 676-6000 / (530) 676-6005
Address: 2010 Crow Canyon Place, Suite 150	Phase/WBS: 03-O&M	Report Type & QC Level: Level 1 with EDF
San Ramon, CA	Sub Phase/Task: 03-Analytical	E-mail EDD To: shayes@stratusinc.net
Tele/Fax: 925-275-3506/925-275-3815	Cost Element: Subcontractor Cost	Invoice to: Atlantic Richfield Co.

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Matrix:	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Preservative:	Requested Analysis: TCLP by 8260	Requested Analysis:	Requested Analysis:	Requested Analysis:	Requested Analysis:	Turnaround Time: 24-hours	Turnaround Time: Standard	Turnaround Time:	Turnaround Time:	Turnaround Time:	Sample Point Lat/Long and Comments
1	0211 I A CARBON	0720	7/7/08	x					1	x						x						x				TCLP includes analysis for vinyl chloride, 1,2-dichloroethene, chloroform, 1,2-dichloroethane, methyl ethyl ketone butanone, carbon tetrachloride, trichloroethene, benzene, tetrachloroethene, and chlorobenzene.
2																										
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										

Sampler's Name: Greg Wilkins	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Stratus Environmental, Inc.		070708	1500			
Shipment Date: 07-07-08						
Shipment Method: GSO	105867101					
Shipment Tracking No:	GSO				7/8/8	1020

Special Instructions: Please cc results to bpedf@broadbentinc.com

Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP COC Rev. 5 10/11/2006

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 07 - 0564

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: STRATUS DATE: 7-8-08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature (For Air & Filter Only).
___ . ___ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

2 . 6 °C Temperature blank.
___ . ___ °C IR Thermometer.
_____ Ambient temperature (For Air & Filter Only).

Initial: WB

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: ✓ No (Not Intact) : _____ Not Present: _____

Initial: WB

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)			✓
VOA vial(s) free of headspace.			✓
Tedlar bag(s) free of condensation			✓

Initial: WB

COMMENTS:

STRATUS
ENVIRONMENTAL, INC.

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

September 4, 2008

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

Re: Remediation System Operation and Maintenance Data Package, ARCO Service Station No. 2111, located at 1156 Davis Street, San Leandro, California.

General Information

Data Submittal Prepared / Reviewed by: Sandy Hayes and Kiran Nagaraju / Jay Johnson

Phone Number: (530) 676-6007 / (530) 676-6000

On-Site Supplier Representatives: Chris Hill and Marty Morgan

Number of Site Visits: 4 (August 5, 12, 21, and 27, 2008)

System Overview: Dual Phase Extraction System, Air Stripper, and Groundwater Extraction and Treatment System (GETS).

Operational Status: Continuous operation

Scope of Work Performed: Conduct routine system operation and maintenance, and record field measurements. Influent, mid-fluent, and effluent air and water samples were collected on on August 5, 2008.

Variations from Scope of Work: During the site visits conducted in August 2008, the remediation systems were found to shutdown frequently due to high water level either in the air-stripper tank or the oil-water separator. These high level shutdowns were due to clogging of the lead carbon vessel.

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

Sincerely,

STRATUS ENVIRONMENTAL, INC.

Kiran Nagaraju
Project Engineer

Jay R. Johnson, P.G.
Project Manager

Attachments:

- Field Data Sheets
- Chain of Custody Documentation
- Certified Analytical Results

CC: Paul Supple, BP/ARCO

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Date: 8508
Onsite Time: 0430
Offsite Time: 0630
Equipment Manufacturer/Model#

Technician: CHILL
Weather Conditions: clouds
Ambient Temperature: 40

System Information

System Status Upon Arrival:	Operational	☐	Non-Operational	☒	High H2O
System Status Upon Departure:	Operational	☒	Non-Operational	☐	

Electric Meter Reading: NM
Hour Meter Reading: 2241
Totalizer Reading Prior to Air Stripper: 473470
PID Calibration Date: 8.4.08
Totalizer Reading After Air Stripper: 1072140

Field Measurements

Parameter	Influent (after blower, 2111DPEAINF)	Air Stripper (2111ASAEFF)	System Influent (2111ASYSINF)	Stack Air Flow (2111AEFF)	Comments
Differential Pressure, "wc		25			
Air Velocity, FPM		2126			
Pipe Diameter, inches		4			
Air Flow Rate, cfm			180		
Applied Vacuum, "wc	20"Hg	.38	NA	NA	
Temperature, deg F		129			
PID Readings, ppmv	130	1	63	0	PID for GAC-1: 0

Other Readings/Measurements

Well ID	% Open	Applied Vac., "Hg	Total depth, feet bgs	Stinger Depth, feet bgs			
V-1	50	16					
V-2	50	15					
V-3	50	15					
MW-1	0						
MW-3	100	15					
MW-7	100	15					
MW-8	0						

Signature: [signature]
Date: 8508

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Sampling Information (monthly)			
Sample ID	Date & Time	Sample ID	Date & Time
02111DPEAINF	8508 0615	02111AGAC1	8508 0609
02111ASAEFF	0613	02111AEFF	0607
02111ASYSINF	0611		
Analyses Required: GRO, BTEX, and MTBE			

Operation & Maintenance Notes

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8015
BTEX	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B
MTBE	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B

Signature: _____ Date: 8508

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Groundwater Treatment System

ORIGINAL

Date: 8505
Onsite Time: 0430
Offsite Time: 0630

Technician: CHILL
Weather Conditions: cloud
Ambient Temperature 40

System Status Upon Arrival: ☐ Operational ☒ Non-operational High H2O Tank
System Status At Departure: ☒ Operational ☐ Non-operational
Transfer Pump: ☒ Operational ☐ Non-operational

Transfer Pump Hour Meter Reading: ____

Effluent Flow Totalizer Reading: 1037580

No. of Carbon Vessels: 2

Lead Carbon Vessel Pressure (psi): 22

Effluent Water Characteristics
(Quarterly by Field Instrument)
pH: 7.38
Temperature: 18.2

Well ID	Hour Meter Reading	Totalizer Reading	Total Depth	Pump Depth	
MW-2		284518			

Sampling Information

Sample ID	Date & Time	Sample ID	Date & Time
02111DPEWINF	8508 0545	02111MW2WINF	8508 0600
02111ASWINF	0533		
02111ASWEFF	0528		
02111WGAC1	0525		
02111WEFF	0519		
TB2111 8508	0605		

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO, BTEX, & 5-Oxys	Monthly	INF& EFF	EPA Method 8260B

Notes:
Carbon Pressure High will Bring [illegible] Next Time
[illegible] carbon

Signature: [signature]

Date: 8508

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Date: 8/20/08
Onsite Time: 0500
Offsite Time: 0600
Equipment Manufacturer/Model#

Technician: CHILL
Weather Conditions: clouds
Ambient Temperature: 50

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒ High Tank
System Status Upon Departure: Operational ☒ Non-Operational ☐
Electric Meter Reading: NM
Hour Meter Reading: 2251
Totalizer Reading Prior to Air Stripper: 477130 PID Calibration Date: 8-11-08
Totalizer Reading After Air Stripper: 1075540

Field Measurements

Parameter	Influent (after blower, 2111DPEAINF)	Air Stripper (2111ASAEFF)	System Influent (2111ASYSINF)	Stack Air Flow (2111AEFF)	Comments
Differential Pressure, "wc		24			
Air Velocity, FPM		2170			
Pipe Diameter, inches		4	4		
Air Flow Rate, cfm			180		
Applied Vacuum, "wc	20"Hg	.40	NA	NA	
Temperature, deg F		124	90		
PID Readings, ppmv	365	2	191	0	PID for GAC-1: 8

Other Readings/Measurements

Well ID	% Open	Applied Vac., "Hg	Total depth, feet bgs	Stinger Depth, feet bgs			
V-1	50	15					
V-2	50	15					
V-3	50	15					
MW-1	0						
MW-3	100	15					
MW-7	100	15					
MW6	0						

Signature: [signature] Date: 8/20/08

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

Sampling Information (monthly)			
Sample ID	Date & Time	Sample ID	Date & Time
02111DPEAINF		02111AGAC1	
02111ASAEFF		02111AEFF	
02111ASYSINF			
Analyses Required: GRO, BTEX, and MTBE			

Operation & Maintenance Notes

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8015
BTEX	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B
MTBE	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B

Signature: _____ Date: 8/12/08

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Groundwater Treatment System

ORIGINAL

Date: 81208
Onsite Time: 0500
Offsite Time: 0600

Technician: CHILL
Weather Conditions: Clouds
Ambient Temperature 50

System Status Upon Arrival: ☐ Operational ☑ Non-operational High H2O Oil/water
System Status At Departure: ☒ Operational ☐ Non-operational
Transfer Pump: ☒ Operational ☐ Non-operational

Transfer Pump Hour Meter Reading: _____

Effluent Flow Totalizer Reading: 1040731

No. of Carbon Vessels: 2

Lead Carbon Vessel Pressure (psi): 20

Effluent Water Characteristics
(Quarterly by Field Instrument)
pH: _____
Temperature: _____

Well ID	Hour Meter Reading	Totalizer Reading	Total Depth	Pump Depth	
MW-2		285201			

Sampling Information

Sample ID	Date & Time	Sample ID	Date & Time
02111DPEWINF		02111MW2WINF	
02111ASWINF			
02111ASWEFF			
02111WGAC1			
02111WEFF			

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO, BTEX, & 5-Oxys	Monthly	INF& EFF	EPA Method 8260B

Notes: Carbon In lead getting very Hard Broke up Some of it - PSI still 20 PSI

Signature: _____ Date: 81208

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Date: 8/21/08
Onsite Time: 0845
Offsite Time: 0945
Equipment Manufacturer/Model#

Technician: MW Morgan
Weather Conditions: overcast
Ambient Temperature: 66°

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒ high tank
System Status Upon Departure: Operational ☒ Non-Operational ☐
Electric Meter Reading: NM
Hour Meter Reading: 2259.8
Totalizer Reading Prior to Air Stripper: 482119 PID Calibration Date: 8/21/08
Totalizer Reading After Air Stripper: 1079990 lead carbon pressure: >30psi

Field Measurements

Parameter	Influent (after blower, 2111DPEAINF)	Air Stripper (2111ASAEFF)	System Influent (2111ASYSINF)	Stack Air Flow (2111AEFF)	Comments
Differential Pressure, "wc		-23			
Air Velocity, FPM		1908			
Pipe Diameter, inches		4	4		
Air Flow Rate, cfm			180		
Applied Vacuum, "wc	21 "Hg	.40	NA	NA	
Temperature, deg F		130	100		
PID Readings, ppmv	239	0	129	0	PID for GAC-1: 0

Other Readings/Measurements

Well ID	% Open	Applied Vac., "Hg	Total depth, feet bgs	Stinger Depth, feet bgs			
V-1	50	40					
V-2	50	17					
V-3	50	18					
MW-1	0	—					
MW-3	100	19					
MW-7	100	18					

Signature: [signature] Date: 8/21/08

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Sampling Information (monthly)			
Sample ID	Date & Time	Sample ID	Date & Time
02111DPEAINF		02111AGAC1	
02111ASAEFF	NC	02111AEFF	
02111ASYSINF			
Analyses Required: GRO, BTEX, and MTBE			

Operation & Maintenance Notes

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8015
BTEX	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B
MTBE	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B

Signature: _____ Date: 8/21/08

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Date: 8 27 08
Onsite Time: 0915
Offsite Time: 1015
Equipment Manufacturer/Model#

Technician: CHILL
Weather Conditions: Clear
Ambient Temperature: 70

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒ High H2O
System Status Upon Departure: Operational ☒ Non-Operational ☐
Electric Meter Reading: NM
Hour Meter Reading: 2270
Totalizer Reading Prior to Air Stripper: 488319
PID Calibration Date: 8 25 08
Totalizer Reading After Air Stripper: 1085950

Air Stripper

Field Measurements

Parameter	Influent (after blower, 2111DPEAINF)	Air Stripper (2111ASAEFF)	System Influent (2111ASYSINF)	Stack Air Flow (2111AEFF)	Comments
Differential Pressure, "wc		21 "H2O			
Air Velocity, FPM		2513			
Pipe Diameter, inches	3	4	4	3	
Air Flow Rate, cfm			180		
Applied Vacuum, "wc	20 "Hg	30 "H2O	NA	NA	
Temperature, deg F		134	110		
PID Readings, ppmv	70	1	44	0	PID for GAC-1: 0

Other Readings/Measurements

Well ID	% Open	Applied Vac., "Hg	Total depth, feet bgs	Stinger Depth, feet bgs			
V-1	50	16					
V-2	50	16					
V-3	50	16					
MW-1	0	-					
MW-3	100	18					
MW-7	100	18					
MW8	0	-					

Signature: [signature]
Date: 8 27 08

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Sampling Information (monthly)			
Sample ID	Date & Time	Sample ID	Date & Time
02111DPEAINF		02111AGAC1	
02111ASAEFF		02111AEFF	
02111ASYSINF			
Analyses Required: GRO, BTEX, and MTBE			

Operation & Maintenance Notes

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8015
BTEX	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B
MTBE	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B

Signature: _____ Date: 8 27 06

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Groundwater Treatment System

ORIGINAL

Date: 8 27 08
Onsite Time: 0915
Offsite Time: 1015

Technician: CHILL
Weather Conditions: Clear
Ambient Temperature 70

System Status Upon Arrival: ☐ Operational ☒ Non-operational High H2O
System Status At Departure: ☒ Operational ☐ Non-operational
Transfer Pump: ☒ Operational ☐ Non-operational

Transfer Pump Hour Meter Reading: _____

Effluent Flow Totalizer Reading: 1050359

No. of Carbon Vessels: 2

Lead Carbon Vessel Pressure (psi): 25

Effluent Water Characteristics
(Quarterly by Field Instrument)
pH: _____
Temperature: _____

Well ID	Hour Meter Reading	Totalizer Reading	Total Depth	Pump Depth	
MW-2		290614			

Sampling Information			
Sample ID	Date & Time	Sample ID	Date & Time
02111DPEWINF		02111MW2WINF	
02111ASWINF			
02111ASWEFF			
02111WGAC1			
02111WEFF			

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO, BTEX, & 5-Oxys	Monthly	INF& EFF	EPA Method 8260B

Notes:
Need To change carbon To Increase Flow
OUT Carbon Hard Pack

Signature: _____ Date: 8 27 08

Atlantic Richfield Company
bp
A BP affiliated company

Chain of Custody Record

RUSH

Project Name: ARCO Facility No. 2111
BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > Alameda
State or Lead Regulatory Agency: Alameda County Environmental Health
Requested Due Date (mm/dd/yy): 24 hours for Effluent & STD for others

On-site Time: 0430	Temp: 40
Off-site Time: 1630	Temp:
Sky Conditions: Clouds	
Meteorological Events:	
Wind Speed:	Direction:

Lab Name: Calscience Environmental Laboratories, Inc.	
Address: 7440 Lincoln Way	
Garden Grove, CA 92841	
Lab PM: Linda Scharpenberg	
Tele/Fax: 714-895-5494/ 714-895-7501	
BP/AR PM Contact: Paul Supple	
Address: 2010 Crow Canyon Place, Suite 150	
San Ramon, CA	
Tele/Fax: 925-275-3506/925-275-3815	
Lab Bottle Order No:	

BP/AR Facility No.: 2111	
BP/AR Facility Address: 1156 Davis St., San Leandro	
Site Lat/Long:	
California Global ID No.: T0600101764	
Enfos Project No.: G0C28-0029	
Provision or OOC (circle one) Provision	
Phase/WBS: 03-O&M	
Sub Phase/Task: 03-Analytical	
Cost Element: Subcontractor Cost	

Consultant/Contractor: Stratus Environmental, Inc.	
Address: 3330 Cameron Park Drive, Suite 550	
Cameron Park, CA 95682	
Consultant/Contractor Project No.: E2111-03	
Consultant/Contractor PM: Jay Johnson	
Tele/Fax: (530) 676-6000 / (530) 676-6005	
Report Type & QC Level: Level 1 with EDF	
E-mail EDD To: shayes@stratusinc.net	
Invoice to: Atlantic Richfield Co.	

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: GRO	Requested Analysis: BTEX	Requested Analysis: MTBE	Requested Analysis: 5-oxygenates	Turnaround Time: 24-hours	Turnaround Time: Standard	Sample Point Lat/Long and Comments
1	02111DPEAINF	0615	8506			X		2	X					X	X	X			X	5-oxygenates requested are MTBE, DIPE, ETBE, TAME, and TBA.
2	02111ASAEFF	0613				X		2	X					X	X	X			X	
3	02111ASYSINF	0611				X		2	X					X	X	X			X	
4	02111AGAC1	0609				X		2	X					X	X	X			X	
5	02111AEFF	0607				X		2	X					X	X	X			X	
6	02111DPEWINF	0545			X			6				X		X	X		X	X		
7	02111ASWINF	0537			X			6				X		X	X		X		X	
8	02111ASWEFF	0528			X			6				X		X	X		X		X	
9	02111WGAC1	0525			X			6				X		X	X		X		X	
10	02111WEFF	0519			X			6				X		X	X		X		X	
11	02111MW2WINF	0600			X			6				X		X	X		X	X		
								6				X		X	X		X		X	
	TB2111 8508	0600		X				2												Hold

Sampler's Name: Chris Hall	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Stratus Environmental, Inc.						
Shipment Date: 8508		8508	1600			
Shipment Method: CSO						
Shipment Tracking No:						

Special Instructions: Please cc results to bpedf@broadbentinc.com

Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Calscience
Environmental
Laboratories, Inc.

August 18, 2008

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

Subject: **Calscience Work Order No.:** **08-08-0357**
Client Reference: **ARCO Facility No. 2111**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 8/6/2008 and analyzed in accordance with the attached chain-of-custody.

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

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

Sincerely,

Philip Samelle for

Calscience Environmental
Laboratories, Inc.
Linda Scharpenberg
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 08/06/08
Work Order No: 08-08-0357
Preparation: N/A
Method: EPA TO-15
Units: mg/m3

Project: ARCO Facility No. 2111

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111DPEAINF	**08-08-0357-1-A**	**08/05/08 06:15**	**Air**	**GC/MS NN**	**N/A**	**08/06/08 19:52**	**080806L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	1.5	0.16	100		Xylenes (total)	9.0	0.43	100	
Toluene	0.97	0.19	100		Methyl-t-Butyl Ether (MTBE)	24	2.9	400	
Ethylbenzene	4.7	0.22	100						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	100	57-129			1,2-Dichloroethane-d4	101	47-137		
Toluene-d8	107	78-156							

02111ASAEFF	08-08-0357-2-A	08/05/08 06:13	Air	GC/MS NN	N/A	08/06/08 16:35	080806L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0016	1		Xylenes (total)	ND	0.0043	1	
Toluene	0.0096	0.0019	1		Methyl-t-Butyl Ether (MTBE)	0.40	0.072	10	
Ethylbenzene	ND	0.0022	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	96	57-129			1,2-Dichloroethane-d4	90	47-137		
Toluene-d8	95	78-156							

02111ASYSINF	08-08-0357-3-A	08/05/08 06:11	Air	GC/MS NN	N/A	08/06/08 19:03	080806L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.62	0.080	50		Xylenes (total)	3.5	0.22	50	
Toluene	0.40	0.094	50		Methyl-t-Butyl Ether (MTBE)	10	1.4	200	
Ethylbenzene	1.9	0.11	50						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	99	57-129			1,2-Dichloroethane-d4	100	47-137		
Toluene-d8	107	78-156							

02111AGAC1	08-08-0357-4-A	08/05/08 06:09	Air	GC/MS NN	N/A	08/06/08 18:14	080806L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0016	1		Xylenes (total)	ND	0.0043	1	
Toluene	0.0083	0.0019	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Ethylbenzene	ND	0.0022	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	97	57-129			1,2-Dichloroethane-d4	96	47-137		
Toluene-d8	98	78-156							

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	08/06/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-08-0357
Cameron Park, CA 95682-8861	Preparation:	N/A
	Method:	EPA TO-15
	Units:	mg/m3
Project: ARCO Facility No. 2111		Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111AEFF	**08-08-0357-5-A**	**08/05/08 06:07**	**Air**	**GC/MS NN**	**N/A**	**08/06/08 17:25**	**080806L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0016	1		Xylenes (total)	ND	0.0043	1	
Toluene	0.0071	0.0019	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Ethylbenzene	ND	0.0022	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	97	57-129			1,2-Dichloroethane-d4	99	47-137		
Toluene-d8	99	78-156							

Method Blank	097-09-002-7,460	N/A	Air	GC/MS NN	N/A	08/06/08 13:46	080806L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0016	1		Xylenes (total)	ND	0.0043	1	
Toluene	ND	0.0019	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Ethylbenzene	ND	0.0022	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	98	57-129			1,2-Dichloroethane-d4	102	47-137		
Toluene-d8	98	78-156							

Method Blank	097-09-002-7,463	N/A	Air	GC/MS K	N/A	08/07/08 10:53	080807L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0016	1		Xylenes (total)	ND	0.0043	1	
Toluene	ND	0.0019	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Ethylbenzene	ND	0.0022	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	98	57-129			1,2-Dichloroethane-d4	93	47-137		
Toluene-d8	104	78-156							

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 08/06/08
Work Order No: 08-08-0357
Preparation: N/A
Method: EPA TO-3M

Project: ARCO Facility No. 2111

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111DPEAINF	**08-08-0357-1-A**	**08/05/08 06:15**	**Air**	**GC 19**	**N/A**	**08/06/08 17:29**	**080806L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	2600	250	5		mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASAEFF	**08-08-0357-2-A**	**08/05/08 06:13**	**Air**	**GC 19**	**N/A**	**08/06/08 12:46**	**080806L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASYSINF	**08-08-0357-3-A**	**08/05/08 06:11**	**Air**	**GC 19**	**N/A**	**08/06/08 15:42**	**080806L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	1100	50	1		mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111AGAC1	**08-08-0357-4-A**	**08/05/08 06:09**	**Air**	**GC 19**	**N/A**	**08/06/08 16:20**	**080806L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111AEFF	**08-08-0357-5-A**	**08/05/08 06:07**	**Air**	**GC 19**	**N/A**	**08/06/08 15:04**	**080806L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-693-66**	**N/A**	**Air**	**GC 19**	**N/A**	**08/06/08 08:37**	**080806L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		mg/m3

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	08/06/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-08-0357
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: ARCO Facility No. 2111

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111DPEWINF	**08-08-0357-6-E**	**08/05/08 05:45**	**Aqueous**	**GC 4**	**08/06/08**	**08/06/08 22:23**	**080806B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	220	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	67	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASWINF	**08-08-0357-7-E**	**08/05/08 05:33**	**Aqueous**	**GC 4**	**08/06/08**	**08/06/08 19:37**	**080806B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	80	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	69	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASWEFF	**08-08-0357-8-E**	**08/05/08 05:28**	**Aqueous**	**GC 4**	**08/06/08**	**08/06/08 19:04**	**080806B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	72	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111WGAC1	**08-08-0357-9-E**	**08/05/08 05:25**	**Aqueous**	**GC 4**	**08/06/08**	**08/06/08 20:44**	**080806B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	66	38-134			

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	08/06/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-08-0357
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: ARCO Facility No. 2111

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111WEFF	**08-08-0357-10-E**	**08/05/08 05:19**	**Aqueous**	**GC 4**	**08/06/08**	**08/06/08 17:25**	**080806B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	64	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111MW2WINF	**08-08-0357-11-E**	**08/05/08 06:00**	**Aqueous**	**GC 4**	**08/06/08**	**08/06/08 20:10**	**080806B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	270	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	70	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-695-223**	**N/A**	**Aqueous**	**GC 4**	**08/06/08**	**08/06/08 12:59**	**080806B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	76	38-134			

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	08/06/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-08-0357
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: ARCO Facility No. 2111			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111DPEWINF	**08-08-0357-6-A**	**08/05/08 05:45**	**Aqueous**	**GC/MS Z**	**08/13/08**	**08/13/08 16:18**	**080813L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	10	20		Tert-Butyl Alcohol (TBA)	1200	200	20	
Ethylbenzene	12	10	20		Diisopropyl Ether (DIPE)	ND	10	20	
Toluene	ND	10	20		Ethyl-t-Butyl Ether (ETBE)	ND	10	20	
Xylenes (total)	25	10	20		Tert-Amyl-Methyl Ether (TAME)	ND	10	20	
Methyl-t-Butyl Ether (MTBE)	460	10	20						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	101	73-157		Dibromofluoromethane	102	82-142	
Toluene-d8	100	82-112		1,4-Bromofluorobenzene	96	75-105	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASWINF	**08-08-0357-7-C**	**08/05/08 05:33**	**Aqueous**	**GC/MS Z**	**08/13/08**	**08/13/08 16:50**	**080813L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	5.0	10		Tert-Butyl Alcohol (TBA)	930	100	10	
Ethylbenzene	ND	5.0	10		Diisopropyl Ether (DIPE)	ND	5.0	10	
Toluene	ND	5.0	10		Ethyl-t-Butyl Ether (ETBE)	ND	5.0	10	
Xylenes (total)	10	5.0	10		Tert-Amyl-Methyl Ether (TAME)	ND	5.0	10	
Methyl-t-Butyl Ether (MTBE)	370	5.0	10						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	102	73-157		Dibromofluoromethane	101	82-142	
Toluene-d8	100	82-112		1,4-Bromofluorobenzene	97	75-105	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASWEFF	**08-08-0357-8-A**	**08/05/08 05:28**	**Aqueous**	**GC/MS Z**	**08/13/08**	**08/13/08 17:22**	**080813L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.0	2		Tert-Butyl Alcohol (TBA)	550	100	10	
Ethylbenzene	ND	1.0	2		Diisopropyl Ether (DIPE)	ND	1.0	2	
Toluene	ND	1.0	2		Ethyl-t-Butyl Ether (ETBE)	ND	1.0	2	
Xylenes (total)	ND	1.0	2		Tert-Amyl-Methyl Ether (TAME)	ND	1.0	2	
Methyl-t-Butyl Ether (MTBE)	12	1.0	2						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	102	73-157		Dibromofluoromethane	102	82-142	
Toluene-d8	100	82-112		1,4-Bromofluorobenzene	95	75-105	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	08/06/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-08-0357
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L
Project: ARCO Facility No. 2111		Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111WGAC1	**08-08-0357-9-B**	**08/05/08 05:25**	**Aqueous**	**GC/MS Z**	**08/13/08**	**08/13/08 17:54**	**080813L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	104	73-157		Dibromofluoromethane	101	82-142	
Toluene-d8	101	82-112		1,4-Bromofluorobenzene	95	75-105	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111WEFF	**08-08-0357-10-B**	**08/05/08 05:19**	**Aqueous**	**GC/MS Z**	**08/07/08**	**08/07/08 13:02**	**080807L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	100	73-157		Dibromofluoromethane	101	82-142	
Toluene-d8	99	82-112		1,4-Bromofluorobenzene	98	75-105	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111MW2WINF	**08-08-0357-11-A**	**08/05/08 06:00**	**Aqueous**	**GC/MS Z**	**08/13/08**	**08/13/08 18:27**	**080813L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	15	10	20		Tert-Butyl Alcohol (TBA)	860	200	20	
Ethylbenzene	ND	10	20		Diisopropyl Ether (DIPE)	ND	10	20	
Toluene	ND	10	20		Ethyl-t-Butyl Ether (ETBE)	ND	10	20	
Xylenes (total)	ND	10	20		Tert-Amyl-Methyl Ether (TAME)	ND	10	20	
Methyl-t-Butyl Ether (MTBE)	230	10	20						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	107	73-157		Dibromofluoromethane	104	82-142	
Toluene-d8	101	82-112		1,4-Bromofluorobenzene	94	75-105	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	08/06/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-08-0357
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L
Project: ARCO Facility No. 2111		Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-361**	**N/A**	**Aqueous**	**GC/MS Z**	**08/07/08**	**08/07/08 09:46**	**080807L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	154	73-157		Dibromofluoromethane	111	82-142	
Toluene-d8	99	82-112		1,4-Bromofluorobenzene	97	75-105	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-378**	**N/A**	**Aqueous**	**GC/MS Z**	**08/13/08**	**08/13/08 11:21**	**080813L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	133	73-157		Dibromofluoromethane	105	82-142	
Toluene-d8	100	82-112		1,4-Bromofluorobenzene	96	75-105	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-388**	**N/A**	**Aqueous**	**GC/MS Z**	**08/14/08**	**08/14/08 17:57**	**080814L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	105	73-157		Dibromofluoromethane	101	82-142	
Toluene-d8	99	82-112		1,4-Bromofluorobenzene	97	75-105	

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

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

Stratus Environmental, inc.	Date Received:	08/06/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-08-0357
Cameron Park, CA 95682-8861	Preparation:	N/A
	Method:	EPA TO-3M

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
08-08-0355-1	**Air**	**GC 19**	**N/A**	**08/06/08**	**080806D01**

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	360	360	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	08/06/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-08-0357
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-08-0355-5	**Aqueous**	**GC 4**	**08/06/08**	**08/06/08**	**080806S01**

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

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 08/06/08
Work Order No: 08-08-0357
Preparation: EPA 5030B
Method: EPA 8260B

Project ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02111WEFF	**Aqueous**	**GC/MS Z**	**08/07/08**	**08/07/08**	**080807S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	95	98	86-122	4	0-8	
Carbon Tetrachloride	99	106	78-138	7	0-9	
Chlorobenzene	94	98	90-120	4	0-9	
1,2-Dibromoethane	93	97	70-130	5	0-30	
1,2-Dichlorobenzene	92	95	89-119	3	0-10	
1,1-Dichloroethene	95	99	52-142	5	0-23	
Ethylbenzene	94	99	70-130	5	0-30	
Toluene	95	98	85-127	3	0-12	
Trichloroethene	93	97	78-126	4	0-10	
Vinyl Chloride	99	102	56-140	3	0-21	
Methyl-t-Butyl Ether (MTBE)	89	94	64-136	6	0-28	
Tert-Butyl Alcohol (TBA)	105	107	27-183	2	0-60	
Diisopropyl Ether (DIPE)	91	95	78-126	4	0-16	
Ethyl-t-Butyl Ether (ETBE)	91	95	67-133	4	0-21	
Tert-Amyl-Methyl Ether (TAME)	90	93	63-141	4	0-21	
Ethanol	121	127	11-167	5	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 08/06/08
Work Order No: 08-08-0357
Preparation: EPA 5030B
Method: EPA 8260B

Project ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-08-0553-1	**Aqueous**	**GC/MS Z**	**08/13/08**	**08/13/08**	**080813S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	108	106	86-122	2	0-8	
Carbon Tetrachloride	106	109	78-138	3	0-9	
Chlorobenzene	106	106	90-120	0	0-9	
1,2-Dibromoethane	108	102	70-130	6	0-30	
1,2-Dichlorobenzene	106	103	89-119	3	0-10	
1,1-Dichloroethene	101	100	52-142	1	0-23	
Ethylbenzene	109	109	70-130	0	0-30	
Toluene	106	105	85-127	2	0-12	
Trichloroethene	105	105	78-126	0	0-10	
Vinyl Chloride	108	108	56-140	1	0-21	
Methyl-t-Butyl Ether (MTBE)	98	91	64-136	4	0-28	
Tert-Butyl Alcohol (TBA)	100	101	27-183	1	0-60	
Diisopropyl Ether (DIPE)	103	98	78-126	5	0-16	
Ethyl-t-Butyl Ether (ETBE)	107	102	67-133	5	0-21	
Tert-Amyl-Methyl Ether (TAME)	111	104	63-141	7	0-21	
Ethanol	87	93	11-167	6	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 08/06/08
Work Order No: 08-08-0357
Preparation: EPA 5030B
Method: EPA 8260B

Project ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-08-0896-1	**Aqueous**	**GC/MS Z**	**08/14/08**	**08/14/08**	**080814S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	101	106	86-122	5	0-8	
Carbon Tetrachloride	98	107	78-138	9	0-9	
Chlorobenzene	99	106	90-120	7	0-9	
1,2-Dibromoethane	99	106	70-130	7	0-30	
1,2-Dichlorobenzene	100	106	89-119	6	0-10	
1,1-Dichloroethene	95	101	52-142	6	0-23	
Ethylbenzene	101	107	70-130	5	0-30	
Toluene	100	106	85-127	6	0-12	
Trichloroethene	96	102	78-126	6	0-10	
Vinyl Chloride	98	105	56-140	7	0-21	
Methyl-t-Butyl Ether (MTBE)	99	107	64-136	8	0-28	
Tert-Butyl Alcohol (TBA)	104	103	27-183	0	0-60	
Diisopropyl Ether (DIPE)	98	106	78-126	8	0-16	
Ethyl-t-Butyl Ether (ETBE)	100	109	67-133	9	0-21	
Tert-Amyl-Methyl Ether (TAME)	99	104	63-141	5	0-21	
Ethanol	119	115	11-167	3	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.	Date Received: N/A
3330 Cameron Park Drive, Suite 550	Work Order No: 08-08-0357
Cameron Park, CA 95682-8861	Preparation: N/A
	Method: EPA TO-15

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-09-002-7,460	Air	GC/MS NN	N/A	08/06/08	080806L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	115	125	60-156	8	0-40	
Toluene	117	131	56-146	11	0-43	
Ethylbenzene	119	133	52-154	11	0-38	
p/m-Xylene	118	132	42-156	11	0-41	
o-Xylene	122	138	52-148	12	0-38	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.		Date Received:	N/A
3330 Cameron Park Drive, Suite 550		Work Order No:	08-08-0357
Cameron Park, CA 95682-8861		Preparation:	N/A
		Method:	EPA TO-15

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-09-002-7,463	Air	GC/MS K	N/A	08/07/08	080807L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	119	117	60-156	1	0-40	
Toluene	110	112	56-146	2	0-43	
Ethylbenzene	124	126	52-154	2	0-38	
p/m-Xylene	115	116	42-156	1	0-41	
o-Xylene	120	123	52-148	3	0-38	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.		Date Received:	N/A
3330 Cameron Park Drive, Suite 550		Work Order No:	08-08-0357
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-223	**Aqueous**	**GC 4**	**08/06/08**	**08/06/08**	**080806B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	85	86	78-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.		Date Received:	N/A
3330 Cameron Park Drive, Suite 550		Work Order No:	08-08-0357
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-361	**Aqueous**	**GC/MS Z**	**08/07/08**	**08/07/08**	**080807L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	97	95	87-117	2	0-7	
Carbon Tetrachloride	102	103	78-132	0	0-8	
Chlorobenzene	97	96	88-118	1	0-8	
1,2-Dibromoethane	99	96	80-120	3	0-20	
1,2-Dichlorobenzene	97	95	88-118	2	0-8	
1,1-Dichloroethene	97	97	71-131	0	0-14	
Ethylbenzene	97	97	80-120	0	0-20	
Toluene	97	96	85-127	1	0-7	
Trichloroethene	97	98	85-121	1	0-11	
Vinyl Chloride	98	99	64-136	1	0-10	
Methyl-t-Butyl Ether (MTBE)	95	90	67-133	6	0-16	
Tert-Butyl Alcohol (TBA)	96	94	34-154	2	0-19	
Diisopropyl Ether (DIPE)	93	92	80-122	1	0-8	
Ethyl-t-Butyl Ether (ETBE)	97	92	73-127	5	0-11	
Tert-Amyl-Methyl Ether (TAME)	94	89	69-135	5	0-12	
Ethanol	95	95	34-124	0	0-44	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.		Date Received:	N/A
3330 Cameron Park Drive, Suite 550		Work Order No:	08-08-0357
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-378	**Aqueous**	**GC/MS Z**	**08/13/08**	**08/13/08**	**080813L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	108	108	87-117	1	0-7	
Carbon Tetrachloride	111	109	78-132	2	0-8	
Chlorobenzene	109	108	88-118	1	0-8	
1,2-Dibromoethane	108	114	80-120	5	0-20	
1,2-Dichlorobenzene	109	109	88-118	1	0-8	
1,1-Dichloroethene	103	104	71-131	1	0-14	
Ethylbenzene	110	108	80-120	1	0-20	
Toluene	109	110	85-127	1	0-7	
Trichloroethene	107	111	85-121	4	0-11	
Vinyl Chloride	109	107	64-136	2	0-10	
Methyl-t-Butyl Ether (MTBE)	107	113	67-133	6	0-16	
Tert-Butyl Alcohol (TBA)	109	113	34-154	4	0-19	
Diisopropyl Ether (DIPE)	106	109	80-122	2	0-8	
Ethyl-t-Butyl Ether (ETBE)	111	117	73-127	5	0-11	
Tert-Amyl-Methyl Ether (TAME)	112	119	69-135	6	0-12	
Ethanol	97	100	34-124	3	0-44	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.	Date Received: N/A
3330 Cameron Park Drive, Suite 550	Work Order No: 08-08-0357
Cameron Park, CA 95682-8861	Preparation: EPA 5030B
	Method: EPA 8260B

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-388	Aqueous	GC/MS Z	08/14/08	08/14/08	080814L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	101	102	87-117	1	0-7	
Carbon Tetrachloride	105	104	78-132	1	0-8	
Chlorobenzene	100	101	88-118	2	0-8	
1,2-Dibromoethane	103	102	80-120	2	0-20	
1,2-Dichlorobenzene	104	103	88-118	0	0-8	
1,1-Dichloroethene	101	101	71-131	1	0-14	
Ethylbenzene	101	103	80-120	2	0-20	
Toluene	100	101	85-127	1	0-7	
Trichloroethene	102	106	85-121	4	0-11	
Vinyl Chloride	98	93	64-136	5	0-10	
Methyl-t-Butyl Ether (MTBE)	112	105	67-133	7	0-16	
Tert-Butyl Alcohol (TBA)	103	100	34-154	3	0-19	
Diisopropyl Ether (DIPE)	104	102	80-122	2	0-8	
Ethyl-t-Butyl Ether (ETBE)	108	104	73-127	4	0-11	
Tert-Amyl-Methyl Ether (TAME)	105	102	69-135	3	0-12	
Ethanol	101	109	34-124	7	0-44	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-08-0357

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

Page 1 of 1

Atlantic Richfield Company
bp A BP affiliated company

Chain of Custody Record

ORIGINAL — RUSH — 0357

Project Name:	
BP BU/AR Region/Enfos Segment:	BP > Americas > West > Retail > Alameda
State or Lead Regulatory Agency:	Alameda County Environmental Health
Requested Due Date (mm/dd/yy):	24 hours for Effluent & STD for others

On-site Time: 0430		Temp: 40	
Off-site Time: 1630		Temp:	
Sky Conditions: Clouds			
Meteorological Events:			
Wind Speed:		Direction:	

Lab Name: Calscience Environmental Laboratories, Inc.	BP/AR Facility No.: 2111	Consultant/Contractor: Stratus Environmental, Inc.
Address: 7440 Lincoln Way	BP/AR Facility Address: 1156 Davis St., San Leandro	Address: 3330 Cameron Park Drive, Suite 550
Garden Grove, CA 92841	Site Lat/Long:	Cameron Park, CA 95682
Lab PM: Linda Scharpenberg	California Global ID No.: T0600101764	Consultant/Contractor Project No.: E2111-03
Tele/Fax: 714-895-5494/ 714-895-7501	Enfos Project No.: G0C28-0029	Consultant/Contractor PM: Jay Johnson
BP/AR PM Contact: Paul Supple	Provision or OOC (circle one) Provision	Tele/Fax: (530) 676-6000 / (530) 676-6005
Address: 2010 Crow Canyon Place, Suite 150	Phase/WBS: 03-O&M	Report Type & QC Level: Level 1 with EDF
San Ramon, CA	Sub Phase/Task: 03-Analytical	E-mail EDD To: shayes@stratusinc.net
Tele/Fax: 925-275-3506/925-275-3815	Cost Element: Subcontractor Cost	Invoice to: Atlantic Richfield Co.

Lab Bottle Order No.:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: GRO	Requested Analysis: BTEX	Requested Analysis: MTBE	Requested Analysis: 5-oxygenates	Turnaround Time: 24-hours	Turnaround Time: Standard	Sample Point Lat/Long and Comments
1	02111DPEAINF	0615	8/5/08			x		2	x					x	x	x			x	5-oxygenates requested are MTBE, DIPE, ETBE, TAME, and TBA.
2	02111ASAEFF	0613				x		2	x					x	x	x			x	
3	02111ASYSINF	0611				x		2	x					x	x	x			x	
4	02111AGAC1	0609				x		2	x					x	x	x			x	
5	02111AEFF	0607				x		2	x					x	x	x		x		
6	02111DPEWINF	0545			x			6				x		x	x		x		x	
7	02111ASWINF	0537			x			6				x		x	x		x		x	
8	02111ASWEFF	0528			x			6				x		x	x		x		x	
9	02111WGAC1	0525			x			6				x		x	x		x		x	
10	02111WEFF	0519			x			6				x		x	x		x	x		
11	02111MW2WINF	0600			x			6				x		x	x		x		x	
	TB2111080508	0605			x			2												Hold

Sampler's Name: Chris Hill	
Sampler's Company: Stratus Environmental, Inc.	
Shipment Date: 8508	
Shipment Method: GSO	
Shipment Tracking No: 925261770	

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
[signature] Stratus	8508	1600			
			[signature] CA	8/6/08	1000

Special Instructions: Please cc results to bpedf@broadbentinc.com

Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP COC Rev. 5 10/11/2006

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 0 8 - 0 3 5 7

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Stratus DATE: 8/6/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature (For Air & Filter Only).
___ ___ . ___ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

3.8 °C Temperature blank.
___ ___ . ___ °C IR Thermometer.
✓ Ambient temperature (For Air & Filter Only).

Initial: JP

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: ✓ No (Not Intact) : _____ Not Present: _____

Initial: JP

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓ P.S.	✓	
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation	✓		~~✓~~ JP

Initial: JP

COMMENTS:

(C-8) 0211IASWEFF RECEIVED 7 VIALS INSTEAD OF 6

(C-9) 0211IWGAC1 RECEIVED 5 VIALS INSTEAD OF 6 - 08/06/08 RS

STRATUS
ENVIRONMENTAL, INC.

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

October 10, 2008

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

Re: Remediation System Operation and Maintenance Data Package, ARCO Service Station No. 2111, located at 1156 Davis Street, San Leandro, California.

General Information

Data Submittal Prepared / Reviewed by: Sandy Hayes and Kiran Nagaraju / Jay Johnson

Phone Number: (530) 676-6007 / (530) 676-6000

On-Site Supplier Representatives: Chris Hill

Number of Site Visits: 4 (September 2, 10, 17 and 24, 2008)

System Overview: Dual Phase Extraction System, Air Stripper, and Groundwater Extraction and Treatment System (GETS).

Operational Status: Continuous operation

Scope of Work Performed: Conduct routine system operation and maintenance, and record field measurements. Influent, mid-fluent, and effluent air and water samples were collected on on September 2 and 11, 2008.

Variations from Scope of Work: The remediation systems were found non-functioning on September 2, 2008, due to high-water level alarm either in the air stripper tank or in the oil-water separator. The remediation systems were re-started momentarily on September 2, 2008 and shutdown after sampling, pending receipt of analytical results. Upon receipt of analytical results and compliance verification, the remediation systems were re-started on September 10, 2008.

Due to excessive cementing of the carbon that caused back pressure on the transfer pump, a carbon sample (liquid phase) was collected on September 10, 2008, for profiling and disposal

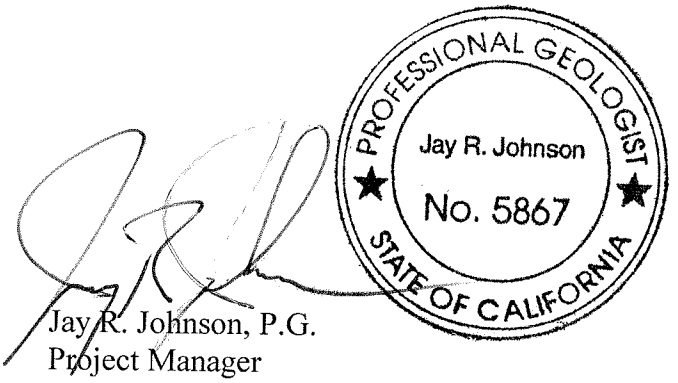
purposes. A carbon change-out for the liquid phase carbon vessels is currently scheduled to be conducted on October 2, 2008.

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

Sincerely,

STRATUS ENVIRONMENTAL, INC.

Kiran Nagaraju
Project Engineer



Jay R. Johnson, P.G.
Project Manager

Attachments:

- Field Data Sheets
- Chain of Custody Documentation
- Certified Analytical Results

CC: Paul Supple, BP/ARCO

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Date: 9208
Onsite Time: 0630
Offsite Time: 1017
Equipment Manufacturer/Model#

Technician: CHILL
Weather Conditions: Clear
Ambient Temperature: 60

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒ Hugh H2O
System Status Upon Departure: Operational ☐ Non-Operational ☒
Electric Meter Reading: NM
Hour Meter Reading: 2275
Totalizer Reading Prior to Air Stripper: 490741 PID Calibration Date: 9208
Totalizer Reading After Air Stripper: 1088240

Wait For Samples

Field Measurements

Parameter	Influent (after blower, 2111DPEAINF)	Air Stripper (2111ASAEFF)	System Influent (2111ASYSINF)	Stack Air Flow (2111AEFF)	Comments
Differential Pressure, "wc		24"			
Air Velocity, FPM		2500			
Pipe Diameter, inches					
Air Flow Rate, cfm			180		
Applied Vacuum, "wc	22" Hg	28"	NA	NA	
Temperature, deg F		139	125		
PID Readings, ppmv	100	1	46	0	PID for GAC-1: 0

Other Readings/Measurements

Well ID	% Open	Applied Vac., "Hg	Total depth, feet bgs	Stinger Depth, feet bgs			
V-1	50	15					
V-2	50	15					
V-3	50	15					
MW-1	0						
MW-3	100	15					
MW-7	100	15					
MW-5	0						

Signature: [signature]
Date: 9208

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Sampling Information (monthly)			
Sample ID	Date & Time	Sample ID	Date & Time
02111DPEAINF	9208 0943	02111AGAC1	9208 0937
02111ASAEFF	〃 0944	02111AEFF	〃 0935
02111ASYSINF	〃 0939		
	〃		
Analyses Required: GRO, BTEX, and MTBE			

Operation & Maintenance Notes

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8015
BTEX	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B
MTBE	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B

Signature: _____ Date: 9208

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Groundwater Treatment System

ORIGINAL

Date: 9208
Onsite Time: 0930
Offsite Time: 1017

Technician: CHILL
Weather Conditions: Clear
Ambient Temperature 60

System Status Upon Arrival: ☐ Operational ☒ Non-operational High H2O
System Status At Departure: ☐ Operational ☒ Non-operational Wait For Samples
Transfer Pump: ☐ Operational ☒ Non-operational

Transfer Pump Hour Meter Reading: _____
Effluent Flow Totalizer Reading: 1052669
No. of Carbon Vessels: 2
Lead Carbon Vessel Pressure (psi): 25

Effluent Water Characteristics
(Quarterly by Field Instrument)
pH: 7.5
Temperature: C 22.1 C

Well ID	Hour Meter Reading	Totalizer Reading	Total Depth	Pump Depth	
MW-2		291267			

Sampling Information

Sample ID	Date & Time	Sample ID	Date & Time
02111DPEWINF	9208 0920	02111MW2WINF	9208 0925
02111ASWINF	0915		
02111ASWEFF	0906		
02111WGAC1	0903		
02111WEFF	0900		
		TB2111 9208	0930

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO, BTEX, & 5-Oxys	Monthly	INF& EFF	EPA Method 8260B

Notes:

Signature: _____ Date: 9208

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Date: 9/10/08
Onsite Time: 1230
Offsite Time: 1332
Equipment Manufacturer/Model#

Technician: CHILL
Weather Conditions: Clear
Ambient Temperature: 70

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒
System Status Upon Departure: Operational ☒ Non-Operational ☐
Electric Meter Reading: NM
Hour Meter Reading: 2270
Totalizer Reading Prior to Air Stripper: Batteries Dead
PID Calibration Date: 9-9-08
Totalizer Reading After Air Stripper: 108840

Field Measurements

Parameter	Influent (after blower, 2111DPEAINF)	Air Stripper (2111ASAEFF)	System Influent (2111ASYSINF)	Stack Air Flow (2111AEFF)	Comments
Differential Pressure, "wc		24			
Air Velocity, FPM		2135			
Pipe Diameter, inches		4	4		
Air Flow Rate, cfm			180		
Applied Vacuum, "wc	20"Hg	.40	NA	NA	
Temperature, deg F		132	100		
PID Readings, ppmv	122	1	51	8	PID for GAC-1: 8

Other Readings/Measurements

Well ID	% Open	Applied Vac., "Hg	Total depth, feet bgs	Stinger Depth, feet bgs			
V-1	50	19					
V-2	50	19					
V-3	50	19					
MW-1	0						
MW-3	100	20					
MW-7	100	19					
MW-8	X						

Signature: [signature]
Date: 9/10/08

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Sampling Information (monthly)			
Sample ID	Date & Time	Sample ID	Date & Time
02111DPEAINF		02111AGAC1	
02111ASAEFF		02111AEFF	
02111ASYSINF			
Analyses Required: GRO, BTEX, and MTBE			

Operation & Maintenance Notes
Need 2" Hoses for H^2O Carbons
2" x 5' Female 2" CAMS Both Ends
Collect Carbon Sample from H^2O Carbons

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8015
BTEX	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B
MTBE	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B

Signature: _____ Date: 91008

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Groundwater Treatment System

ORIGINAL

Date: 9/10/06
Onsite Time: 1230
Offsite Time: 1332

Technician: CHILC
Weather Conditions: Clear
Ambient Temperature 70

System Status Upon Arrival: ☐ Operational ☒ Non-operational Restart After sample
System Status At Departure: ☒ Operational ☐ Non-operational
Transfer Pump: ☒ Operational ☐ Non-operational

Transfer Pump Hour Meter Reading: _____

Effluent Flow Totalizer Reading: 1052851

No. of Carbon Vessels: 2

Lead Carbon Vessel Pressure (psi): 22

Effluent Water Characteristics
(Quarterly by Field Instrument)
pH: _____
Temperature: _____

Well ID	Hour Meter Reading	Totalizer Reading	Total Depth	Pump Depth	
MW-2		291287			

Sampling Information

Sample ID	Date & Time	Sample ID	Date & Time
02111DPEWINF		02111MW2WINF	
02111ASWINF			
02111ASWEFF			
02111WGAC1			
02111WEFF			

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO, BTEX, & 5-Oxys	Monthly	INF& EFF	EPA Method 8260B

Notes:

Signature: _____ Date: 9/10/06

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Date: 91708
Onsite Time: 0700
Offsite Time: 0905
Equipment Manufacturer/Model#

Technician: CHILL
Weather Conditions: Clouds
Ambient Temperature: 50

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒ High H2O
System Status Upon Departure: Operational ☒ Non-Operational ☐
Electric Meter Reading: N/A
Hour Meter Reading: 2285
Totalizer Reading Prior to Air Stripper: Not Reading PID Calibration Date: 91708
Totalizer Reading After Air Stripper: 1091960

Field Measurements

Parameter	Influent (after blower, 2111DPEAINF)	Air Stripper (2111ASAEFF)	System Influent (2111ASYSINF)	Stack Air Flow (2111AEFF)	Comments
Differential Pressure, "wc		~~.70~~			
Air Velocity, FPM		2078			
Pipe Diameter, inches					
Air Flow Rate, cfm			180		
Applied Vacuum, "wc	20"Hg	.40	NA	NA	
Temperature, deg F		102	90		
PID Readings, ppmv	100	1	~~50~~	~~0~~	PID for GAC-1: ~~0~~

Other Readings/Measurements

Well ID	% Open	Applied Vac., "Hg	Total depth, feet bgs	Stinger Depth, feet bgs			
V-1	50	16					
V-2	50	16					
V-3	50	16					
MW-1	~~0~~						
MW-3	100	18					
MW-7	100	18					
MW-5	0						

Signature: [signature]
Date: 91708

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System ORIGINAL

Sampling Information (monthly)			
Sample ID	Date & Time	Sample ID	Date & Time
02111DPEAINF		02111AGAC1	
02111ASAEFF		02111AEFF	
02111ASYSINF			
Analyses Required: GRO, BTEX, and MTBE			

Operation & Maintenance Notes
Floats in oil/water separator working but will not Turn on Pump - Possible PLC Problem - Check Air Proving Switch than Floats started working switch checked ok with meter - Leave systems up

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8015
BTEX	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B
MTBE	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B

Signature: _____ Date: 9/7/08

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Groundwater Treatment System ORIGINAL

Date: 91705
Onsite Time: 0700
Offsite Time: 0805

Technician: CHW
Weather Conditions: Cloudy
Ambient Temperature 50

System Status Upon Arrival: ☐ Operational ☒ Non-operational High H2O
System Status At Departure: ☒ Operational ☐ Non-operational
Transfer Pump: ☒ Operational ☐ Non-operational

Transfer Pump Hour Meter Reading: _____

Effluent Flow Totalizer Reading: 1056514

No. of Carbon Vessels: 2

Lead Carbon Vessel Pressure (psi): 20

Effluent Water Characteristics
(Quarterly by Field Instrument)
pH: _____
Temperature: _____

Well ID	Hour Meter Reading	Totalizer Reading	Total Depth	Pump Depth	
MW-2		292267			

Sampling Information

Sample ID	Date & Time	Sample ID	Date & Time
02111DPEWINF		02111MW2WINF	
02111ASWINF			
02111ASWEFF			
02111WGAC1			
02111WEFF			

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO, BTEX, & 5-Oxys	Monthly	INF& EFF	EPA Method 8260B

Notes:

Signature: [signature] Date: 91705

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Date: 92405
Onsite Time: 0715
Offsite Time: 0800
Equipment Manufacturer/Model#

Technician: CHICC
Weather Conditions: Clear
Ambient Temperature: 60

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒ High Tank

System Status Upon Departure: Operational ☒ Non-Operational ☐

Electric Meter Reading: NM

Hour Meter Reading: 2787

Totalizer Reading Prior to Air Stripper: Install New Buttons Reset Reading will start over at 00000

PID Calibration Date: 92208

Totalizer Reading After Air Stripper: 1092750

Field Measurements

Parameter	Influent (after blower, 2111DPEAINF)	Air Stripper (2111ASAEFF)	System Influent (2111ASYSINF)	Stack Air Flow (2111AEFF)	Comments
Differential Pressure, "wc		#22			
Air Velocity, FPM		2110			
Pipe Diameter, inches		4			
Air Flow Rate, cfm			180		
Applied Vacuum, "wc	20"Hg	.36	NA	NA	
Temperature, deg F		90	80		
PID Readings, ppmv	120	0	80	0	PID for GAC-1: 0

Other Readings/Measurements

Well ID	% Open	Applied Vac., "Hg	Total depth, feet bgs	Stinger Depth, feet bgs			
V-1	50	17					
V-2	50	16					
V-3	50	17					
MW-1	0						
MW-3	100	15					
MW-7	100	17					
MW-5	0						

Signature: [signature]

Date: 92405

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Dual Phase Extraction and Air Stripper System

ORIGINAL

Sampling Information (monthly)			
Sample ID	Date & Time	Sample ID	Date & Time
02111DPEAINF		02111AGAC1	
02111ASAEFF		02111AEFF	
02111ASYSINF			
Analyses Required: GRO, BTEX, and MTBE			

Operation & Maintenance Notes
Carbon is To Be changed out in Oct. 08 That Should make system Run Better

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8015
BTEX	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B
MTBE	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B

Signature: _____ Date: 9-24-08

ARCO FACILITY NO. 2111
1156 Davis Street
San Leandro, California
Groundwater Treatment System

ORIGINAL

Date: 9.24.05
Onsite Time: 0715
Offsite Time: 0900

Technician: CHH
Weather Conditions: Clear
Ambient Temperature 60

System Status Upon Arrival: ☐ Operational ☒ Non-operational High Tanks
System Status At Departure: ☒ Operational ☐ Non-operational
Transfer Pump: ☒ Operational ☐ Non-operational

Transfer Pump Hour Meter Reading: _____

Effluent Flow Totalizer Reading: 1056950

No. of Carbon Vessels: 2

Lead Carbon Vessel Pressure (psi): 24

Effluent Water Characteristics
(Quarterly by Field Instrument)
pH: _____
Temperature: _____

Well ID	Hour Meter Reading	Totalizer Reading	Total Depth	Pump Depth	
MW-2		292463			

Sampling Information

Sample ID	Date & Time	Sample ID	Date & Time
02111DPEWINF		02111MW2WINF	
02111ASWINF			
02111ASWEFF			
02111WGAC1			
02111WEFF			

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO, BTEX, & 5-Oxys	Monthly	INF& EFF	EPA Method 8260B

Notes:

Signature: _____ Date: 92405

Atlantic Richfield Company
bp
A BP affiliated company

Chain of Custody Record

RUSH
OVERNIGHT

Project Name: ARCO Facility No. 2111
BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > Alameda
State or Lead Regulatory Agency: Alameda County Environmental Health
Requested Due Date (mm/dd/yy): 24 hours for Effluent & STD for others

On-site Time: 0830	Temp: 60
Off-site Time: 1015	Temp: 70
Sky Conditions: Clear	
Meteorological Events:	
Wind Speed:	Direction:

Lab Name: Calscience Environmental Laboratories, Inc.	
Address: 7440 Lincoln Way	
Garden Grove, CA 92841	
Lab PM: Linda Scharpenberg	
Tele/Fax: 714-895-5494/ 714-895-7501	
BP/AR PM Contact: Paul Supple	
Address: 2010 Crow Canyon Place, Suite 150	
San Ramon, CA	
Tele/Fax: 925-275-3506/925-275-3815	

BP/AR Facility No.:	2111
BP/AR Facility Address:	1156 Davis St., San Leandro
Site Lat/Long:	
California Global ID No.:	T0600101764
Enfos Project No.:	G0C28-0029
Provision or OOC (circle one)	Provision
Phase/WBS:	03-O&M
Sub Phase/Task:	03-Analytical
Cost Element:	Subcontractor Cost

Consultant/Contractor:	Stratus Environmental, Inc.
Address:	3330 Cameron Park Drive, Suite 550
	Cameron Park, CA 95682
Consultant/Contractor Project No.:	E2111-03
Consultant/Contractor PM:	Jay Johnson
Tele/Fax:	(530) 676-6000 / (530) 676-6005
Report Type & QC Level:	Level 1 with EDF
E-mail EDD To:	shayes@stratusinc.net
Invoice to:	Atlantic Richfield Co.

Lab Bottle Order No:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: GRO	Requested Analysis: BTEX	Requested Analysis: MTBE	Requested Analysis: 5-oxygenates	Turnaround Time: 24-hours	Turnaround Time: Standard	Sample Point Lat/Long and Comments
1	02111DPEAINF	0943	9/25/08			X		2	X					X	X	X			X	5-oxygenates requested are MTBE, DIPE, ETBE, TAME, and TBA.
2	02111ASAEFF	0941				X		2	X					X	X	X			X	
3	02111ASYSINF	0939				X		2	X					X	X	X			X	
4	02111AGAC1	0937				X		2	X					X	X	X			X	
5	02111AEFF	0935				X		2	X					X	X	X			X	
6	02111DPEWINF	0920			X			6				X		X	X		X		X	
7	02111ASWINF	0915			X			6				X		X	X		X		X	
8	02111ASWEFF	0906			X			6				X		X	X		X		X	
9	02111WGAC1	0903			X			6				X		X	X		X		X	
10	02111WEFF	0900			X			6				X		X	X		X		X	
11	02111MW2WINF	0925			X			6				X		X	X		X		X	
								6				X		X	X		X		X	
	TB2111 9208	0930	9/26		X			2												Hold

Sampler's Name:	Chris Hall	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company:	Stratus Environmental, Inc.	[signature] Stratus	9/25/08	1600			
Shipment Date:	9/25/08						
Shipment Method:	GSO						
Shipment Tracking No:							

Special Instructions: Please cc results to bpedf@broadbentinc.com

Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Atlantic Richfield Company
bp
A BP affiliated company

Chain of Custody Record

ORIGINAL

RUSH

Project Name: ARCO Facility No. 2111
BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > Alameda
State or Lead Regulatory Agency: Alameda County Environmental Health
Requested Due Date (mm/dd/yy): 24 hours for Effluent & STD for others

On-site Time: 1200	Temp: 85
Off-site Time: 1300	Temp: 81
Sky Conditions: Clear	
Meteorological Events:	
Wind Speed:	Direction:

Lab Name: Calscience Environmental Laboratories, Inc.	
Address: 7440 Lincoln Way	
Garden Grove, CA 92841	
Lab PM: Linda Scharpenberg	
Tele/Fax: 714-895-5494/ 714-895-7501	
BP/AR PM Contact: Paul Supple	
Address: 2010 Crow Canyon Place, Suite 150	
San Ramon, CA	
Tele/Fax: 925-275-3506/925-275-3815	

BP/AR Facility No.:	2111
BP/AR Facility Address:	1156 Davis St., San Leandro
Site Lat/Long:	
California Global ID No.:	T0600101764
Enfos Project No.:	G0C28-0029
Provision or OOC (circle one)	Provision
Phase/WBS:	03-O&M
Sub Phase/Task:	03-Analytical
Cost Element:	Subcontractor Cost

Consultant/Contractor:	Stratus Environmental, Inc.
Address:	3330 Cameron Park Drive, Suite 550
	Cameron Park, CA 95682
Consultant/Contractor Project No.:	E2111-03
Consultant/Contractor PM:	Jay Johnson
Tele/Fax:	(530) 676-6000 / (530) 676-6005
Report Type & QC Level:	Level 1 with EDF
E-mail EDD To:	shayes@stratusinc.net
Invoice to:	Atlantic Richfield Co.

Lab Bottle Order No:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: TCLP by 8260	Turnaround Time: Standard	Sample Point Lat/Long and Comments
1	Carbon sample	1245	9/10/08	x				1	x					x	x	TCLP includes analysis for vinyl chloride, 1,2-dichloroethene, chloroform, 1,2-dichloroethane, methyl ethyl ketone butanone, carbon tetrachloride, trichloroethene, benzene, tetrachloroethene, and chlorobenzene.
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																

Sampler's Name:	Chris Hill
Sampler's Company:	Stratus Environmental, Inc.
Shipment Date:	9-11-08
Shipment Method:	GSO
Shipment Tracking No:	

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
	9/11/08	1700			

Special Instructions: Please cc results to bpedf@broadbentinc.com

Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Calscience
Environmental
Laboratories, Inc.

September 17, 2008

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

Subject: **Calscience Work Order No.:** **08-09-0162**
Client Reference: **ARCO Facility No. 2111**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/3/2008 and analyzed in accordance with the attached chain-of-custody.

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

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

Sincerely,

Philip Hamelle for

Calscience Environmental
Laboratories, Inc.
Linda Scharpenberg
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 09/03/08
Work Order No: 08-09-0162
Preparation: N/A
Method: EPA TO-15
Units: mg/m3

Project: ARCO Facility No. 2111

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111DPEAINF	**08-09-0162-1-A**	**09/02/08 09:43**	**Air**	**GC/MS NN**	**N/A**	**09/04/08 03:12**	**080903L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	1.3	0.24	150		Xylenes (total)	9.4	1.3	150	
Toluene	0.77	0.28	150		Methyl-t-Butyl Ether (MTBE)	22	1.1	150	
Ethylbenzene	3.8	0.33	150						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	99	57-129		1,2-Dichloroethane-d4	95	47-137	
Toluene-d8	103	78-156					

02111ASAEFF	**08-09-0162-2-A**	**09/02/08 09:41**	**Air**	**GC/MS NN**	**N/A**	**09/03/08 23:59**	**080903L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.0043	0.0016	1		Xylenes (total)	0.015	0.0087	1	
Toluene	0.014	0.0019	1		Methyl-t-Butyl Ether (MTBE)	1.1	0.12	16	
Ethylbenzene	0.0042	0.0022	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	101	57-129		1,2-Dichloroethane-d4	92	47-137	
Toluene-d8	97	78-156					

02111ASYSINF	**08-09-0162-3-A**	**09/02/08 09:39**	**Air**	**GC/MS NN**	**N/A**	**09/04/08 04:02**	**080903L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.67	0.13	80		Xylenes (total)	4.0	0.69	80	
Toluene	0.31	0.15	80		Methyl-t-Butyl Ether (MTBE)	13	0.58	80	
Ethylbenzene	1.9	0.17	80						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	93	57-129		1,2-Dichloroethane-d4	96	47-137	
Toluene-d8	104	78-156					

02111AGAC1	**08-09-0162-4-A**	**09/02/08 09:37**	**Air**	**GC/MS NN**	**N/A**	**09/04/08 00:48**	**080903L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0016	1		Xylenes (total)	ND	0.0087	1	
Toluene	0.0077	0.0019	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Ethylbenzene	ND	0.0022	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	100	57-129		1,2-Dichloroethane-d4	94	47-137	
Toluene-d8	97	78-156					

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 09/03/08
Work Order No: 08-09-0162
Preparation: N/A
Method: EPA TO-15
Units: mg/m3

Project: ARCO Facility No. 2111

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111AEFF	**08-09-0162-5-A**	**09/02/08 09:35**	**Air**	**GC/MS NN**	**N/A**	**09/03/08 23:06**	**080903L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0016	1		Xylenes (total)	ND	0.0087	1	
Toluene	0.0065	0.0019	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Ethylbenzene	ND	0.0022	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	99	57-129			1,2-Dichloroethane-d4	95	47-137		
Toluene-d8	100	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-09-002-7,570**	**N/A**	**Air**	**GC/MS NN**	**N/A**	**09/03/08 21:21**	**080903L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0016	1		Xylenes (total)	ND	0.0087	1	
Toluene	ND	0.0019	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Ethylbenzene	ND	0.0022	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	97	57-129			1,2-Dichloroethane-d4	93	47-137		
Toluene-d8	98	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-09-002-7,571**	**N/A**	**Air**	**GC/MS NN**	**N/A**	**09/04/08 10:33**	**080904L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0016	1		Xylenes (total)	ND	0.0087	1	
Toluene	ND	0.0019	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Ethylbenzene	ND	0.0022	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	96	57-129			1,2-Dichloroethane-d4	95	47-137		
Toluene-d8	101	78-156							

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 09/03/08
Work Order No: 08-09-0162
Preparation: N/A
Method: EPA TO-3M

Project: ARCO Facility No. 2111

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111DPEAINF	**08-09-0162-1-B**	**09/02/08 09:43**	**Air**	**GC 38**	**N/A**	**09/04/08 13:55**	**080904L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	2400	50	1		mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASAEFF	**08-09-0162-2-B**	**09/02/08 09:41**	**Air**	**GC 38**	**N/A**	**09/04/08 10:00**	**080904L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASYSINF	**08-09-0162-3-B**	**09/02/08 09:39**	**Air**	**GC 38**	**N/A**	**09/04/08 11:21**	**080904L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	1300	50	1		mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111AGAC1	**08-09-0162-4-B**	**09/02/08 09:37**	**Air**	**GC 38**	**N/A**	**09/04/08 12:37**	**080904L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111AEFF	**08-09-0162-5-B**	**09/02/08 09:35**	**Air**	**GC 38**	**N/A**	**09/04/08 10:44**	**080904L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-693-74**	**N/A**	**Air**	**GC 38**	**N/A**	**09/04/08 08:41**	**080904L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		mg/m3

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	09/03/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-09-0162
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: ARCO Facility No. 2111

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111DPEWINF	**08-09-0162-6-E**	**09/02/08 09:20**	**Aqueous**	**GC 4**	**09/03/08**	**09/04/08 16:02**	**080903B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	230	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	57	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASWINF	**08-09-0162-7-E**	**09/02/08 09:15**	**Aqueous**	**GC 4**	**09/03/08**	**09/04/08 16:35**	**080903B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	77	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	52	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASWEFF	**08-09-0162-8-E**	**09/02/08 09:06**	**Aqueous**	**GC 4**	**09/03/08**	**09/04/08 17:08**	**080903B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	65	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111WGAC1	**08-09-0162-9-E**	**09/02/08 09:03**	**Aqueous**	**GC 4**	**09/03/08**	**09/04/08 17:41**	**080903B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	53	38-134			

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	09/03/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-09-0162
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8015B (M)

Project: ARCO Facility No. 2111

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111WEFF	**08-09-0162-10-E**	**09/02/08 09:00**	**Aqueous**	**GC 4**	**09/03/08**	**09/04/08 10:33**	**080903B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	53	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111MW2WINF	**08-09-0162-11-E**	**09/02/08 09:25**	**Aqueous**	**GC 4**	**09/03/08**	**09/04/08 18:14**	**080903B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	250	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	66	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-695-249**	**N/A**	**Aqueous**	**GC 4**	**09/03/08**	**09/04/08 05:37**	**080903B02**

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

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received: 09/03/08
3330 Cameron Park Drive, Suite 550	Work Order No: 08-09-0162
Cameron Park, CA 95682-8861	Preparation: EPA 5030B
	Method: EPA 8260B
	Units: ug/L
Project: ARCO Facility No. 2111	Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111DPEWINF	**08-09-0162-6-B**	**09/02/08 09:20**	**Aqueous**	**GC/MS Z**	**09/09/08**	**09/09/08 20:22**	**080909L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	10	20		Tert-Butyl Alcohol (TBA)	1600	200	20	
Ethylbenzene	12	10	20		Diisopropyl Ether (DIPE)	ND	10	20	
Toluene	ND	10	20		Ethyl-t-Butyl Ether (ETBE)	ND	10	20	
Xylenes (total)	25	10	20		Tert-Amyl-Methyl Ether (TAME)	ND	10	20	
Methyl-t-Butyl Ether (MTBE)	610	10	20						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	124	73-157			Dibromofluoromethane	117	82-142		
Toluene-d8	102	82-112			1,4-Bromofluorobenzene	95	75-105		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASWINF	**08-09-0162-7-B**	**09/02/08 09:15**	**Aqueous**	**GC/MS Z**	**09/09/08**	**09/09/08 20:55**	**080909L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	5.0	10		Tert-Butyl Alcohol (TBA)	1100	100	10	
Ethylbenzene	ND	5.0	10		Diisopropyl Ether (DIPE)	ND	5.0	10	
Toluene	ND	5.0	10		Ethyl-t-Butyl Ether (ETBE)	ND	5.0	10	
Xylenes (total)	8.6	5.0	10		Tert-Amyl-Methyl Ether (TAME)	ND	5.0	10	
Methyl-t-Butyl Ether (MTBE)	380	10	20						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	128	73-157			Dibromofluoromethane	120	82-142		
Toluene-d8	103	82-112			1,4-Bromofluorobenzene	93	75-105		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASWEFF	**08-09-0162-8-B**	**09/02/08 09:06**	**Aqueous**	**GC/MS Z**	**09/09/08**	**09/09/08 21:27**	**080909L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.0	2		Tert-Butyl Alcohol (TBA)	450	40	4	
Ethylbenzene	ND	1.0	2		Diisopropyl Ether (DIPE)	ND	1.0	2	
Toluene	ND	1.0	2		Ethyl-t-Butyl Ether (ETBE)	ND	1.0	2	
Xylenes (total)	ND	1.0	2		Tert-Amyl-Methyl Ether (TAME)	ND	1.0	2	
Methyl-t-Butyl Ether (MTBE)	16	1.0	2						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	127	73-157			Dibromofluoromethane	121	82-142		
Toluene-d8	99	82-112			1,4-Bromofluorobenzene	93	75-105		

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 09/03/08
Work Order No: 08-09-0162
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: ARCO Facility No. 2111

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111WGAC1	**08-09-0162-9-B**	**09/02/08 09:03**	**Aqueous**	**GC/MS Z**	**09/09/08**	**09/09/08 22:00**	**080909L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	131	73-157		Dibromofluoromethane	121	82-142	
Toluene-d8	103	82-112		1,4-Bromofluorobenzene	92	75-105	

02111WEFF	**08-09-0162-10-A**	**09/02/08 09:00**	**Aqueous**	**GC/MS BB**	**09/03/08**	**09/03/08 17:12**	**080903L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	86	73-157		Dibromofluoromethane	102	82-142	
Toluene-d8	102	82-112		1,4-Bromofluorobenzene	91	75-105	

02111MW2WINF	**08-09-0162-11-B**	**09/02/08 09:25**	**Aqueous**	**GC/MS Z**	**09/09/08**	**09/09/08 22:32**	**080909L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	14	10	20		Tert-Butyl Alcohol (TBA)	950	200	20	
Ethylbenzene	ND	10	20		Diisopropyl Ether (DIPE)	ND	10	20	
Toluene	ND	10	20		Ethyl-t-Butyl Ether (ETBE)	ND	10	20	
Xylenes (total)	ND	10	20		Tert-Amyl-Methyl Ether (TAME)	ND	10	20	
Methyl-t-Butyl Ether (MTBE)	250	10	20						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	128	73-157		Dibromofluoromethane	122	82-142	
Toluene-d8	103	82-112		1,4-Bromofluorobenzene	91	75-105	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 09/03/08
Work Order No: 08-09-0162
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: ARCO Facility No. 2111

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-423**	**N/A**	**Aqueous**	**GC/MS BB**	**09/03/08**	**09/03/08 13:48**	**080903L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	90	73-157		Dibromofluoromethane	104	82-142	
Toluene-d8	103	82-112		1,4-Bromofluorobenzene	93	75-105	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-435**	**N/A**	**Aqueous**	**GC/MS Z**	**09/09/08**	**09/09/08 15:59**	**080909L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	121	73-157		Dibromofluoromethane	116	82-142	
Toluene-d8	102	82-112		1,4-Bromofluorobenzene	92	75-105	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-441**	**N/A**	**Aqueous**	**GC/MS Z**	**09/10/08**	**09/10/08 14:31**	**080910L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Toluene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	121	73-157		Dibromofluoromethane	119	82-142	
Toluene-d8	102	82-112		1,4-Bromofluorobenzene	93	75-105	

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

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

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

Date Received: 09/03/08
Work Order No: 08-09-0162
Preparation: N/A
Method: EPA TO-3M

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
02111ASYSINF	**Air**	**GC 38**	**N/A**	**09/04/08**	**080904D01**

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	1300	1300	2	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 09/03/08
Work Order No: 08-09-0162
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-0161-3	**Aqueous**	**GC 4**	**09/03/08**	**09/04/08**	**080903S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	90	87	38-134	3	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 09/03/08
Work Order No: 08-09-0162
Preparation: EPA 5030B
Method: EPA 8260B

Project ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-08-2238-2	**Aqueous**	**GC/MS BB**	**09/03/08**	**09/03/08**	**080903S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	101	99	86-122	2	0-8	
Carbon Tetrachloride	93	93	78-138	0	0-9	
Chlorobenzene	101	98	90-120	3	0-9	
1,2-Dibromoethane	91	90	70-130	2	0-30	
1,2-Dichlorobenzene	98	96	89-119	2	0-10	
1,1-Dichloroethene	91	86	52-142	6	0-23	
Ethylbenzene	94	91	70-130	3	0-30	
Toluene	106	104	85-127	2	0-12	
Trichloroethene	98	96	78-126	2	0-10	
Vinyl Chloride	106	108	56-140	2	0-21	
Methyl-t-Butyl Ether (MTBE)	88	96	64-136	5	0-28	
Tert-Butyl Alcohol (TBA)	100	98	27-183	1	0-60	
Diisopropyl Ether (DIPE)	96	95	78-126	1	0-16	
Ethyl-t-Butyl Ether (ETBE)	91	89	67-133	1	0-21	
Tert-Amyl-Methyl Ether (TAME)	91	88	63-141	3	0-21	
Ethanol	94	101	11-167	7	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	09/03/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-09-0162
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-0238-6	**Aqueous**	**GC/MS Z**	**09/09/08**	**09/09/08**	**080909S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	102	97	86-122	5	0-8	
Carbon Tetrachloride	103	98	78-138	6	0-9	
Chlorobenzene	99	94	90-120	5	0-9	
1,2-Dibromoethane	107	106	70-130	1	0-30	
1,2-Dichlorobenzene	100	98	89-119	2	0-10	
1,1-Dichloroethene	101	95	52-142	6	0-23	
Ethylbenzene	100	95	70-130	5	0-30	
Toluene	101	95	85-127	6	0-12	
Trichloroethene	96	92	78-126	5	0-10	
Vinyl Chloride	94	90	56-140	4	0-21	
Methyl-t-Butyl Ether (MTBE)	114	114	64-136	0	0-28	
Tert-Butyl Alcohol (TBA)	100	95	27-183	5	0-60	
Diisopropyl Ether (DIPE)	94	97	78-126	3	0-16	
Ethyl-t-Butyl Ether (ETBE)	98	100	67-133	1	0-21	
Tert-Amyl-Methyl Ether (TAME)	109	105	63-141	3	0-21	
Ethanol	86	95	11-167	11	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 09/03/08
Work Order No: 08-09-0162
Preparation: EPA 5030B
Method: EPA 8260B

Project ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-0403-1	**Aqueous**	**GC/MS Z**	**09/10/08**	**09/10/08**	**080910S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	100	103	86-122	4	0-8	
Carbon Tetrachloride	100	107	78-138	7	0-9	
Chlorobenzene	97	101	90-120	3	0-9	
1,2-Dibromoethane	105	108	70-130	2	0-30	
1,2-Dichlorobenzene	97	101	89-119	4	0-10	
1,1-Dichloroethene	99	102	52-142	3	0-23	
Ethylbenzene	95	102	70-130	6	0-30	
Toluene	98	102	85-127	4	0-12	
Trichloroethene	93	98	78-126	5	0-10	
Vinyl Chloride	94	99	56-140	6	0-21	
Methyl-t-Butyl Ether (MTBE)	118	112	64-136	5	0-28	
Tert-Butyl Alcohol (TBA)	98	102	27-183	5	0-60	
Diisopropyl Ether (DIPE)	98	100	78-126	3	0-16	
Ethyl-t-Butyl Ether (ETBE)	103	101	67-133	2	0-21	
Tert-Amyl-Methyl Ether (TAME)	106	103	63-141	3	0-21	
Ethanol	91	118	11-167	25	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.		Date Received:	N/A
3330 Cameron Park Drive, Suite 550		Work Order No:	08-09-0162
Cameron Park, CA 95682-8861		Preparation:	N/A
		Method:	EPA TO-15

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-09-002-7,570	Air	GC/MS NN	N/A	09/03/08	080903L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	118	117	60-156	1	0-40	
Toluene	118	118	56-146	0	0-43	
Ethylbenzene	127	123	52-154	3	0-38	
p/m-Xylene	128	123	42-156	4	0-41	
o-Xylene	128	120	52-148	7	0-38	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.		Date Received:	N/A
3330 Cameron Park Drive, Suite 550		Work Order No:	08-09-0162
Cameron Park, CA 95682-8861		Preparation:	N/A
		Method:	EPA TO-15

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-09-002-7,571	**Air**	**GC/MS NN**	**N/A**	**09/04/08**	**080904L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	124	118	60-156	4	0-40	
Toluene	129	122	56-146	5	0-43	
Ethylbenzene	137	126	52-154	8	0-38	
p/m-Xylene	138	128	42-156	7	0-41	
o-Xylene	138	128	52-148	8	0-38	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.	Date Received: N/A
3330 Cameron Park Drive, Suite 550	Work Order No: 08-09-0162
Cameron Park, CA 95682-8861	Preparation: EPA 5030B
	Method: EPA 8015B (M)

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-249	**Aqueous**	**GC 4**	**09/03/08**	**09/04/08**	**080903B02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	95	94	78-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.	Date Received: N/A
3330 Cameron Park Drive, Suite 550	Work Order No: 08-09-0162
Cameron Park, CA 95682-8861	Preparation: EPA 5030B
	Method: EPA 8260B

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-423	Aqueous	GC/MS BB	09/03/08	09/03/08	080903L01

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	102	103	87-117	82-122	1	0-7	
Carbon Tetrachloride	93	95	78-132	69-141	2	0-8	
Chlorobenzene	97	100	88-118	83-123	3	0-8	
1,2-Dibromoethane	91	96	80-120	73-127	6	0-20	
1,2-Dichlorobenzene	100	99	88-118	83-123	1	0-8	
1,1-Dichloroethene	94	90	71-131	61-141	4	0-14	
Ethylbenzene	92	94	80-120	73-127	2	0-20	
Toluene	104	106	85-127	78-134	2	0-7	
Trichloroethene	97	101	85-121	79-127	3	0-11	
Vinyl Chloride	107	110	64-136	52-148	3	0-10	
Methyl-t-Butyl Ether (MTBE)	85	91	67-133	56-144	6	0-16	
Tert-Butyl Alcohol (TBA)	99	98	34-154	14-174	1	0-19	
Diisopropyl Ether (DIPE)	96	98	80-122	73-129	2	0-8	
Ethyl-t-Butyl Ether (ETBE)	87	91	73-127	64-136	4	0-11	
Tert-Amyl-Methyl Ether (TAME)	87	92	69-135	58-146	5	0-12	
Ethanol	86	100	34-124	19-139	15	0-44	

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

Stratus Environmental, inc.	Date Received: N/A
3330 Cameron Park Drive, Suite 550	Work Order No: 08-09-0162
Cameron Park, CA 95682-8861	Preparation: EPA 5030B
	Method: EPA 8260B

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-435	**Aqueous**	**GC/MS Z**	**09/08/08**	**09/09/08**	**080909L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	101	103	87-117	82-122	2	0-7	
Carbon Tetrachloride	104	105	78-132	69-141	1	0-8	
Chlorobenzene	100	101	88-118	83-123	2	0-8	
1,2-Dibromoethane	110	111	80-120	73-127	1	0-20	
1,2-Dichlorobenzene	99	101	88-118	83-123	2	0-8	
1,1-Dichloroethene	102	103	71-131	61-141	1	0-14	
Ethylbenzene	100	100	80-120	73-127	0	0-20	
Toluene	100	102	85-127	78-134	2	0-7	
Trichloroethene	99	102	85-121	79-127	3	0-11	
Vinyl Chloride	92	95	64-136	52-148	3	0-10	
Methyl-t-Butyl Ether (MTBE)	113	120	67-133	56-144	6	0-16	
Tert-Butyl Alcohol (TBA)	95	98	34-154	14-174	4	0-19	
Diisopropyl Ether (DIPE)	97	101	80-122	73-129	3	0-8	
Ethyl-t-Butyl Ether (ETBE)	103	107	73-127	64-136	4	0-11	
Tert-Amyl-Methyl Ether (TAME)	104	109	69-135	58-146	4	0-12	
Ethanol	97	86	34-124	19-139	12	0-44	

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

Stratus Environmental, inc.	Date Received: N/A
3330 Cameron Park Drive, Suite 550	Work Order No: 08-09-0162
Cameron Park, CA 95682-8861	Preparation: EPA 5030B
	Method: EPA 8260B

Project: ARCO Facility No. 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-441	**Aqueous**	**GC/MS Z**	**09/10/08**	**09/10/08**	**080910L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	103	103	87-117	82-122	1	0-7	
Carbon Tetrachloride	109	111	78-132	69-141	2	0-8	
Chlorobenzene	100	100	88-118	83-123	0	0-8	
1,2-Dibromoethane	105	108	80-120	73-127	3	0-20	
1,2-Dichlorobenzene	99	102	88-118	83-123	4	0-8	
1,1-Dichloroethene	103	103	71-131	61-141	0	0-14	
Ethylbenzene	103	101	80-120	73-127	2	0-20	
Toluene	100	102	85-127	78-134	2	0-7	
Trichloroethene	101	102	85-121	79-127	1	0-11	
Vinyl Chloride	94	95	64-136	52-148	0	0-10	
Methyl-t-Butyl Ether (MTBE)	106	114	67-133	56-144	8	0-16	
Tert-Butyl Alcohol (TBA)	101	104	34-154	14-174	3	0-19	
Diisopropyl Ether (DIPE)	101	100	80-122	73-129	1	0-8	
Ethyl-t-Butyl Ether (ETBE)	98	104	73-127	64-136	5	0-11	
Tert-Amyl-Methyl Ether (TAME)	99	106	69-135	58-146	6	0-12	
Ethanol	108	88	34-124	19-139	20	0-44	

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.

Glossary of Terms and Qualifiers

Work Order Number: 08-09-0162

Qualifier	Definition
AX	Sample too dilute to quantify surrogate.
BA	
BA,AY	Relative percent difference out of control, 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.
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.
ET	Sample was extracted past end of recommended max. holding time.
EY	Result exceeds normal dynamic range; reported as a min est.
GS	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	Surrogate recovery below the acceptance limit.
LH	Surrogate recovery above the acceptance limit.
LM,AY	MS and/or MSD above acceptance limits. See Blank Spike (LCS). Matrix interfence suspected.
LN,AY	MS and/or MSD below acceptance limits. See Blank Spike (LCS). Matrix interfence suspected.
LQ	LCS recovery above method control limits.
LR	LCS recovery below method control limits.
MB	Analyte present in the method blank.

Work Order Number: 08-09-0162

Qualifier	Definition
MG	Analyte is a suspected lab contaminate.
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.

Atlantic Richfield Company
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Chain of Custody Record

0162

RUSH ORIGINAL

Project Name: ARCO Facility No. 2111
BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > Alameda
State or Lead Regulatory Agency: Alameda County Environmental Health
Requested Due Date (mm/dd/yy): 24 hours for Effluent & STD for others

On-site Time: 0830	Temp: 60
Off-site Time: 1015	Temp: 70
Sky Conditions: Clear	
Meteorological Events:	
Wind Speed:	Direction:

Lab Name: Calscience Environmental Laboratories, Inc.	
Address: 7440 Lincoln Way	
Garden Grove, CA 92841	
Lab PM: Linda Scharpenberg	
Tele/Fax: 714-895-5494/ 714-895-7501	
BP/AR PM Contact: Paul Supple	
Address: 2010 Crow Canyon Place, Suite 150	
San Ramon, CA	
Tele/Fax: 925-275-3506/925-275-3815	

BP/AR Facility No.:	2111
BP/AR Facility Address:	1156 Davis St., San Leandro
Site Lat/Long:	
California Global ID No.:	T0600101764
Enfos Project No.:	G0C28-0029
Provision or OOC (circle one)	Provision
Phase/WBS:	03-O&M
Sub Phase/Task:	03-Analytical
Cost Element:	Subcontractor Cost

Consultant/Contractor:	Stratus Environmental, Inc.
Address:	3330 Cameron Park Drive, Suite 550
	Cameron Park, CA 95682
Consultant/Contractor Project No.:	E2111-03
Consultant/Contractor PM:	Jay Johnson
Tele/Fax:	(530) 676-6000 / (530) 676-6005
Report Type & QC Level:	Level 1 with EDF
E-mail EDD To:	shayes@stratusinc.net
Invoice to:	Atlantic Richfield Co.

Lab Bottle Order No:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: GRO	Requested Analysis: BTEX	Requested Analysis: MTBE	Requested Analysis: 5-oxygenates	Turnaround Time: 24-hours	Turnaround Time: Standard	Sample Point Lat/Long and Comments
1	02111DPEAINF	0943	9/25/08			x		2	x					x	x	x			x	5-oxygenates requested are MTBE, DIPE, ETBE, TAME, and TBA.
2	02111ASAEFF	0941				x		2	x					x	x	x			x	
3	02111ASYSINF	0939				x		2	x					x	x	x			x	
4	02111AGAC1	0937				x		2	x					x	x	x			x	
5	02111AEFF	0935				x		2	x					x	x	x			x	
6	02111DPEWINF	0920			x			6				x		x	x		x	x		
7	02111ASWINF	0915			x			6				x		x	x		x		x	
8	02111ASWEFF	0906			x			6				x		x	x		x		x	
9	02111WGAC1	0903			x			6				x		x	x		x		x	
10	02111WEFF	0900			x			6				x		x	x		x		x	
11	02111MW2WINF	0925			x			6				x		x	x		x	x		
														x	x		x		x	
12	TB2111 9208	0930	9/25/08		X			2												Hold

Sampler's Name: Chris Hill	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Stratus Environmental, Inc.		9/25/08	1600			
Shipment Date: 9/25/08						
Shipment Method: GSO						
Shipment Tracking No: 925591810					9/30/08	1030

Special Instructions: Please cc results to bpedf@broadbentinc.com

Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP COC Rev. 5 10/11/2006

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 09 - 0162

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Stratus DATE: 9/3/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

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

___.___ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

2.9 °C Temperature blank.
___.___ °C IR thermometer.
✓ Ambient temperature (For Air & Filter only).

Initial: [illegible]

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: [illegible]

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace	✓		
Tedlar bag(s) free of condensation	✓		

Initial: [illegible]

COMMENTS:

APPENDIX D

STRATUS REMEDIATION SYSTEM MONTHLY DISCHARGE REPORTS
(INCLUDES BRIEF STATEMENTS SUMMARIZING OPERATIONS AND SEWER DISCHARGE SUMMARY TABLES)

STRATUS
ENVIRONMENTAL, INC.

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

TRANSMITTAL

Date July 31, 2008

Project E2111-03

To:

Ms. Tiffany Treece

City of San Leandro

Civic Center, 835 E. 14th Street

San Leandro, CA 94577

Re: Permit # SD-036, ARCO Service Station No. 2111, 1156 Davis Street, San Leandro

Item	Description
1	Monthly Discharge Report for July 2008
2	Table 1– Sewer Discharge Summary Report

Comments:

Dear Ms. Treece:

Please find attached for your review the *Monthly Discharge Report* for July 2008, for the remediation system at ARCO Service Station No. 2111, located at 1156 Davis Street, San Leandro, California. A total of approximately 11,876 gallons of treated groundwater were discharged to the sanitary sewer between June 23, 2008 and July 29, 2008.

If you have any questions or need any additional information, please call either Kiran Nagaraju at (530) 676 6007 or myself at (530) 676-6000.

Sincerely,

Jay R. Johnson, P.G.
Project Manager

cc: Mr. Rob Miller, Broadbent & Associates, Inc.

MONTHLY DISCHARGE REPORT
ARCO SERVICE STATION #2111, 1156 DAVIS STREET

This form and enclosed documents serve as the remediation activities monthly discharge report to the City of San Leandro for the reporting period of: June 23, 2008 to July 29, 2008. This report is submitted in compliance with 40 CFR 403.12 and Part III (A) of Special Discharge Permit **SD-036.** The information contained in this report is accurate and complete. For any questions or comments regarding this report, contact Kiran Nagaraju at (530) 676 6007.

Number of days discharged: 36

Total monthly discharge: 11,876 U. S. Gallons

Signature of Certifying Official: _____

Printed Name of Official: Jay R. Johnson, P.G.

Title: Project Manager

Date: July 31, 2008

Include a brief statement summarizing the month's operations:

The operation of the dual phase extraction (DPE) system, air stripper (AS), and the groundwater extraction and treatment system (GETS) was initiated on January 29, 2007. Soil vapors and groundwater were concurrently extracted from wells V-1, V-2, V-3, MW-1, MW-3, MW-7, and MW-8 using the liquid ring pump of the DPE system. In addition, groundwater was also extracted from well MW-2 using the electrical submersible pump. The groundwater extracted by both the DPE and the submersible pump is treated using the air stripper and two 2,000-pound carbon vessels in series prior to discharge to the sewer. The remediation systems were found non-functioning on July 1, 2008, due to a high-water level alarm in the air stripper tank. The remediation systems were re-started momentarily on July 1, 2008 and shutdown after sampling, pending receipt of analytical results and compliance verification. GRO (32 ppmv) and MTBE (3.4 ppmv) were reported in the mid-fluent air sample collected on July 1, 2008. Hence, a carbon sample (vapor phase) was collected on June 7, 2008, for profiling and disposal purposes. Stratus oversaw EnviroSupply & Service Inc. conduct the carbon change-out on July 23, 2008, and the remediation systems were re-started on the same day. The remediation systems were found non-functioning during the site visit conducted on July 29, 2008, due to a high-water level alarm in the air stripper tank and were re-started on the same day after re-setting the air-stripper level alarm.

Submit reports to: City of San Leandro – Environmental Services Division
835 East 14th Street, San Leandro CA 94577

TABLE 1
SEWER DISCHARGE SUMMARY REPORT
ARCO Service Station No. 2111
1156 Davis Street
San Leandro, California

Report Month (month/year)	Date	Effluent Totalizer Reading (gallons)	Monthy Discharge (gallons)
January-07	1/29/07 8:00 1/29/07 8:00 1/29/07[1] 12:00 01/30/07 01/31/07	System Start-up 3,000 5,000 6,200 8,560	5,560
February-07	2/1/07 5:15 2/2/07 5:00 2/5/07 5:00 2/20/07 6:30	16,860 25,480 33,400 122,790	114,230
March-07	3/5/07[2] 5:00 3/8/07[3] 4:50 3/14/07[4] 7:00 3/29/07[5] 10:00	130,565 132,951 NM 133,262	10,472
April-07	4/2/07[6] 5:30 4/10/07[7] 5:00 4/23/07[8] 7:00 4/26/07 6:00	170,596 NM 172,210 200,143	66,881
May-07	5/1/2007[9] 4:50 5/15/2007[10] 5:00 5/29/07 8:30	220,892 225,297 410,246	210,103
June-07	6/4/2007[11] 5:00 6/12/2007[12] 5:00 6/26/2007[13] 4:30	429,450 430,092 430,222	19,976

TABLE 1
SEWER DISCHARGE SUMMARY REPORT
ARCO Service Station No. 2111
1156 Davis Street
San Leandro, California

Report Month (month/year)	Date	Effluent Totalizer Reading (gallons)	Monthy Discharge (gallons)
July-07	7/2/07 5:30 7/10/2007 [14] 5:45 7/17/2007 [15] 5:00	480,377 523,553 546,094	115,872
August-07	8/1/2007 [15] 5:00 8/7/07 5:00 8/20/2007 [15] 5:00	580,301 580,662 582,706	36,612
September-07	9/5/2007 [16] 5:00 9/11/2007 [17] 9:00 9/17/2007 [18] 5:30	589,944 589,950 591,443	8,737
October-07	10/1/07 [19] 5:00 10/11/07 [20] 8:15 10/23/07 [17] 5:00 10/30/07 [15] 7:10	592,403 NM NM 593,647	2,204
November-07	11/6/07 [11] 4:30 11/14/07 [17] 6:00 11/20/07 [15] 6:50	612,552 612,552 613,537	19,890
December-07	12/5/07 [11] 5:00 12/17/07 [17] 4:30	633,121 633,123	19,586
January-08	1/7/08 [11] 5:00 1/15/08 [17] 7:00	635,200 636,041	2,918
February-08	2/5/08 [21] 8:15 2/26/08 [22] 6:00	642,841 643,443	7,402

TABLE 1
SEWER DISCHARGE SUMMARY REPORT
ARCO Service Station No. 2111
1156 Davis Street
San Leandro, California

Report Month (month/year)	Date	Effluent Totalizer Reading (gallons)	Monthy Discharge (gallons)
March-08	3/5/08 [11] 4:00 3/17/08 [23] 4:30	646,123 646,221	2,778
April-08	4/1/08 [24] 5:00 4/14/08 [25] 5:00 4/22/08 5:00	719,174 719,881 757,683	111,462
May-08	5/6/08 [26] 5:15 5/12/08 4:45 5/20/08 7:00 5/27/08 6:15	806,356 822,743 844,640 914,563	156,880
June-08	6/2/08 [15] 5:00 6/9/08 [15] 7:15 6/16/08 [15] 7:16 6/23/08 [15] 7:24	949,693 984,702 1,001,527 1,017,867	103,304
July-08	7/1/08 [27] 7:27 7/7/08 [28] 6:54 7/23/08 [29] 7:30 7/29/08 [15] 4:30	1,028,841 1,029,035 1,029,035 1,029,743	11,876

TABLE 1
SEWER DISCHARGE SUMMARY REPORT
ARCO Service Station No. 2111
1156 Davis Street
San Leandro, California

Report Month (month/year)	Date	Effluent Totalizer Reading (gallons)	Monthy Discharge (gallons)

Notes:
NM = Not measured

[1] Submersible pump at well MW-2 was shutdown. This pump will be re-started after troubleshooting the level floats/controller malfunction.

[2] System observed non-functioning upon arrival. Re-started by re-setting power supply.

[3] System shutdown to verify effluent air results.

[4] System shutdown due to float malfunction.

[5] System re-started after replacing the floats.

[6] System shutdown due to high-level in oil-water separator. System restarted after replacing a capacitor on the transfer pump.

[7] System shutdown due to transfer pump malfunction. System could not be restarted pending replacement of transfer pump.

[8] System restarted after replacing transfer pump.

[9] System observed non-functioning upon arrival due to DPE liquid ring pump malfunction. System re-started, but shutdown after sampling pending receipt and verification of analytical results.

[10] System re-started upon compliance verification and after conducting maintenance on the liquid ring pump.

[11] System observed non-functioning upon arrival due to high water level alarm on air stripper. System re-started, but shutdown after sampling pending receipt and verification of analytical results.

[12] System re-started momentarily upon compliance verification and to collect carbon sample for profiling and change-out.

[13] System re-started upon receipt of analytical results for carbon profile.

[14] System observed non-functioning upon arrival due to high-level in oil-water separator. System re-started after replacing particulate filters on the system.

[15] System observed non-functioning upon arrival due to high water level alarm on air stripper. System re-started after re-setting air stripper.

[16] System observed non-functioning upon arrival due to high-level in oil-water separator. System re-started, but shutdown after sampling pending receipt and verification of analytical results.

[17] System re-started upon receipt of analytical results and compliance verification.

[18] System observed non-functioning upon arrival due to high-level in oil-water separator. System re-started momentarily after conducting maintenance, but shutdown pending further troubleshooting.

TABLE 1
SEWER DISCHARGE SUMMARY REPORT
ARCO Service Station No. 2111
1156 Davis Street
San Leandro, California

Report Month (month/year)	Date	Effluent Totalizer Reading (gallons)	Monthy Discharge (gallons)

[19] System re-started, but shutdown after sampling pending receipt and verification of analytical results.

[20] System re-started briefly but shutdown to verify effluent air results.

[21] System observed non-functioning upon arrival due to high water level alarm on air stripper and transfer pump malfunction. System re-started, but shutdown after sampling pending receipt and verification of analytical results and replacement of transfer pump.

[22] System re-started upon receipt of analytical results and compliance verification and replacement of transfer pump.

[23] System re-started upon receipt of analytical results and compliance verification, but DPE system was shutdown due to float malfunction.

[24] System observed non-functioning upon arrival due to power failure. System re-started, but shutdown after sampling pending receipt and verification of analytical results. Floats were replaced on DPE system.

[25] System re-started upon receipt of analytical results and compliance verification, but DPE system was shutdown due to transfer pump contactor malfunction. Currently only GETS operational.

[26] DPE system re-started after replacing transfer pump contactor.

[27] System observed non-functioning upon arrival due to high water level alarm on air stripper. System re-started, but shutdown after sampling pending receipt and verification of analytical results.

[28] System remained shutdown. Collected carbon sample (vapor phase) for profiling and change-out.

[29] System re-started after completion of carbon change-out.

STRATUS
ENVIRONMENTAL, INC.

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

TRANSMITTAL

Date September 5, 2008

Project E2111-03

To:

Ms. Tiffany Treece

City of San Leandro

Civic Center, 835 E. 14th Street

San Leandro, CA 94577

Re: Permit # SD-036, ARCO Service Station No. 2111, 1156 Davis Street, San Leandro

Item	Description
1	Monthly Discharge Report for August 2008
2	Table 1– Sewer Discharge Summary Report

Comments:

Dear Ms. Treece:

Please find attached for your review the *Monthly Discharge Report* for August 2008, for the remediation system at ARCO Service Station No. 2111, located at 1156 Davis Street, San Leandro, California. A total of approximately 20,616 gallons of treated groundwater were discharged to the sanitary sewer between July 29, 2008 and August 27, 2008.

If you have any questions or need any additional information, please call either Kiran Nagaraju at (530) 676 6007 or myself at (530) 676-6000.

Sincerely,

Jay R. Johnson, P.G.
Project Manager

cc: Mr. Rob Miller, Broadbent & Associates, Inc.

MONTHLY DISCHARGE REPORT
ARCO SERVICE STATION #2111, 1156 DAVIS STREET

This form and enclosed documents serve as the remediation activities monthly discharge report to the City of San Leandro for the reporting period of: July 29, 2008 to August 27, 2008. This report is submitted in compliance with 40 CFR 403.12 and Part III (A) of Special Discharge Permit **SD-036**. The information contained in this report is accurate and complete. For any questions or comments regarding this report, contact Kiran Nagaraju at (530) 676 6007.

Number of days discharged: 29

Total monthly discharge: 20,616 U. S. Gallons

Signature of Certifying Official: _____

Printed Name of Official: Jay R. Johnson, P.G.

Title: Project Manager

Date: September 5, 2008

Include a brief statement summarizing the month's operations:

The operation of the dual phase extraction (DPE) system, air stripper (AS), and the groundwater extraction and treatment system (GETS) was initiated on January 29, 2007. Soil vapors and groundwater were concurrently extracted from wells V-1, V-2, V-3, MW-1, MW-3, MW-7, and MW-8 using the liquid ring pump of the DPE system. In addition, groundwater was also extracted from well MW-2 using the electrical submersible pump. The groundwater extracted by both the DPE and the submersible pump is treated using the air stripper and two 2,000-pound carbon vessels in series prior to discharge to the sewer. The remediation systems were found non-functioning on August 5, 12, and 27, 2008, due to a high-water level alarm either in the air stripper tank or in the oil-water separator and were re-started on the same respective days after re-setting the high level alarms.

Submit reports to: City of San Leandro – Environmental Services Division
835 East 14th Street, San Leandro CA 94577

TABLE 1
SEWER DISCHARGE SUMMARY REPORT
ARCO Service Station No. 2111
1156 Davis Street
San Leandro, California

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1156 Davis Street
San Leandro, California

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January-08	1/7/08 [11] 5:00 1/15/08 [17] 7:00	635,200 636,041	2,918
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TABLE 1
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July-08	7/1/08 [27] 7:27 7/7/08 [28] 6:54 7/23/08 [29] 7:30 7/29/08 [15] 4:30	1,028,841 1,029,035 1,029,035 1,029,743	11,876
August-08	8/5/08 [30] 4:30 8/12/08 [30] 5:00 8/27/08 [30] 9:15	1,037,580 1,040,731 1,050,359	20,616

TABLE 1
SEWER DISCHARGE SUMMARY REPORT
ARCO Service Station No. 2111
1156 Davis Street
San Leandro, California

Report Month (month/year)	Date	Effluent Totalizer Reading (gallons)	Monthy Discharge (gallons)

Notes:
NM = Not measured

[1] Submersible pump at well MW-2 was shutdown. This pump will be re-started after troubleshooting the level floats/controller malfunction.

[2] System observed non-functioning upon arrival. Re-started by re-setting power supply.

[3] System shutdown to verify effluent air results.

[4] System shutdown due to float malfunction.

[5] System re-started after replacing the floats.

[6] System shutdown due to high-level in oil-water separator. System restarted after replacing a capacitor on the transfer pump.

[7] System shutdown due to transfer pump malfunction. System could not be restarted pending replacement of transfer pump.

[8] System restarted after replacing transfer pump.

[9] System observed non-functioning upon arrival due to DPE liquid ring pump malfunction. System re-started, but shutdown after sampling pending receipt and verification of analytical results.

[10] System re-started upon compliance verification and after conducting maintenance on the liquid ring pump.

[11] System observed non-functioning upon arrival due to high water level alarm on air stripper. System re-started, but shutdown after sampling pending receipt and verification of analytical results.

[12] System re-started momentarily upon compliance verification and to collect carbon sample for profiling and change-out.

[13] System re-started upon receipt of analytical results for carbon profile.

[14] System observed non-functioning upon arrival due to high-level in oil-water separator. System re-started after replacing particulate filters on the system.

[15] System observed non-functioning upon arrival due to high water level alarm on air stripper. System re-started after re-setting air stripper.

[16] System observed non-functioning upon arrival due to high-level in oil-water separator. System re-started, but shutdown after sampling pending receipt and verification of analytical results.

[17] System re-started upon receipt of analytical results and compliance verification.

[18] System observed non-functioning upon arrival due to high-level in oil-water separator. System re-started momentarily after conducting maintenance, but shutdown pending further troubleshooting.

TABLE 1
SEWER DISCHARGE SUMMARY REPORT
ARCO Service Station No. 2111
1156 Davis Street
San Leandro, California

Report Month (month/year)	Date	Effluent Totalizer Reading (gallons)	Monthy Discharge (gallons)

[19] System re-started, but shutdown after sampling pending receipt and verification of analytical results.

[20] System re-started briefly but shutdown to verify effluent air results.

[21] System observed non-functioning upon arrival due to high water level alarm on air stripper and transfer pump malfunction. System re-started, but shutdown after sampling pending receipt and verification of analytical results and replacement of transfer pump.

[22] System re-started upon receipt of analytical results and compliance verification and replacement of transfer pump.

[23] System re-started upon receipt of analytical results and compliance verification, but DPE system was shutdown due to float malfunction.

[24] System observed non-functioning upon arrival due to power failure. System re-started, but shutdown after sampling pending receipt and verification of analytical results. Floats were replaced on DPE system.

[25] System re-started upon receipt of analytical results and compliance verification, but DPE system was shutdown due to transfer pump contactor malfunction. Currently only GETS operational.

[26] DPE system re-started after replacing transfer pump contactor.

[27] System observed non-functioning upon arrival due to high water level alarm on air stripper. System re-started, but shutdown after sampling pending receipt and verification of analytical results.

[28] System remained shutdown. Collected carbon sample (vapor phase) for profiling and change-out.

[29] System re-started after completion of carbon change-out.

[30] System observed non-functioning upon arrival due to high water level alarm on air stripper or oil-water separator. System re-started after re-setting alarm.

STRATUS
ENVIRONMENTAL, INC.

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

TRANSMITTAL

Date October 2, 2008

Project E2111-03

To:
Ms. Tiffany Treece
City of San Leandro
Civic Center, 835 E. 14th Street
San Leandro, CA 94577

Re: Permit # SD-036, ARCO Service Station No. 2111, 1156 Davis Street, San Leandro

Item	Description
1	Monthly Discharge Report for September 2008
2	Table 1– Sewer Discharge Summary Report

Comments:

Dear Ms. Treece:

Please find attached for your review the *Monthly Discharge Report* for September 2008, for the remediation system at ARCO Service Station No. 2111, located at 1156 Davis Street, San Leandro, California. A total of approximately 6,591 gallons of treated groundwater were discharged to the sanitary sewer between August 27, 2008 and September 24, 2008.

If you have any questions or need any additional information, please call either Kiran Nagaraju at (530) 676 6007 or myself at (530) 676-6000.

Sincerely,

Jay R. Johnson, P.G.
Project Manager

cc: Mr. Rob Miller, Broadbent & Associates, Inc.

MONTHLY DISCHARGE REPORT
ARCO SERVICE STATION #2111, 1156 DAVIS STREET

This form and enclosed documents serve as the remediation activities monthly discharge report to the City of San Leandro for the reporting period of: August 27, 2008 to September 24, 2008. This report is submitted in compliance with 40 CFR 403.12 and Part III (A) of Special Discharge Permit **SD-036**. The information contained in this report is accurate and complete. For any questions or comments regarding this report, contact Kiran Nagaraju at (530) 676 6007.

Number of days discharged: 28

Total monthly discharge: 6,591 U. S. Gallons

Signature of Certifying Official: _____

Printed Name of Official: Jay R. Johnson, P.G.

Title: Project Manager

Date: October 2, 2008

Include a brief statement summarizing the month's operations:

The operation of the dual phase extraction (DPE) system, air stripper (AS), and the groundwater extraction and treatment system (GETS) was initiated on January 29, 2007. Soil vapors and groundwater were concurrently extracted from wells V-1, V-2, V-3, MW-1, MW-3, MW-7, and MW-8 using the liquid ring pump of the DPE system. In addition, groundwater was also extracted from well MW-2 using the electrical submersible pump. The groundwater extracted by both the DPE and the submersible pump is treated using the air stripper and two 2,000-pound carbon vessels in series prior to discharge to the sewer. The remediation systems were found non-functioning on September 2, due to a high-water level alarm either in the air stripper tank or in the oil-water separator. The remediation systems were re-started momentarily on September 2, 2008 and shutdown after sampling, pending receipt and verification of analytical results. Upon receipt of analytical results and compliance verification, the remediation systems were re-started on September 10, 2008. The remediation systems were again found non-functioning on September 17, 2008 and September 24, 2008, due to a high-water level alarm either in the air stripper tank or in the oil-water separator and were re-started on the same respective days after re-setting the high level alarms.

Due to excessive hardening (cementing) of the lead carbon vessel, a carbon sample (liquid phase) was collected on September 10, 2008, for profiling and disposal purposes. A carbon change-out has been scheduled for October 2, 2008.

Submit reports to: City of San Leandro – Environmental Services Division
835 East 14th Street, San Leandro CA 94577

TABLE 1
SEWER DISCHARGE SUMMARY REPORT
ARCO Service Station No. 2111
1156 Davis Street
San Leandro, California

Report Month (month/year)	Date	Effluent Totalizer Reading (gallons)	Monthy Discharge (gallons)
January-07	1/29/07 8:00 1/29/07 8:00 1/29/07[1] 12:00 01/30/07 01/31/07	System Start-up 3,000 5,000 6,200 8,560	5,560
February-07	2/1/07 5:15 2/2/07 5:00 2/5/07 5:00 2/20/07 6:30	16,860 25,480 33,400 122,790	114,230
March-07	3/5/07[2] 5:00 3/8/07[3] 4:50 3/14/07[4] 7:00 3/29/07[5] 10:00	130,565 132,951 NM 133,262	10,472
April-07	4/2/07[6] 5:30 4/10/07[7] 5:00 4/23/07[8] 7:00 4/26/07 6:00	170,596 NM 172,210 200,143	66,881
May-07	5/1/2007[9] 4:50 5/15/2007[10] 5:00 5/29/07 8:30	220,892 225,297 410,246	210,103
June-07	6/4/2007[11] 5:00 6/12/2007[12] 5:00 6/26/2007[13] 4:30	429,450 430,092 430,222	19,976

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July-07	7/2/07 5:30 7/10/2007 [14] 5:45 7/17/2007 [15] 5:00	480,377 523,553 546,094	115,872
August-07	8/1/2007 [15] 5:00 8/7/07 5:00 8/20/2007 [15] 5:00	580,301 580,662 582,706	36,612
September-07	9/5/2007 [16] 5:00 9/11/2007 [17] 9:00 9/17/2007 [18] 5:30	589,944 589,950 591,443	8,737
October-07	10/1/07 [19] 5:00 10/11/07 [20] 8:15 10/23/07 [17] 5:00 10/30/07 [15] 7:10	592,403 NM NM 593,647	2,204
November-07	11/6/07 [11] 4:30 11/14/07 [17] 6:00 11/20/07 [15] 6:50	612,552 612,552 613,537	19,890
December-07	12/5/07 [11] 5:00 12/17/07 [17] 4:30	633,121 633,123	19,586
January-08	1/7/08 [11] 5:00 1/15/08 [17] 7:00	635,200 636,041	2,918
February-08	2/5/08 [21] 8:15 2/26/08 [22] 6:00	642,841 643,443	7,402

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March-08	3/5/08 [11] 4:00 3/17/08 [23] 4:30	646,123 646,221	2,778
April-08	4/1/08 [24] 5:00 4/14/08 [25] 5:00 4/22/08 5:00	719,174 719,881 757,683	111,462
May-08	5/6/08 [26] 5:15 5/12/08 4:45 5/20/08 7:00 5/27/08 6:15	806,356 822,743 844,640 914,563	156,880
June-08	6/2/08 [15] 5:00 6/9/08 [15] 7:15 6/16/08 [15] 7:16 6/23/08 [15] 7:24	949,693 984,702 1,001,527 1,017,867	103,304
July-08	7/1/08 [27] 7:27 7/7/08 [28] 6:54 7/23/08 [29] 7:30 7/29/08 [15] 4:30	1,028,841 1,029,035 1,029,035 1,029,743	11,876
August-08	8/5/08 [30] 4:30 8/12/08 [30] 5:00 8/27/08 [30] 9:15	1,037,580 1,040,731 1,050,359	20,616
September-08	9/2/08 [31] 8:30 9/10/08 [32] 12:30 9/17/08 [30] 7:00 9/24/08 [30] 7:15	1,052,669 1,052,851 1,056,514 1,056,950	6,591

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Notes:
NM = Not measured

[1] Submersible pump at well MW-2 was shutdown. This pump will be re-started after troubleshooting the level floats/controller malfunction.

[2] System observed non-functioning upon arrival. Re-started by re-setting power supply.

[3] System shutdown to verify effluent air results.

[4] System shutdown due to float malfunction.

[5] System re-started after replacing the floats.

[6] System shutdown due to high-level in oil-water separator. System restarted after replacing a capacitor on the transfer pump.

[7] System shutdown due to transfer pump malfunction. System could not be restarted pending replacement of transfer pump.

[8] System restarted after replacing transfer pump.

[9] System observed non-functioning upon arrival due to DPE liquid ring pump malfunction. System re-started, but shutdown after sampling pending receipt and verification of analytical results.

[10] System re-started upon compliance verification and after conducting maintenance on the liquid ring pump.

[11] System observed non-functioning upon arrival due to high water level alarm on air stripper. System re-started, but shutdown after sampling pending receipt and verification of analytical results.

[12] System re-started momentarily upon compliance verification and to collect carbon sample for profiling and change-out.

[13] System re-started upon receipt of analytical results for carbon profile.

[14] System observed non-functioning upon arrival due to high-level in oil-water separator. System re-started after replacing particulate filters on the system.

[15] System observed non-functioning upon arrival due to high water level alarm on air stripper. System re-started after re-setting air stripper.

[16] System observed non-functioning upon arrival due to high-level in oil-water separator. System re-started, but shutdown after sampling pending receipt and verification of analytical results.

[17] System re-started upon receipt of analytical results and compliance verification.

[18] System observed non-functioning upon arrival due to high-level in oil-water separator. System re-started momentarily after conducting maintenance, but shutdown pending further troubleshooting.

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[19] System re-started, but shutdown after sampling pending receipt and verification of analytical results.

[20] System re-started briefly but shutdown to verify effluent air results.

[21] System observed non-functioning upon arrival due to high water level alarm on air stripper and transfer pump malfunction. System re-started, but shutdown after sampling pending receipt and verification of analytical results and replacement of transfer pump.

[22] System re-started upon receipt of analytical results and compliance verification and replacement of transfer pump.

[23] System re-started upon receipt of analytical results and compliance verification, but DPE system was shutdown due to float malfunction.

[24] System observed non-functioning upon arrival due to power failure. System re-started, but shutdown after sampling pending receipt and verification of analytical results. Floats were replaced on DPE system.

[25] System re-started upon receipt of analytical results and compliance verification, but DPE system was shutdown due to transfer pump contactor malfunction. Currently only GETS operational.

[26] DPE system re-started after replacing transfer pump contactor.

[27] System observed non-functioning upon arrival due to high water level alarm on air stripper. System re-started, but shutdown after sampling pending receipt and verification of analytical results.

[28] System remained shutdown. Collected carbon sample (vapor phase) for profiling and change-out.

[29] System re-started after completion of carbon change-out.

[30] System observed non-functioning upon arrival due to high water level alarm on air stripper or oil-water separator. System re-started after re-setting alarm.

[31] System observed non-functioning upon arrival due to high water level alarm on air stripper or oil-water separator. System re-started, but shutdown after sampling pending receipt and verification of analytical results.

[32] System re-started upon receipt of analytical results and compliance verification. Collected carbon sample (liquid phase) for profiling and change-out.