Atlantic Richfield Company
(a BP affiliated company)

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

3:00 pm, Jul 30, 2008

Alameda County
Environmental Health

29 July 2008

Re: Second 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

Second 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
www.broadbentinc.com

29 July 2008

Project No. 06-08-615

Broadbent & Associates, Inc.
1324 Mangrove Ave., Suite 212
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BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL

29 July 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: Second 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 *Second 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 Second 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

PROFESSIONAL GEOLOGIST
ROBERT H. MILLER
No. 4893
exp. 4-30-10
STATE OF CALIFORNIA

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

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 (Second Quarter 2008):

1. Prepared and submitted First Quarter 2008 Ground-Water Monitoring and Remediation System Status Report.
2. Conducted ground-water monitoring/sampling for Second Quarter 2008. Work performed on 8 April 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 April, May and June 2008 to the City of San Leandro. Work performed by Stratus.

WORK PROPOSED FOR NEXT QUARTER (Third Quarter 2008):

1. Prepared and submitted this Second Quarter 2008 Ground-Water Monitoring and Remediation System Status Report (contained herein).
2. Conduct quarterly ground-water monitoring/sampling for Third Quarter 2008.
3. Continue operation, maintenance and performance monitoring of the DPE treatment system.
4. Submit monthly discharge reports for July, August and September 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):	**13.52 ft (MW-6) to 16.53 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**		**Cumulative**	
	303,570		**949,693**	
Total operating hours:	**621**		**1973**	
Mass Removal (pounds)				
Gasoline range organics (GRO):	**1.069 (GWE)**	**7.56 (SVE)**	**5.254 (GWE)**	**367.82 (SVE)**
Benzene:	**0.034 (GWE)**		**0.081 (GWE)**	
Methyl-tert butyl ether (MTBE):	**2.968 (GWE)**		**7.673 (GWE)**	

Ground-water DPE system influent sample results (µg/L):	**4/1/2008**	**5/6/2008**	**6/2/2008**
GRO:	**410**	**500**	**87**
Benzene:	**16**	**<20**	**<5.0**
MTBE:	**860**	**2,000**	**340**
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:	**620**	**920**	**230**
Benzene:	**1.6**	**0.99**	**0.13**
MTBE:	**21**	**27**	**10**
Soil vapor DPE system effluent sample results (mg/M^3):			
GRO:	**<50**	**<50**	**<50**
Benzene:	**0.0089**	**<0.0016**	**<0.0016**
MTBE:	**0.014**	**16**	**1.4**

DISCUSSION:

Second quarter 2008 ground-water monitoring and sampling was conducted at Station #2111 on 8 April 2008 by Stratus personnel. Water levels were gauged in the eight wells associated with the Site while the DPE system was non-operational. No irregularities were noted during water level gauging. Depth to water measurements ranged from 13.52 ft at MW-6 to 16.53 ft at MW-1. Resulting ground-water surface elevations ranged from 24.32 ft above mean sea level in well MW-7 to 22.74 ft in well MW-5. Water level elevations were between historic minimum and maximum ranges for each well, as summarized in Table 1. 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-5, MW-7, and 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 three of the seven wells sampled at concentrations up to 270 micrograms per liter (µg/L) in well MW-7. Benzene was detected above the laboratory reporting limit in two of the seven wells sampled at concentrations of 0.5 µg/L in well MW-7 and 34 µg/L in well MW-2. Ethylbenzene was detected above the laboratory reporting limit in one of the seven wells sampled at a concentration of 1.2 µg/L in well MW-7. Total Xylenes were detected above the laboratory reporting limit in one of the seven wells sampled at a concentration of 0.66 µg/L in well MW-7. TAME was detected above the laboratory reporting limit in three of the seven wells sampled at concentrations up to 5.1 µg/L in well MW-7. TBA was detected above the laboratory reporting limit in five of the seven wells sampled at concentrations up to 970 µg/L in well MW-2. MTBE was detected above the laboratory reporting limit in six of the seven wells sampled at concentrations up to 1,200 µg/L in well MW-7. The remaining fuel additives and oxygenates were not detected above their laboratory reporting limits in the seven wells sampled this quarter.

Detected analyte concentrations were within the historic minimum and maximum ranges recorded for each well, with the following exceptions: the concentration of GRO reached a historic minimum value of 200 µg/L in well MW-2; the concentration of benzene reached a historic minimum value of 0.50 µg/L in well MW-7; the concentration of ethylbenzene in well MW-2 reached a historic minimum value of <0.50 µg/L; the concentration of total xylenes reached a historic minimum value of <0.50 µg/L in well MW-2; the concentration of TAME reached a historic minimum value of <0.50 µg/L in well MW-8; and the MTBE concentrations reached historic minimum values of 690 µg/L, <0.50 µg/L, and 32 µg/L in wells MW-2, MW-3, and MW-8, respectively. 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 Second Quarter 2008 period from 1 April 2008 to 23 June 2008, the DPE system reportedly operated approximately 31.2 percent of the time. During this period, a total of 303,570 gallons of ground water was treated and discharged. During the Second Quarter 2008, approximately 1.069 pounds of GRO (0.175 gallons), approximately 0.034 pounds of benzene (0.005 gallons), and approximately 2.968 pounds of MTBE (0.48 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 621 hours between 1 April 2008 and 23 June 2008 based on the hour meter reading. Stratus found the system non-operational upon arrival at the Site on 1 April 2008 due to a power failure. The system was restarted momentarily on 1 April 2008 to facilitate sample collection and then shut down pending receipt of the laboratory results. The floats were also replaced during this Site visit. On 14 April 2008, Stratus attempted to restart the system after receiving the analytical results from the samples collected on 1 April 2008. However, the system immediately shutdown due to transfer pump contactor malfunction. Upon departure the ground-water extraction system was left operational while the vapor extraction system was left non-operational until repairs could be performed on the transfer pump. Stratus found the ground-water extraction system non-operational upon the next arrival at the site on 22 April 2008 due to clogged filters. The filters were changed and the

ground-water extraction system was restarted during this Site visit. The vapor extraction system remained non-operational.

Stratus found the ground-water extraction system to be operational upon arrival at the Site on 6 May 2008. A new contactor for the transfer pump of the vapor extraction system was installed and a new Magnehelic gauge was installed on the air stripper. The vapor extraction system was restarted and samples were collected from both the vapor and ground-water extraction systems. The system was left operational upon departure from the Site. Stratus found the system operational upon arrival at the Site on 12 May 2008. System readings were collected and the system was left operational upon departure. Stratus found the system non-operational on 20 May 2008 due to a high water level and a high level in the oil/water separator. Well MW-3 was opened to facilitate vapor extraction and the filters were changed during this Site visit. The system was restarted and left operational upon departure. Stratus found the system operational upon arrival at the Site on 27 May 2008. System readings were collected and the system was left operational upon departure.

Stratus found the system non-operational upon arrival at the Site on 2 June 2008 due to a high water level. The water filters were replaced, the system was restarted, and system samples were collected during this Site visit. The system was left operational upon departure. Stratus found the system non-operational upon arrival at the Site on 9 June 2008 due to a high water level. The system was restarted and the stinger in well MW-7 was reset. The system was left operational upon departure. Stratus found the system non-operational upon arrival at the Site on 16 June 2008 due to a high water level. Two cartridge filters were replaced and the system was restarted during this Site visit. The system was left operational upon departure. Stratus found the system non-operational upon arrival at the Site on 23 June 2008 due to a high water level. The effluent totalizer was cleaned, the stinger in well MW-7 was reset, and the system was restarted during this Site visit. The system was left operational upon departure. Copies of Stratus' remediation system operation and maintenance data packages for Second Quarter 2008 are contained within Appendix C. Copies of Stratus' remediation system monthly discharge reports for Second Quarter 2008 are contained within Appendix D.

CLOSURE:

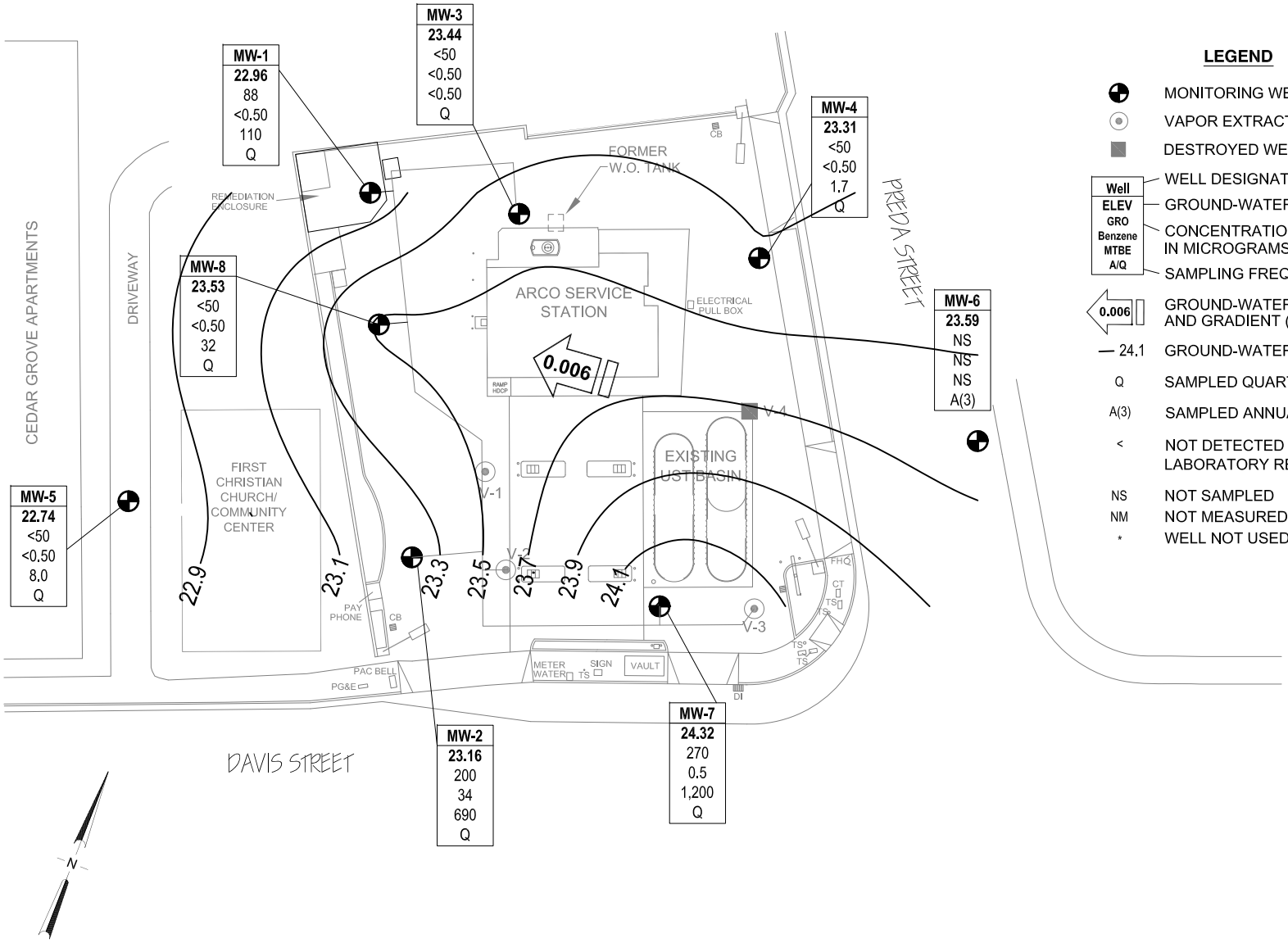
The findings presented in this report are based upon: observations of Stratus field personnel (see Appendices A, C, D), the points investigated, and results of laboratory tests performed by Calscience Environmental Laboratories, Inc. (Garden Grove, California). Our services were performed in accordance 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 – 8 April 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



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)
- 24.1 — 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: 7/25/08

Station #2111
1156 Davis Street
San Leandro, California

Ground-Water Elevation Contours and Analytical Summary Map
8 April 2008

Drawing
1

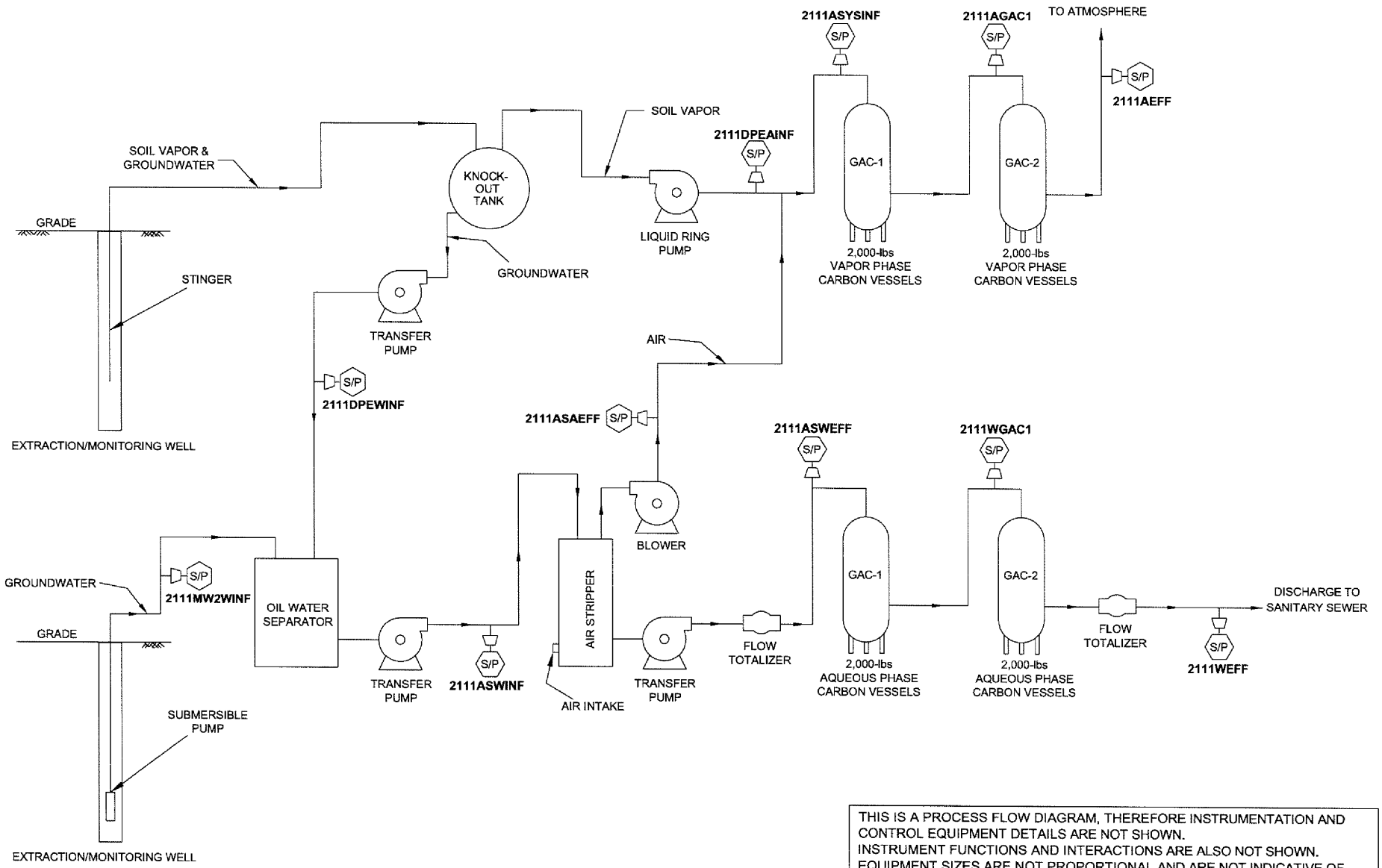


Diagram from Stratus Environmental Inc.

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**
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	--	--
12/21/00	--	b	37.99	12.0	26.00	--	--	5,010	360	189	213	626	54,300/89,200	--	--
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	--	--
3/13/2001	--	b	37.99	12.0	26.00	--	--	<20,000	525	466	408	1,460	91,700/76,000	--	--
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	--	--
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
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

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.															
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**
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
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

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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-3 Cont.															
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**
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
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

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								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-4 Cont.															
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**
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
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

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								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-5 Cont.															
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**
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	--	--
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

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.															
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**	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--
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

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.															
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**
MW-8															
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

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.															
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**

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**	
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	
1/15/2007	<6,000	1,900	1,400	<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.									
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**	
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**	
MW-4									
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	

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.									
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**	
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	
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

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.									
10/24/2006	<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**	
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	
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	
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	

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.									
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**	
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**	

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**

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**
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
1/29/2007	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
	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
2/5/2007	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
	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
3/5/2007	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
	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
4/2/2007	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
	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
5/1/2007	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
	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
6/4/2007	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
	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
7/2/2007	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
	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
8/1/2007	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
	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
9/5/2007	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
	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
10/1/2007	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
	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

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 range
[2] = Primary and confirm results varied by > 40% RPD
[3] = Sample taken from VOA vial with air bubble > 6 millimeters in diameter
[4] = Incorrect GWE influent concentrations were recorded in previously submitted reports

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**
REPORTING PERIOD: SECOND QUARTER 2008																	
PERIOD WATER DISCHARGED (gal):					**303,570**	**as of 6/2/2008**											
AVERAGE DISCHARGE RATE (gpm)					**3.40**												
PERIOD POUNDS REMOVED:								**1.069**				**0.034**				**2.968**	
PERIOD GALLONS REMOVED:								**0.175**				**0.005**				**0.480**	
TOTAL POUNDS REMOVED:									**5.254**				**0.081**				**7.673**
TOTAL GALLONS REMOVED:					**949,693**				**0.861**				**0.011**				**1.242**
ESTIMATED PERCENT CARBON LOADING:						**21.7%**											

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

REPORTING PERIOD: SECOND QUARTER 2008
PERIOD WATER DISCHARGED (gal): 303,570 as of 06/02/2008
AVERAGE DISCHARGE RATE (gpm) 3.40

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	No. of Days Between Sampling Dates			Cumulative Days		Percent
	Reading	Total Days	Uptime	Days Down	Total Days	Uptime	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%**

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

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	**9.91**	**0.03**	**0.40**	**0.00**	**96.0%**	**99.4%**	**0.55**	**360.81**
5/6/2008	**15.52**	**0.02**	**0.42**	**0.00**	**97.3%**	**99.9%**	**5.09**	**365.90**
6/2/2008	**3.68**	**0.00**	**0.40**	**0.00**	**89.1%**	**99.4%**	**1.92**	**367.82**

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

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

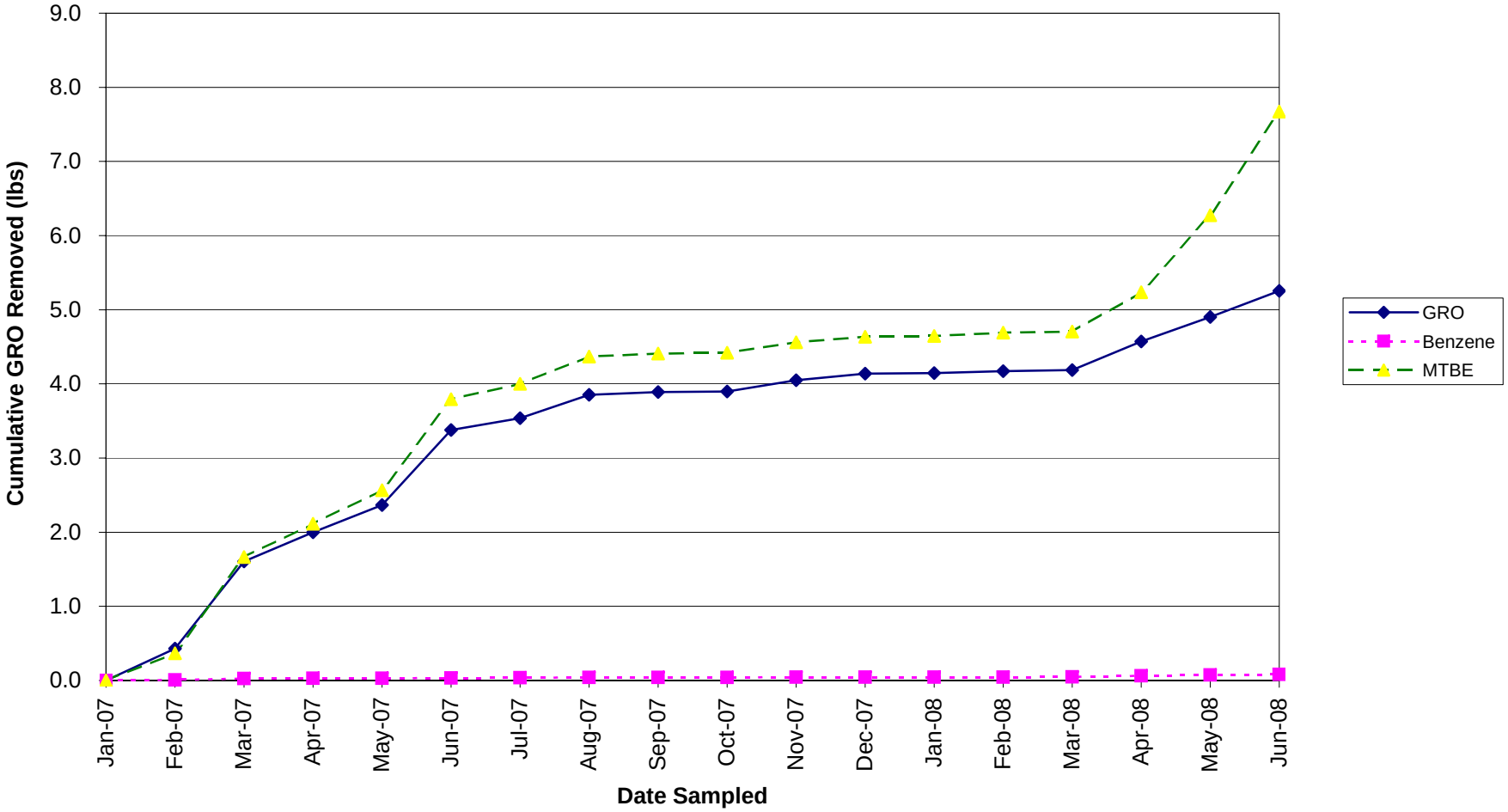


Figure 2
GWE Influent Concentrations for GRO, Benzene, and MTBE
Station #2111, 1156 Davis Street, San Leandro, California

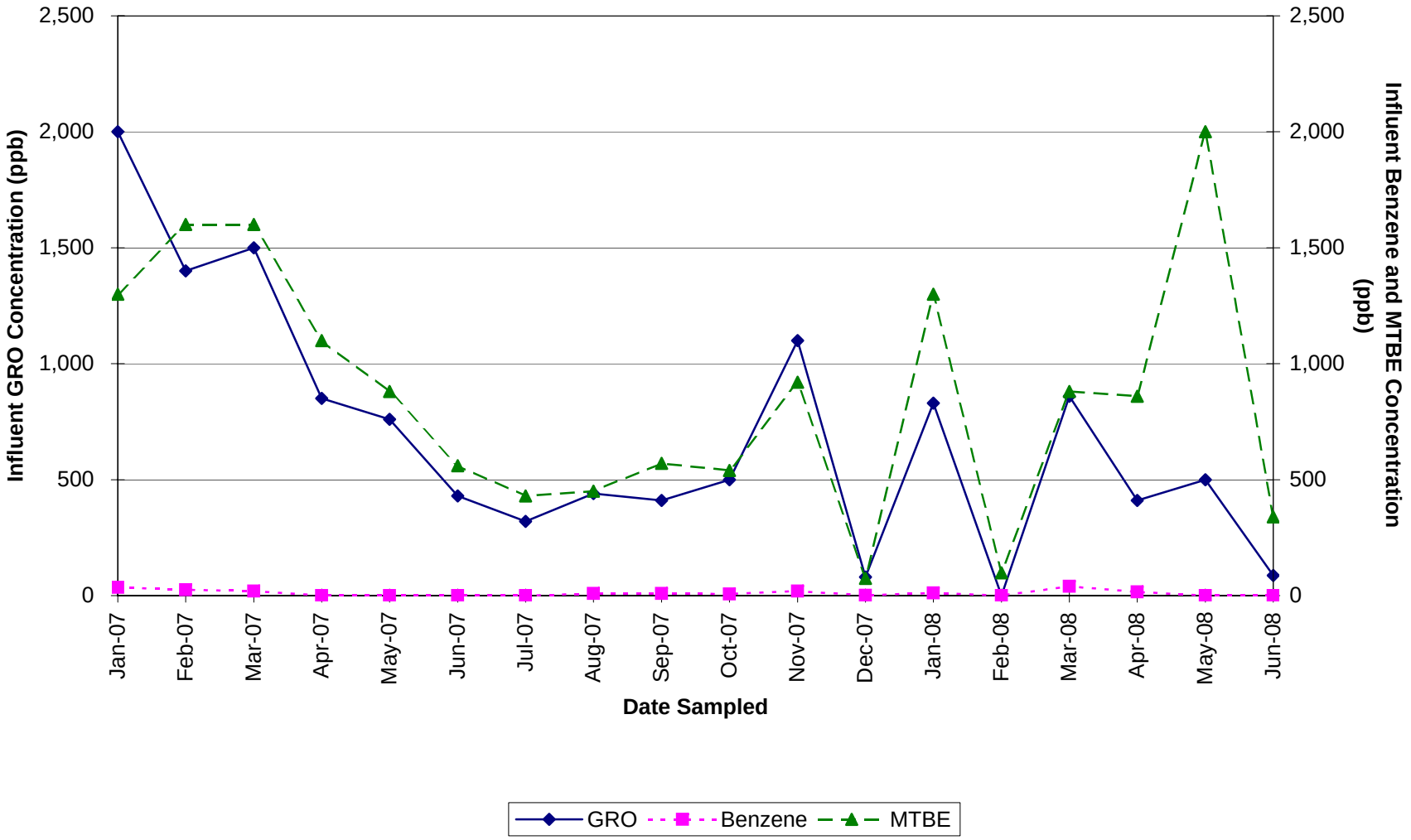


Figure 3
SVE System Influent Concentration vs.Time
Station #2111, 1156 Davis Street, San Leandro, California

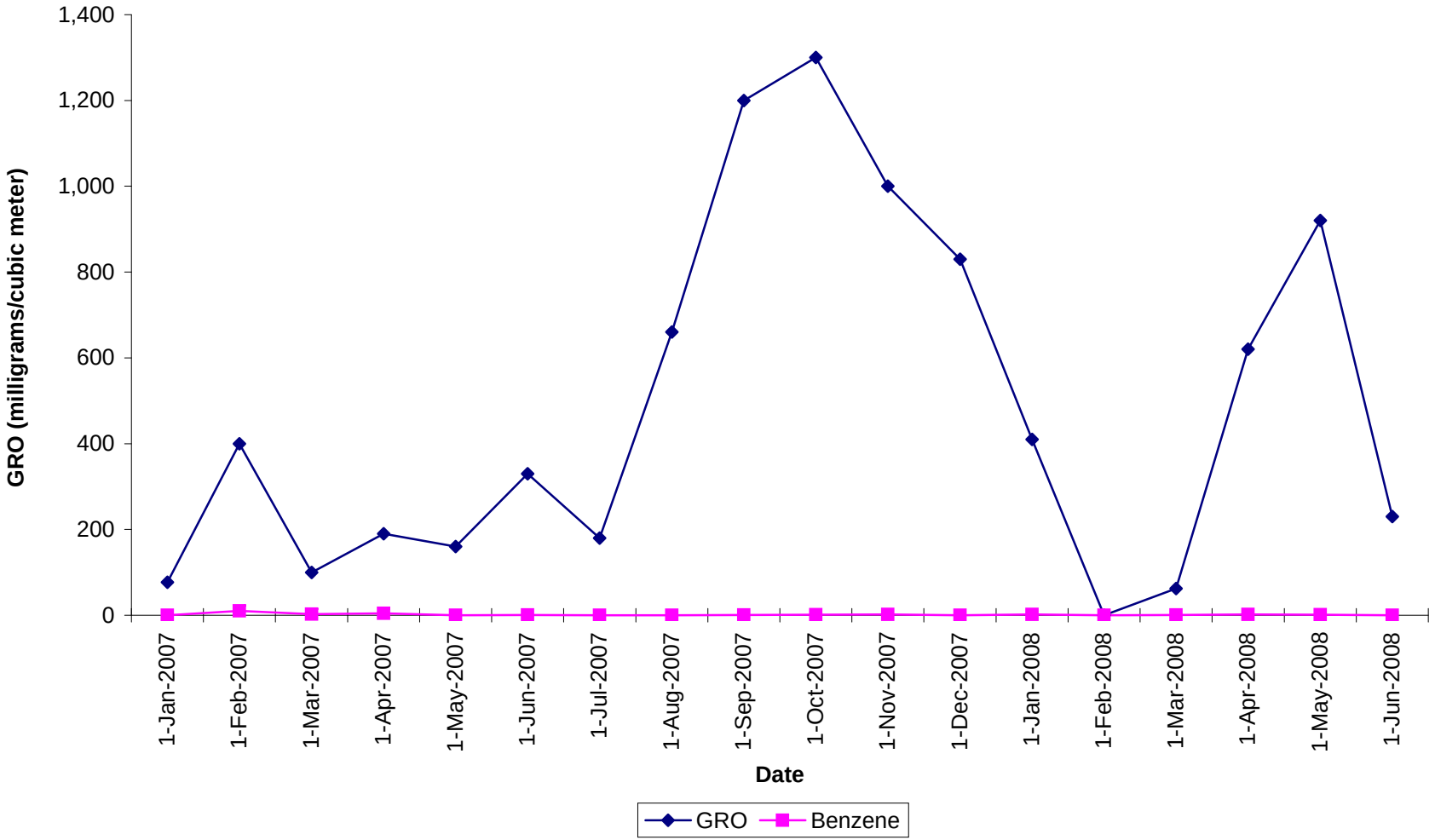
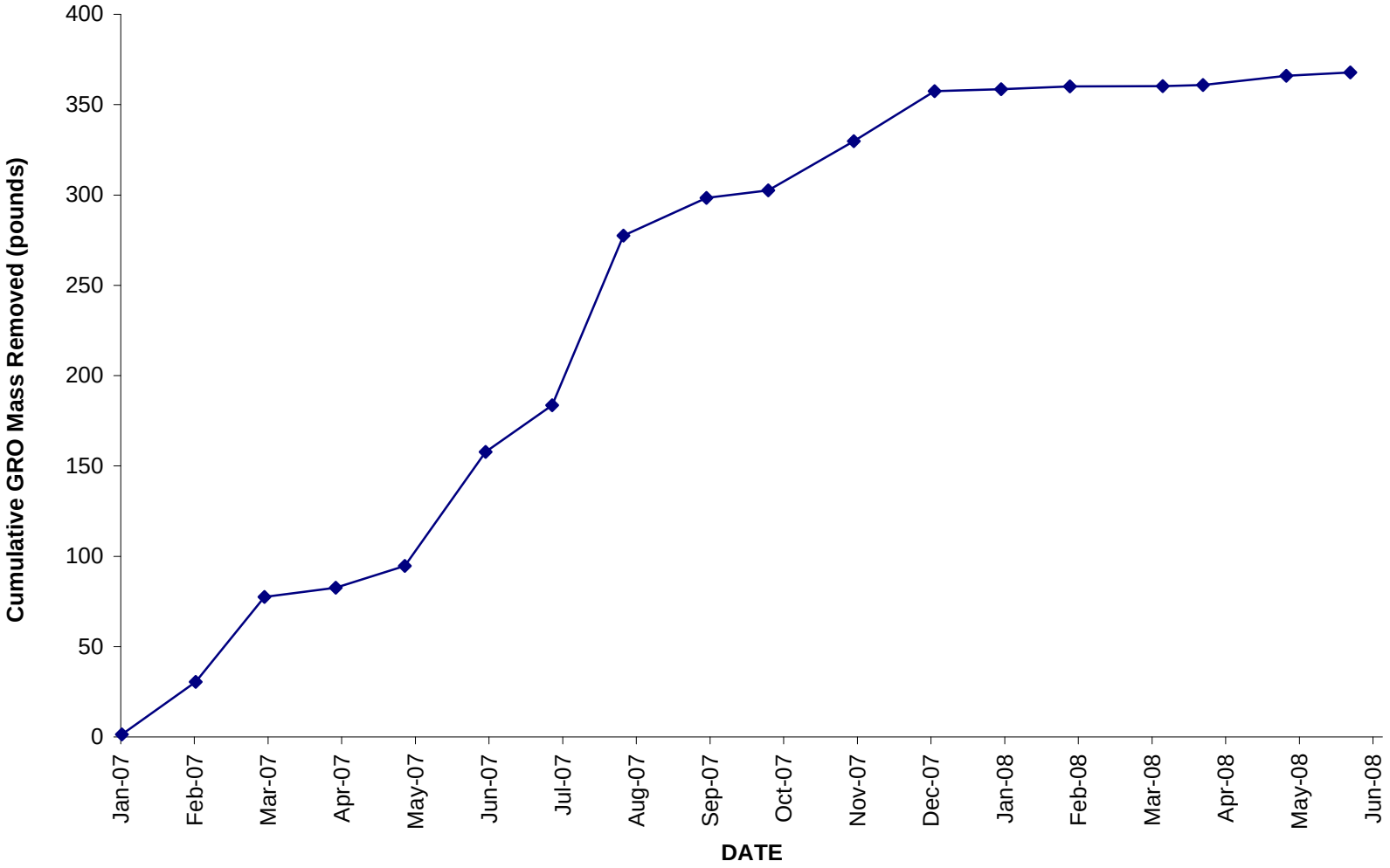


Figure 4
SVE System Cumulative GRO Mass Removed vs. Time
Station #2111, 1156 Davis Street, San Leandro, California



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

April 29, 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: David DeMello

Sampling Date: April 8, 2008
Arrival: 12:00 *Departure:* 16:30
Weather Conditions: Clear / Overcast
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.

ORIGINAL

Site Address 1555 Davis St.
City San Leandro, CA
Sampled by: D. Demello
Signature

Site Number ARCO 2111
Project Number E2111-03
Project PM JAY JOHNSON
DATE 04-08-08

Water Level Data					Purge Volume Calculations					Purge Method				Sample Record			Field Data
Well ID	Time	~~Depth to Product~~ (feet) Top of Scr	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	1335	12.5	16.53	26.08	-	4	2	8		X				N/A	MW-1	1350	1.73
* MW-2	1448	12.0	14.70	20.12	-	4	2								MW-2	1540	3.24
MW-3	1315	12.0	15.75	26.20	-	4	2								MW-3	1320	1.98
MW-4	1250	10.0	14.68	21.45	-	4	2								MW-4	1300	2.54
MW-5	1550	9.5	14.38	23.53		2	.5								MW-5	1610	1.64
MW-6	1240	10.0	13.52	20.50	-	2	.5								MW-6	N/S	-
MW-7	1455	12.0	14.22	26.30	-	4	2								MW-7	1515	1.67
MW-8	1410	18.0	15.38	39.00	23.62	2	.5	11.81	12		X			15.40	MW-8	1440	1.60
TB	1200	(2111-04082007)								Holding						12.30	-
								(*) Total	12 gallons								

* Took Sample from Port inside Compound (Turned Sub-Pump on "Hand" then Meter Sample then turn it off.)

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 04-04-08
Conductivity
DO

(*) Left Purge water on site in Compound for water Treatment.

STRATUS ENVIRONMENTAL, INC.

Site Address 1156 Davis St.
City San Leandro, CA
Site Sampled by D. DeMello

ORIGINAL

Site Number ARCO 2111
Project No. E2111-03
Project PM Jay Johnson
Date Sampled 04-08-08

Well ID	MW-4			1300
purge start time	Bailer			NO ODOR
	Temp C	pH	cond	gallons
time	19.5	6.80	721	Ø
time				
time				
time				
purge stop time				

Well ID	MW-3			1320
purge start time	Bailer			NO ODOR
	Temp C	pH	cond	gallons
time	18.7	6.80	504	Ø
time				
time				
time				
pugre stop time				

Well ID	MW-1			1350
purge start time	Bailer			NO ODOR
	Temp C	pH	cond	gallons
time	18.5	6.89	656	Ø
time				
time				
time				
purge stop time				

Well ID	MW-8			1440
purge start time	Bailer			No odor
	Temp C	pH	cond	gallons
time	18.8	6.79	547	Ø
time	19.3	6.78	545	6
time	18.8	6.77	548	12
time				
purge stop time				

Well ID	MW-7			1515
purge start time	Bailer			ODOR
	Temp C	pH	cond	gallons
time	17.8	7.17	438	Ø
time				
time				
time				
purge stop time				

Well ID	MW-2			1540
purge start time	System Port			ODOR
	Temp C	pH	cond	gallons
time	16.6	6.95	448	Ø
time				
time				
time				
purge stop time				

Well ID	MW-5			1610
purge start time	Bailer			No odor
	Temp C	pH	cond	gallons
time	17.6	6.76	635	Ø
time				
time				
time				
purge stop time				

Well ID				
purge start time				
	Temp C	pH	cond	gallons
time				
time				
time				
time				
purge stop time				

ORIGINAL

WELLHEAD OBSERVATION FORM

STRATUS ENVIRONMENTAL, INC.

Site Name/Number: ARCO 2111 *Date:* 04-08-08 *Technican:* D. DeMello

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							X					
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):

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.)

(updated 3-28-08, SS)

ORIGINAL

Page 1 of 1

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: 1200	Temp: Air 60's
Off-site Time: 1630	Temp: Low 70's
Sky Conditions: Clear/Overcast	
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	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: 5 Oxys	Requested Analysis: EDB	Requested Analysis: 1,2-DCA	Requested Analysis: Ethanol	Sample Point Lat/Long and Comments
			2008											ALL By 8260 Requested Analysis						*Oxy= MTBE,TAME,ETBE,DIPE,TBA
1	MW-1	1350	0409		X			6				X		X	X	X	X	X	X	
2	MW-2	1540																		
3	MW-3	1320																		
4	MW-4	1300																		
5	MW-5	1610																		
6	MW-7	1515																		
7	MW-8	1440																		
8																				
9	TB-2111-04082008	1230	0408		X			2												HOLD
10																				

Sampler's Name:	David DeMello
Sampler's Company:	STRATUS ENVIRONMENTAL Inc.
Shipment Date:	04-09-08
Shipment Method:	Ground
Shipment Tracking No:	925538161 8

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
David DeMello / Stratus	2008 04-09				

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.

April 24, 2008

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

Subject: **Calscience Work Order No.: 08-04-0907**
Client Reference: ARCO 2111

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 4/10/2008 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.

CASE NARRATIVE – 08-04-0907

Data Qualifiers – EPA 8260:

080417S01

The % recovery for MtBE in the MS/MSD was bias low. The % recoveries were within criteria in the LCS/LCSD. The MS/MSD has been flagged "3".

"3" = LN, AY

LN = MS and/or MSD below acceptance limits. See Blank Spike (LCS).
AY = Matrix Interference Suspected

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	04/10/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-04-0907
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-1	**08-04-0907-1-E**	**04/08/08 13:50**	**Aqueous**	**GC 4**	**04/10/08**	**04/11/08 07:36**	**080410B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	88	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
MW-2	**08-04-0907-2-E**	**04/08/08 15:40**	**Aqueous**	**GC 4**	**04/10/08**	**04/11/08 11:27**	**080410B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	200	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	94	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-3	**08-04-0907-3-E**	**04/08/08 13:20**	**Aqueous**	**GC 4**	**04/10/08**	**04/11/08 16:26**	**080410B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	98	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-4	**08-04-0907-4-E**	**04/08/08 13:00**	**Aqueous**	**GC 4**	**04/10/08**	**04/11/08 14:15**	**080410B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	85	38-134			

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	04/10/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-04-0907
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	**08-04-0907-5-E**	**04/08/08 16:10**	**Aqueous**	**GC 4**	**04/10/08**	**04/11/08 14:47**	**080410B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	92	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-7	**08-04-0907-6-E**	**04/08/08 15:15**	**Aqueous**	**GC 4**	**04/10/08**	**04/11/08 15:20**	**080410B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	270	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	94	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-8	**08-04-0907-7-E**	**04/08/08 14:40**	**Aqueous**	**GC 4**	**04/10/08**	**04/11/08 15:53**	**080410B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	94	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-695-101**	**N/A**	**Aqueous**	**GC 4**	**04/10/08**	**04/10/08 16:44**	**080410B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	103	38-134			

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	04/10/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-04-0907
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	**099-12-695-102**	**N/A**	**Aqueous**	**GC 4**	**04/10/08**	**04/11/08 09:48**	**080410B02**

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

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

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	04/10/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-04-0907
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L
Project: ARCO 2111		Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-1	**08-04-0907-1-A**	**04/08/08 13:50**	**Aqueous**	**GC/MS BB**	**04/15/08**	**04/15/08 23:18**	**080415L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	110	5.0	10	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	57	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)	2.6	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	89	73-157			Dibromofluoromethane	99	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
MW-2	**08-04-0907-2-A**	**04/08/08 15:40**	**Aqueous**	**GC/MS BB**	**04/15/08**	**04/15/08 23:51**	**080415L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	34	0.50	1		Methyl-t-Butyl Ether (MTBE)	690	20	40	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	970	400	40	
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)	3.3	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	92	73-157			Dibromofluoromethane	100	82-142		
Toluene-d8	97	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-3	**08-04-0907-3-A**	**04/08/08 13:20**	**Aqueous**	**GC/MS BB**	**04/15/08**	**04/16/08 04:17**	**080415L02**

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	90	73-157			Dibromofluoromethane	101	82-142		
Toluene-d8	98	82-112			1,4-Bromofluorobenzene	96	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: 04/10/08
Work Order No: 08-04-0907
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	**08-04-0907-4-A**	**04/08/08 13:00**	**Aqueous**	**GC/MS BB**	**04/15/08**	**04/16/08 04:51**	**080415L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	1.7	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	89	73-157			Dibromofluoromethane	101	82-142		
Toluene-d8	97	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-5	**08-04-0907-5-A**	**04/08/08 16:10**	**Aqueous**	**GC/MS BB**	**04/15/08**	**04/16/08 05:24**	**080415L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	8.0	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	300	50	5	
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	94	73-157			Dibromofluoromethane	105	82-142		
Toluene-d8	98	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-7	**08-04-0907-6-A**	**04/08/08 15:15**	**Aqueous**	**GC/MS BB**	**04/15/08**	**04/16/08 05:57**	**080415L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.50	0.50	1		Methyl-t-Butyl Ether (MTBE)	1200	25	50	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	700	500	50	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	1.2	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	5.1	0.50	1	
Xylenes (total)	0.66	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	90	73-157			Dibromofluoromethane	99	82-142		
Toluene-d8	100	82-112			1,4-Bromofluorobenzene	96	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: 04/10/08
Work Order No: 08-04-0907
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-8	**08-04-0907-7-A**	**04/08/08 14:40**	**Aqueous**	**GC/MS BB**	**04/15/08**	**04/16/08 06:30**	**080415L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	32	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	110	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	92	73-157			Dibromofluoromethane	99	82-142		
Toluene-d8	94	82-112			1,4-Bromofluorobenzene	97	75-105		

Method Blank	099-12-703-170	N/A	Aqueous	GC/MS BB	04/15/08	04/15/08 15:00	080415L01

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	92	73-157			Dibromofluoromethane	101	82-142		
Toluene-d8	96	82-112			1,4-Bromofluorobenzene	96	75-105		

Method Blank	099-12-703-172	N/A	Aqueous	GC/MS BB	04/15/08	04/16/08 03:44	080415L02

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	93	73-157			Dibromofluoromethane	95	82-142		
Toluene-d8	98	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:	04/10/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-04-0907
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	**099-12-703-175**	**N/A**	**Aqueous**	**GC/MS BB**	**04/16/08**	**04/16/08 15:39**	**080416L01**

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	89	73-157			Dibromofluoromethane	99	82-142		
Toluene-d8	98	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	**099-12-703-176**	**N/A**	**Aqueous**	**GC/MS BB**	**04/16/08**	**04/17/08 03:50**	**080416L02**

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	97	73-157			Dibromofluoromethane	101	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	**099-12-703-178**	**N/A**	**Aqueous**	**GC/MS BB**	**04/17/08**	**04/17/08 17:12**	**080417L01**

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	96	73-157			Dibromofluoromethane	96	82-142		
Toluene-d8	97	82-112			1,4-Bromofluorobenzene	91	75-105		

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

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.	Date Received: 04/10/08
3330 Cameron Park Drive, Suite 550	Work Order No: 08-04-0907
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	MS/MSD Batch Number
08-04-0795-11	**Aqueous**	**GC 4**	**04/10/08**	**04/10/08**	**080410S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	79	75	38-134	5	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	04/10/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-04-0907
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	MS/MSD Batch Number
MW-2	**Aqueous**	**GC 4**	**04/10/08**	**04/11/08**	**080410S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	101	94	38-134	6	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	04/10/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-04-0907
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project ARCO 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-04-0665-7	**Aqueous**	**GC/MS BB**	**04/15/08**	**04/15/08**	**080415S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	100	100	86-122	0	0-8	
Carbon Tetrachloride	87	91	78-138	5	0-9	
Chlorobenzene	100	99	90-120	1	0-9	
1,2-Dibromoethane	96	94	70-130	2	0-30	
1,2-Dichlorobenzene	99	100	89-119	0	0-10	
1,1-Dichloroethene	82	82	52-142	0	0-23	
Ethylbenzene	98	99	70-130	2	0-30	
Toluene	99	98	85-127	2	0-12	
Trichloroethene	94	94	78-126	0	0-10	
Vinyl Chloride	86	87	56-140	1	0-21	
Methyl-t-Butyl Ether (MTBE)	92	91	64-136	1	0-28	
Tert-Butyl Alcohol (TBA)	95	100	27-183	4	0-60	
Diisopropyl Ether (DIPE)	108	110	78-126	2	0-16	
Ethyl-t-Butyl Ether (ETBE)	104	104	67-133	0	0-21	
Tert-Amyl-Methyl Ether (TAME)	95	92	63-141	3	0-21	
Ethanol	80	95	11-167	17	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.	Date Received: 04/10/08
3330 Cameron Park Drive, Suite 550	Work Order No: 08-04-0907
Cameron Park, CA 95682-8861	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**	**04/15/08**	**04/16/08**	**080415S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	103	100	86-122	3	0-8	
Carbon Tetrachloride	91	97	78-138	6	0-9	
Chlorobenzene	102	99	90-120	2	0-9	
1,2-Dibromoethane	97	97	70-130	0	0-30	
1,2-Dichlorobenzene	100	104	89-119	4	0-10	
1,1-Dichloroethene	81	95	52-142	15	0-23	
Ethylbenzene	99	99	70-130	1	0-30	
Toluene	102	102	85-127	0	0-12	
Trichloroethene	101	98	78-126	4	0-10	
Vinyl Chloride	85	92	56-140	7	0-21	
Methyl-t-Butyl Ether (MTBE)	85	97	64-136	14	0-28	
Tert-Butyl Alcohol (TBA)	108	117	27-183	7	0-60	
Diisopropyl Ether (DIPE)	97	90	78-126	8	0-16	
Ethyl-t-Butyl Ether (ETBE)	98	98	67-133	0	0-21	
Tert-Amyl-Methyl Ether (TAME)	96	96	63-141	1	0-21	
Ethanol	113	108	11-167	5	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.	Date Received:	04/10/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-04-0907
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B

Project ARCO 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-04-0770-2	**Aqueous**	**GC/MS BB**	**04/16/08**	**04/16/08**	**080416S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	100	103	86-122	3	0-8	
Carbon Tetrachloride	92	92	78-138	0	0-9	
Chlorobenzene	102	101	90-120	1	0-9	
1,2-Dibromoethane	98	96	70-130	2	0-30	
1,2-Dichlorobenzene	101	104	89-119	3	0-10	
1,1-Dichloroethene	57	11	52-142	20	0-23	3
Ethylbenzene	101	102	70-130	1	0-30	
Toluene	100	103	85-127	3	0-12	
Trichloroethene	56	40	78-126	5	0-10	3
Vinyl Chloride	86	87	56-140	1	0-21	
Methyl-t-Butyl Ether (MTBE)	94	91	64-136	4	0-28	
Tert-Butyl Alcohol (TBA)	91	100	27-183	9	0-60	
Diisopropyl Ether (DIPE)	110	108	78-126	1	0-16	
Ethyl-t-Butyl Ether (ETBE)	108	98	67-133	9	0-21	
Tert-Amyl-Methyl Ether (TAME)	97	97	63-141	0	0-21	
Ethanol	77	96	11-167	22	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	04/10/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-04-0907
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project ARCO 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-04-1042-12	**Aqueous**	**GC/MS BB**	**04/16/08**	**04/17/08**	**080416S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	103	105	86-122	2	0-8	
Carbon Tetrachloride	96	96	78-138	1	0-9	
Chlorobenzene	101	103	90-120	2	0-9	
1,2-Dibromoethane	95	100	70-130	5	0-30	
1,2-Dichlorobenzene	104	104	89-119	0	0-10	
1,1-Dichloroethene	84	88	52-142	4	0-23	
Ethylbenzene	102	99	70-130	3	0-30	
Toluene	102	101	85-127	1	0-12	
Trichloroethene	57	65	78-126	3	0-10	3
Vinyl Chloride	87	89	56-140	2	0-21	
Methyl-t-Butyl Ether (MTBE)	90	94	64-136	5	0-28	
Tert-Butyl Alcohol (TBA)	118	109	27-183	8	0-60	
Diisopropyl Ether (DIPE)	101	110	78-126	9	0-16	
Ethyl-t-Butyl Ether (ETBE)	97	108	67-133	11	0-21	
Tert-Amyl-Methyl Ether (TAME)	92	95	63-141	3	0-21	
Ethanol	122	77	11-167	45	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.	Date Received:	04/10/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-04-0907
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B

Project ARCO 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-04-1056-1	**Aqueous**	**GC/MS BB**	**04/17/08**	**04/17/08**	**080417S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	100	104	86-122	3	0-8	
Carbon Tetrachloride	94	95	78-138	1	0-9	
Chlorobenzene	104	106	90-120	2	0-9	
1,2-Dibromoethane	99	97	70-130	2	0-30	
1,2-Dichlorobenzene	105	105	89-119	0	0-10	
1,1-Dichloroethene	80	83	52-142	3	0-23	
Ethylbenzene	102	105	70-130	3	0-30	
Toluene	101	104	85-127	3	0-12	
Trichloroethene	96	98	78-126	3	0-10	
Vinyl Chloride	84	88	56-140	4	0-21	
Methyl-t-Butyl Ether (MTBE)	0	3	64-136	1	0-28	3
Tert-Butyl Alcohol (TBA)	117	111	27-183	2	0-60	
Diisopropyl Ether (DIPE)	97	104	78-126	6	0-16	
Ethyl-t-Butyl Ether (ETBE)	100	98	67-133	2	0-21	
Tert-Amyl-Methyl Ether (TAME)	96	96	63-141	0	0-21	
Ethanol	104	104	11-167	0	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: 08-04-0907
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
099-12-695-101	**Aqueous**	**GC 4**	**04/10/08**	**04/10/08**	**080410B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	105	100	78-120	5	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:	08-04-0907
Preparation:	EPA 5030B
Method:	EPA 8015B (M)

Project: ARCO 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-102	**Aqueous**	**GC 4**	**04/10/08**	**04/11/08**	**080410B02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	103	101	78-120	1	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: 08-04-0907
Preparation: EPA 5030B
Method: EPA 8260B

Project: ARCO 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-170	**Aqueous**	**GC/MS BB**	**04/15/08**	**04/15/08**	**080415L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	98	95	87-117	3	0-7	
Carbon Tetrachloride	88	86	78-132	1	0-8	
Chlorobenzene	99	97	88-118	2	0-8	
1,2-Dibromoethane	90	91	80-120	1	0-20	
1,2-Dichlorobenzene	98	97	88-118	1	0-8	
1,1-Dichloroethene	81	75	71-131	8	0-14	
Ethylbenzene	96	95	80-120	1	0-20	
Toluene	97	94	85-127	4	0-7	
Trichloroethene	93	93	85-121	0	0-11	
Vinyl Chloride	85	85	64-136	0	0-10	
Methyl-t-Butyl Ether (MTBE)	85	85	67-133	0	0-16	
Tert-Butyl Alcohol (TBA)	94	100	34-154	6	0-19	
Diisopropyl Ether (DIPE)	104	97	80-122	7	0-8	
Ethyl-t-Butyl Ether (ETBE)	98	94	73-127	5	0-11	
Tert-Amyl-Methyl Ether (TAME)	90	89	69-135	1	0-12	
Ethanol	86	103	34-124	17	0-44	

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: 08-04-0907
Preparation: EPA 5030B
Method: EPA 8260B

Project: ARCO 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-172	**Aqueous**	**GC/MS BB**	**04/15/08**	**04/16/08**	**080415L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	98	98	87-117	1	0-7	
Carbon Tetrachloride	87	86	78-132	2	0-8	
Chlorobenzene	99	97	88-118	2	0-8	
1,2-Dibromoethane	93	96	80-120	3	0-20	
1,2-Dichlorobenzene	103	100	88-118	3	0-8	
1,1-Dichloroethene	81	75	71-131	8	0-14	
Ethylbenzene	95	93	80-120	3	0-20	
Toluene	95	96	85-127	2	0-7	
Trichloroethene	105	103	85-121	2	0-11	
Vinyl Chloride	88	83	64-136	5	0-10	
Methyl-t-Butyl Ether (MTBE)	88	95	67-133	7	0-16	
Tert-Butyl Alcohol (TBA)	104	98	34-154	6	0-19	
Diisopropyl Ether (DIPE)	106	110	80-122	3	0-8	
Ethyl-t-Butyl Ether (ETBE)	106	105	73-127	1	0-11	
Tert-Amyl-Methyl Ether (TAME)	93	97	69-135	4	0-12	
Ethanol	101	83	34-124	20	0-44	

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:	08-04-0907
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: ARCO 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-175	**Aqueous**	**GC/MS BB**	**04/16/08**	**04/16/08**	**080416L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	101	102	87-117	1	0-7	
Carbon Tetrachloride	92	92	78-132	1	0-8	
Chlorobenzene	104	103	88-118	1	0-8	
1,2-Dibromoethane	102	98	80-120	4	0-20	
1,2-Dichlorobenzene	100	105	88-118	5	0-8	
1,1-Dichloroethene	83	82	71-131	1	0-14	
Ethylbenzene	99	101	80-120	2	0-20	
Toluene	100	100	85-127	0	0-7	
Trichloroethene	98	98	85-121	0	0-11	
Vinyl Chloride	89	86	64-136	3	0-10	
Methyl-t-Butyl Ether (MTBE)	91	89	67-133	3	0-16	
Tert-Butyl Alcohol (TBA)	91	94	34-154	3	0-19	
Diisopropyl Ether (DIPE)	107	104	80-122	3	0-8	
Ethyl-t-Butyl Ether (ETBE)	106	101	73-127	5	0-11	
Tert-Amyl-Methyl Ether (TAME)	99	96	69-135	3	0-12	
Ethanol	83	77	34-124	7	0-44	

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: 08-04-0907
Preparation: EPA 5030B
Method: EPA 8260B

Project: ARCO 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-176	**Aqueous**	**GC/MS BB**	**04/16/08**	**04/17/08**	**080416L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	104	101	87-117	3	0-7	
Carbon Tetrachloride	94	95	78-132	0	0-8	
Chlorobenzene	104	103	88-118	1	0-8	
1,2-Dibromoethane	97	95	80-120	2	0-20	
1,2-Dichlorobenzene	105	105	88-118	0	0-8	
1,1-Dichloroethene	85	84	71-131	1	0-14	
Ethylbenzene	99	99	80-120	0	0-20	
Toluene	101	99	85-127	2	0-7	
Trichloroethene	109	108	85-121	1	0-11	
Vinyl Chloride	88	88	64-136	1	0-10	
Methyl-t-Butyl Ether (MTBE)	89	91	67-133	2	0-16	
Tert-Butyl Alcohol (TBA)	96	84	34-154	13	0-19	
Diisopropyl Ether (DIPE)	105	106	80-122	1	0-8	
Ethyl-t-Butyl Ether (ETBE)	102	105	73-127	2	0-11	
Tert-Amyl-Methyl Ether (TAME)	97	93	69-135	4	0-12	
Ethanol	92	97	34-124	6	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: 08-04-0907
Cameron Park, CA 95682-8861	Preparation: EPA 5030B
	Method: EPA 8260B

Project: ARCO 2111

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-178	**Aqueous**	**GC/MS BB**	**04/17/08**	**04/17/08**	**080417L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	102	104	87-117	2	0-7	
Carbon Tetrachloride	94	95	78-132	0	0-8	
Chlorobenzene	101	102	88-118	1	0-8	
1,2-Dibromoethane	103	105	80-120	2	0-20	
1,2-Dichlorobenzene	105	105	88-118	0	0-8	
1,1-Dichloroethene	83	81	71-131	2	0-14	
Ethylbenzene	99	101	80-120	2	0-20	
Toluene	100	102	85-127	1	0-7	
Trichloroethene	101	101	85-121	0	0-11	
Vinyl Chloride	90	91	64-136	1	0-10	
Methyl-t-Butyl Ether (MTBE)	92	89	67-133	3	0-16	
Tert-Butyl Alcohol (TBA)	101	97	34-154	4	0-19	
Diisopropyl Ether (DIPE)	100	93	80-122	7	0-8	
Ethyl-t-Butyl Ether (ETBE)	96	91	73-127	5	0-11	
Tert-Amyl-Methyl Ether (TAME)	95	98	69-135	2	0-12	
Ethanol	108	104	34-124	3	0-44	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-04-0907

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.
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

ORIGINAL

0907

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:	1200	Temp:	50's
Off-site Time:	1630	Temp:	Low 70's
Sky Conditions:	CLEAR/OVERCAST		
Meteorological Events:	—		
Wind Speed:	—	Direction:	—

Lab Name:	Cal Science	BP/AR Facility No.:	2111
Address:	7440 Lincoln way	BP/AR Facility Address:	1156 Davis Street, San Leandro
	Garden Grove Ca. 92841-1427	Site Lat/Long:	
Lab PM:	Linda Sharpenberg	California Global ID No.:	T0600101764
Tele/Fax:	714-895-5494 714-895-7501 (fax)	Enfos Project No.:	G0C28-0029
BP/AR PM Contact:	Paul Supple	Provision or OOC (circle one)	Provision
Address:	2010 Crow Canyon Place, Suite 150	Phase/WBS:	04-Monitoring
	San Ramon, CA	Sub Phase/Task:	03-Analytical
Tele/Fax:	925-275-3506	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.		

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	All By 8260 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	1350	0408		X			6				X		X	X	X	X	X	X	
2	MW-2	1540																		
3	MW-3	1320																		
4	MW-4	1300																		
5	MW-5	1610																		
6	MW-7	1515																		
7	MW-8	1440																		
8																				
9	TB-2111-04082008	1230	0408		X			2												HOLD
10																				

Sampler's Name:	David DeMello	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company:	STRATUS ENVIRONMENTAL INC.	David DeMello / STRATUS	2008 04-09				
Shipment Date:	04-09-08						
Shipment Method:	GROUND						
Shipment Tracking No:	925538161 8					4/10/08	10:20

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 - 04 - 0907

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Stratus DATE: 4/10/08

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.
_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

3.6 °C Temperature blank.
_____ °C IR thermometer.
_____ Ambient temperature.

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	✓		
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: JP

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

Electronic Submittal Information

UPLOADING A GEO_WELL FILE

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

Submittal Title:	**2Q08 GEO_WELL 2111**
Facility Global ID:	**T0600101764**
Facility Name:	**ARCO #2111**
Submittal Date/Time:	**7/3/2008 10:40:55 AM**
Confirmation Number:	**9061680674**

Back to Main Menu

Electronic Submittal Information

Your EDF file has been successfully uploaded!

Confirmation Number: 9984218418
Date/Time of Submittal: 7/3/2008 11:01:50 AM
Facility Global ID: T0600101764
Facility Name: ARCO #2111
Submittal Title: 2Q08 GW Monitoring
Submittal Type: GW Monitoring Report

Click here to view the detections report for this upload.

ARCO #2111
1156 DAVIS
SAN LEANDRO, CA 94577

Regional Board - Case #: 01-1903
SAN FRANCISCO BAY RWQCB (REGION 2)
Local Agency (lead agency) - Case #: RO0000494
ALAMEDA COUNTY LOP - **(PK)**

CONF #	TITLE	QUARTER
9984218418	2Q08 GW Monitoring	Q2 2008

SUBMITTED BY	SUBMIT DATE	STATUS
Broadbent & Associates, Inc.	7/3/2008	PENDING REVIEW

SAMPLE DETECTIONS REPORT

# FIELD POINTS SAMPLED	7
# FIELD POINTS WITH DETECTIONS	6
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	5
SAMPLE MATRIX TYPES	WATER

METHOD QA/QC REPORT

METHODS USED	M8015,SW8260B
TESTED FOR REQUIRED ANALYTES?	Y
LAB NOTE DATA QUALIFIERS	Y

QA/QC FOR 8021/8260 SERIES SAMPLES

TECHNICAL HOLDING TIME VIOLATIONS	0
METHOD HOLDING TIME VIOLATIONS	0
LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT	0
LAB BLANK DETECTIONS	0
DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING?	
- LAB METHOD BLANK	Y
- MATRIX SPIKE	Y
- MATRIX SPIKE DUPLICATE	Y
- BLANK SPIKE	Y
- SURROGATE SPIKE	Y

WATER SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	Y
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	Y
SURROGATE SPIKES % RECOVERY BETWEEN 85-115%	Y
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	Y

SOIL SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	n/a
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	n/a

SURROGATE SPIKES % RECOVERY BETWEEN 70-125%	n/a
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	n/a

FIELD QC SAMPLES

SAMPLE	COLLECTED	DETECTIONS > REPDL
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

ARCO #2111 - T0600101764
1156 DAVIS
SAN LEANDRO, CA 94577

CONF #	TITLE	QUARTER
8966393589	Monthly System Sampling 0408	Q2 2008

SUBMITTED BY	SUBMIT DATE	STATUS
Broadbent & Associates, Inc.	7/25/2008	PENDING REVIEW

SAMPLE DETECTIONS REPORT

# FIELD POINTS SAMPLED	11
# FIELD POINTS WITH DETECTIONS	9
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	0
SAMPLE MATRIX TYPES	VAPOR,WATER

METHOD QA/QC REPORT

METHODS USED	SW8260B,ETO15,ETO3,M8015
TESTED FOR REQUIRED ANALYTES?	Y
LAB NOTE DATA QUALIFIERS	Y

QA/QC FOR 8021/8260 SERIES SAMPLES

TECHNICAL HOLDING TIME VIOLATIONS	0
METHOD HOLDING TIME VIOLATIONS	0
LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT	0
LAB BLANK DETECTIONS	0
DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING?	
- LAB METHOD BLANK	n/a
- MATRIX SPIKE	n/a
- MATRIX SPIKE DUPLICATE	n/a
- BLANK SPIKE	n/a
- SURROGATE SPIKE	n/a

WATER SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	n/a
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	n/a
SURROGATE SPIKES % RECOVERY BETWEEN 85-115%	n/a
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	n/a

SOIL SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	n/a
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	n/a
SURROGATE SPIKES % RECOVERY BETWEEN 70-125%	n/a
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	n/a

FIELD QC SAMPLES

SAMPLE	COLLECTED	DETECTIONS > REPDL
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A EDF FILE

SUCCESS

Processing is complete. No errors were found!
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Submittal Type:	**SWI_R**
Submittal Title:	**Monthly System Sampling 0508**
Facility Global ID:	**T0600101764**
Facility Name:	**ARCO #2111**
File Name:	**08050578a.zip**
Organization Name:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**7/25/2008 2:45:42 PM**
Confirmation Number:	**4196302652**

VIEW QC REPORT

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 0608**
Facility Global ID:	**T0600101764**
Facility Name:	**ARCO #2111**
File Name:	**08060105a.zip**
Organization Name:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**7/25/2008 2:46:33 PM**
Confirmation Number:	**9004839837**

VIEW QC REPORT

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

May 6, 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: 3 (April 1, 14, and 22, 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 April 1, 2008. City of San Leandro also collected an effluent water sample on April1, 2008. A copy of their analytical report is included in the attachments.

Variations from Scope of Work: The DPE system was shutdown during a site visit conducted on March 17, 2008, due to float malfunction. The GETS was observed non-functioning on April 1, 2008, due to power failure. The floats were replaced on the DPE system on April 1, 2008 and the remediation systems were re-started momentarily on the same day and shutdown after sampling, pending receipt of analytical results. Upon receipt of analytical results and compliance verification, the remediation systems were re-started on April 14, 2008, but the DPE system shutdown immediately due to transfer pump contactor malfunction. The GETS was left

operational on April 14, 2008 and the DPE system will be re-started in May 2008 after replacing the contactor.

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

PROFESSIONAL GEOLOGIST
Jay R. Johnson
No. 5867
STATE OF CALIFORNIA

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
Groundwater Treatment System

ORIGINAL

Date: 4-1-08
Onsite Time: 0500
Offsite Time: 0845

Technician: CHILL
Weather Conditions: cloudy
Ambient Temperature: 40

System Status Upon Arrival: ☐ Operational ☒ Non-operational *
System Status At Departure: ☐ Operational ☒ Non-operational wait for lab
Transfer Pump: ☐ Operational ☒ Non-operational

Transfer Pump Hour Meter Reading: NA

Effluent Flow Totalizer Reading: 719174

No. of Carbon Vessels: 2

Lead Carbon Vessel Pressure (psi): 10

Effluent Water Characteristics
(Quarterly by Field Instrument)
pH: 8.1
Temperature: 13.1

Well ID	Hour Meter Reading	Totalizer Reading	Total Depth	Pump Depth	
MW-2		85574			

Sampling Information

Sample ID	Date & Time	Sample ID	Date & Time
02111DPEWINF	4108 0730	02111MW2WINF	4108 0735
02111ASWINF	0725		
02111ASWEFF	0719		
02111WGAC1	0714		
02111WEFF	0711		
TB21114108	0738		

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

Notes:
* No Power To Panel - Appears Main Breaker In Sub Panel BAD move on/off lever Power goes on/off | checking Further lose connection Tighten Everything system Back up

Signature: [signature] Date: 4-1-08

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

ORIGINAL

Date: 4105
Onsite Time: 0900
Offsite Time: 0945
Equipment Manufacturer/Model#

Technician: CHILL
Weather Conditions: Cloudy
Ambient Temperature: 40

System Information

System Status Upon Arrival:	Operational	☐	Non-Operational	☒
System Status Upon Departure:	Operational	☐	Non-Operational	☒ LAB (Unit)

Electric Meter Reading: NM
Hour Meter Reading: 1562
Totalizer Reading Prior to Air Stripper: 115588
PID Calibration Date: 4.1.08
Totalizer Reading After Air Stripper: 739880

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		1497			
Pipe Diameter, inches	3	4	4	3	
Air Flow Rate, cfm			180		
Applied Vacuum, "wc	22"Hg	.45	NA	NA	
Temperature, deg F	90	115	90		
PID Readings, ppmv	200	3.4	70	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	17					
MW-1	☒						
MW-3	☒						
MW-7	100	15					
MW-8	☒						

Signature: [signature]
Date: 4108

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	4/08 0754	02111AGAC1	4/08 0753
02111ASAEFF	" 0800	02111AEFF	" 0750
02111ASYSINF	" 0757		
Analyses Required: GRO, BTEX, and MTBE			

Operation & Maintenance Notes
Floats replaced.

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: 4-1-08

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

ORIGINAL

Date: 4-14-08
Onsite Time: 0500
Offsite Time: 0730
Equipment Manufacturer/Model#

Technician: CHILL
Weather Conditions: Cloudy
Ambient Temperature: 45

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒ Restart LAB Clear
System Status Upon Departure: Operational ☐ Non-Operational ☒
Electric Meter Reading: MM
Hour Meter Reading: 1562
Totalizer Reading Prior to Air Stripper: 116424 PID Calibration Date: 4-14-08
Totalizer Reading After Air Stripper: 740710

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		1771			
Pipe Diameter, inches	~~4~~ 3	4	4	3	
Air Flow Rate, cfm			190		
Applied Vacuum, "wc	20"Hg	.40	NA	NA	
Temperature, deg F		117	90		
PID Readings, ppmv	210	3	70	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	17					
V-2	50	18					
V-3	50	17					
MW-1	8	-					
MW-3	8	-					
MW-7	100	18					
MW8	50	17					

Signature: Chm/Md
Date: 4-14-08

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
DPE System Not Running BAD Contactor on Trans Pump. - Will order one
Trans Pump Runs Some Time Then Does Not

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: 4-14-05

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

ORIGINAL

Date: 4-14-08
Onsite Time: 0900
Offsite Time: 0730

Technician: CHILL
Weather Conditions: Clear
Ambient Temperature 75

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

Transfer Pump Hour Meter Reading: _____

Effluent Flow Totalizer Reading: 719881

No. of Carbon Vessels: 1

Lead Carbon Vessel Pressure (psi): 8

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

Well ID	Hour Meter Reading	Totalizer Reading	Total Depth	Pump Depth	
MW-2		862531			

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: 41408

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

ORIGINAL

Date: 42208
Onsite Time: 0500
Offsite Time: 0645
Equipment Manufacturer/Model#

Technician: CHILL
Weather Conditions: Cloudy
Ambient Temperature: 48

System Information

System Status Upon Arrival:	Operational	☐	Non-Operational	☒
System Status Upon Departure:	Operational	☐	Non-Operational	☒
Electric Meter Reading:	NM	Ran System for few minute.		
Hour Meter Reading:	1562			
Totalizer Reading Prior to Air Stripper:	156585	PID Calibration Date:	4.21.08	
Totalizer Reading After Air Stripper:	779660			

got wo… contacte…

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		1700			
Pipe Diameter, inches	3	4	4	3	
Air Flow Rate, cfm					
Applied Vacuum, "wc			NA	NA	
Temperature, deg F		115	80		
PID Readings, ppmv		4	3	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							
V-2							
V-3							
MW-1							
MW-3							
MW-7							

Signature: [signature]   Date: 42208

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: 42208

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

ORIGINAL

Date: 4-22-08
Onsite Time: 0500
Offsite Time: 0645

Technician: CHILC
Weather Conditions: Clouds
Ambient Temperature 48

System Status Upon Arrival: ☐ Operational ☑ Non-operational Filter Plugged Change Filters
System Status At Departure: ☒ Operational ☐ Non-operational
Transfer Pump: ☒ Operational ☐ Non-operational

Transfer Pump Hour Meter Reading: NA

Effluent Flow Totalizer Reading: 757683

No. of Carbon Vessels: 2

Lead Carbon Vessel Pressure (psi): 6

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

Well ID	Hour Meter Reading	Totalizer Reading	Total Depth	Pump Depth	
MW-2		127716			

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: 42208

Atlantic Richfield Company
bp
A BP affiliated company

Chain of Custody Record

ORIGINAL RUSH

Page 1 of 1

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: 0500	Temp: 40
Off-site Time: 0845	Temp: 48
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	

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	0758	4108			x		2	x					x	x	x			x	5-oxygenates requested are MTBE, DIPE, ETBE, TAME, and TBA.
2	02111ASAEFF	0500				x		2	x					x	x	x			x	
3	02111ASYSINF	0755				x		2	x					x	x	x			x	
4	02111AGAC1	0753				x		2	x					x	x	x			x	
5	02111AEFF	0750				x		2	x					x	x	x		x		
6	02111DPEWINF	0730			x			6				x		x	x		x		x	
7	02111ASWINF	0725			x			6				x		x	x		x		x	
8	02111ASWEFF	0719			x			6				x		x	x		x		x	
9	02111WGAC1	0714			x			6				x		x	x		x		x	
10	02111WEFF	0711			x			6				x		x	x		x		x	
11	02111MW2WINF	0734	4108		x			6				x		x	x		x	x		
								6				x		x	x		x		x	
	TB2111 4108	0758	4108					2												Hold

Sampler's Name:	Chris Hill	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company:	Stratus Environmental, Inc.		4108	1500			
Shipment Date:	4108						
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

E2111

APR 20 2008

COPY

City of San Leandro
Civic Center, 835 E. 14th Street
San Leandro, California 94577

April 17, 2008

Jay R. Johnson, Project Manager
Stratus Environmental, Inc.
3330 Cameron Park Drive, Ste 550
Cameron Park CA 95682

Dear Mr. Johnson:

Enclosed please find a copy of the laboratory results for the compliance samples collected 4/1/08 from the pretreatment system batch tank. Results of all parameters analyzed were in compliance with applicable discharge standards. These samples satisfy the second quarter sampling requirement of Special Discharge Permit SD-036. If you have any questions, please call me at (510) 577-6031.

Sincerely,

Tiffany Treece

Tiffany Treece
Environmental Protection Specialist

Enclosures

ANALYTICAL RESULTS

Lab Order: I040269

Project ID Industrial Discharge Monitorin

Lab ID: I040269001 Date Collected: 4/1/2008 07:45 Matrix: Water

Sample ID: 04/01/08\P;X28;X;GRAB Date Received: 4/3/2008 15:25

Parameters	Result	Units	R. L.	DF	Prepared	Batch	Analyzed	Batch	C
Client provided Data	**Analytical Method:** Client Method						**Analyzed by:** MPH		
pH	7.8	pH Units		1			04/01/08 00:00	CSV	
Volatile Organic Analysis	**Analytical Method:** EPA 624						**Analyzed by:** CWC		
Acetone	ND	ug/L	50	5			04/07/08 22:10	VMS 1866	1,
Acrolein	ND	ug/L	20	5			04/07/08 22:10	VMS 1866	
Benzene	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
Bromodichloromethane	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
Bromoform	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
Bromomethane (Methyl Bromide)	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
2-Butanone (MEK)	ND	ug/L	20	5			04/07/08 22:10	VMS 1866	
Carbon tetrachloride	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
Chlorobenzene	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
Chloroethane (Ethyl Chloride)	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
2-Chloroethyl vinyl ether	ND	ug/L	5.0	5			04/07/08 22:10	VMS 1866	
Chloroform	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
Chloromethane(Methyl Chloride)	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
Dibromochloromethane	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
1,2-Dichlorobenzene	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
1,3-Dichlorobenzene	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
1,4-Dichlorobenzene	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
Dichlorodifluoromethane (F-12)	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
1,1-Dichloroethane	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
1,2-Dichloroethane (EDC)	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
1,1-Dichloroethene	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
cis-1,2-Dichloroethene	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
trans-1,2-Dichloroethene	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
1,2-Dichloropropane	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
cis-1,3-Dichloropropene	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
trans-1,3-Dichloropropene	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
Dichlorotrifluoroethane (F123)	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
Ethylbenzene	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
2-Hexanone	ND	ug/L	20	5			04/07/08 22:10	VMS 1866	
Methyl tert-butyl ether (MTBE)	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
Methylene chloride	ND	ug/L	3.0	5			04/07/08 22:10	VMS 1866	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10	5			04/07/08 22:10	VMS 1866	
1,1,2,2-Tetrachloroethane	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
Tetrachloroethene (PCE)	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
Toluene	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
1,1,2-Trichloroethane	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	
1,1,1-Trichloroethane (TCA)	ND	ug/L	2.5	5			04/07/08 22:10	VMS 1866	

1885 North Kelly Road • Napa, California 94558
(707) 258-4000 • Fax: (707) 226-1001 • e-mail: info@caltestlabs.com

Caltest
ANALYTICAL LABORATORY
ENVIRONMENTAL ANALYSES

Wednesday, April 09, 2008

John Camp
City of San Leandro
Water Pollution Control Plant
835 East 14th Street
San Leandro, CA 94577

RE: Lab Order: I040269
Project ID: Industrial Discharge Monitorin

Collected By: Tiffany Treece
PO/Contract #: 46169

Dear John Camp:

Enclosed are the analytical results for sample(s) received by the laboratory on Thursday, April 03, 2008. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Enclosures

Project Manager: Mike Hamilton

Lab Director: Christine Horn

REPORT OF LABORATORY ANALYSIS

1885 North Kelly Road • Napa, California 94558
(707) 258-4000 • Fax: (707) 226-1001 • e-mail: info@caltestlabs.com

Calscience
Environmental
Laboratories, Inc.

April 08, 2008

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

Subject: **Calscience Work Order No.: 08-04-0127**
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 4/2/2008 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.

CASE NARRATIVE – 08-04-0127

Data Qualifiers - EPA 8260:

080405S02:

The % recoveries for benzene and toluene were bias low in the MS. The RPD's for benzene, toluene, DIPE and EtBE were outside acceptance criteria in the MS/MSD. The MS/MSD has been flagged "3, 4" or "4" within the report.

"3" = LN, AY
"4" = BA, AY

LN = MS and/or MSD below acceptance limits. See Blank Spike (LCS).
BA = Relative percent difference out of control
AY = Matrix Interference Suspected

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	04/02/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-04-0127
Cameron Park, CA 95682-8861		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ppm (v/v)
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	**08-04-0127-1-A**	**04/01/08 07:58**	**Air**	**GC/MS AA**	**N/A**	**04/02/08 20:43**	**080402L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	1.2	0.60	1200		Xylenes (total)	0.52	0.020	20	
Toluene	0.023	0.010	20		Methyl-t-Butyl Ether (MTBE)	14	2.4	1200	
Ethylbenzene	0.64	0.60	1200						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	90	57-129			1,2-Dichloroethane-d4	89	47-137		
Toluene-d8	120	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASAEFF	**08-04-0127-2-A**	**04/01/08 08:00**	**Air**	**GC/MS NN**	**N/A**	**04/02/08 15:44**	**080402L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.031	0.0080	16		Xylenes (total)	0.023	0.0010	1	
Toluene	0.0057	0.00050	1		Methyl-t-Butyl Ether (MTBE)	2.7	0.20	100	
Ethylbenzene	0.029	0.00050	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	98	57-129			1,2-Dichloroethane-d4	106	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	**08-04-0127-3-A**	**04/01/08 07:55**	**Air**	**GC/MS AA**	**N/A**	**04/02/08 22:13**	**080402L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.49	0.0050	10		Xylenes (total)	0.14	0.010	10	
Toluene	0.0098	0.0050	10		Methyl-t-Butyl Ether (MTBE)	5.9	0.80	400	
Ethylbenzene	0.29	0.0050	10						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	91	57-129			1,2-Dichloroethane-d4	92	47-137		
Toluene-d8	122	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111AGAC1	**08-04-0127-4-A**	**04/01/08 07:53**	**Air**	**GC/MS NN**	**N/A**	**04/02/08 18:12**	**080402L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.0023	0.00050	1		Xylenes (total)	0.0047	0.0010	1	
Toluene	0.0071	0.00050	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0020	1	
Ethylbenzene	0.0011	0.00050	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	96	57-129			1,2-Dichloroethane-d4	100	47-137		
Toluene-d8	100	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: 04/02/08
Work Order No: 08-04-0127
Preparation: N/A
Method: EPA TO-15
Units: ppm (v/v)

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	**08-04-0127-5-A**	**04/01/08 07:50**	**Air**	**GC/MS NN**	**N/A**	**04/02/08 14:56**	**080402L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.0028	0.00050	1		Xylenes (total)	0.0056	0.0010	1	
Toluene	0.0089	0.00050	1		Methyl-t-Butyl Ether (MTBE)	0.0039	0.0020	1	
Ethylbenzene	0.0012	0.00050	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	96	57-129		1,2-Dichloroethane-d4	102	47-137	
Toluene-d8	99	78-156					

Method Blank	097-09-002-6,984	N/A	Air	GC/MS AA	N/A	04/02/08 17:32	080402L01

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	91	57-129		1,2-Dichloroethane-d4	90	47-137	
Toluene-d8	100	78-156					

Method Blank	097-09-002-6,987	N/A	Air	GC/MS NN	N/A	04/02/08 11:33	080402L01

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	95	57-129		1,2-Dichloroethane-d4	102	47-137	
Toluene-d8	97	78-156					

Method Blank	097-09-002-6,988	N/A	Air	GC/MS NN	N/A	04/03/08 09:33	080403L01

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	93	57-129		1,2-Dichloroethane-d4	103	47-137	
Toluene-d8	97	78-156					

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	04/02/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-04-0127
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	**08-04-0127-1-A**	**04/01/08 07:58**	**Air**	**GC 19**	**N/A**	**04/02/08 16:55**	**080402L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	530	13	1		ppm (v/v)

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASAEFF	**08-04-0127-2-A**	**04/01/08 08:00**	**Air**	**GC 19**	**N/A**	**04/02/08 18:29**	**080402L01**

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	**08-04-0127-3-A**	**04/01/08 07:55**	**Air**	**GC 19**	**N/A**	**04/02/08 20:09**	**080402L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	160	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	**08-04-0127-4-A**	**04/01/08 07:53**	**Air**	**GC 19**	**N/A**	**04/02/08 20:52**	**080402L01**

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
02111AEFF	**08-04-0127-5-A**	**04/01/08 07:50**	**Air**	**GC 19**	**N/A**	**04/02/08 16:16**	**080402L01**

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	**099-12-693-24**	**N/A**	**Air**	**GC 19**	**N/A**	**04/02/08 07:32**	**080402L01**

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

Date Received: 04/02/08
Work Order No: 08-04-0127
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	**08-04-0127-6-F**	**04/01/08 07:30**	**Aqueous**	**GC 4**	**04/02/08**	**04/02/08 13:41**	**080402B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	640	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	108	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASWINF	**08-04-0127-7-F**	**04/01/08 07:25**	**Aqueous**	**GC 4**	**04/02/08**	**04/02/08 17:32**	**080402B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	410	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	93	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASWEFF	**08-04-0127-8-F**	**04/01/08 07:19**	**Aqueous**	**GC 4**	**04/02/08**	**04/02/08 18:05**	**080402B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	99	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111WGAC1	**08-04-0127-9-F**	**04/01/08 07:14**	**Aqueous**	**GC 4**	**04/02/08**	**04/02/08 18:38**	**080402B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	92	38-134			

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 04/02/08
Work Order No: 08-04-0127
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	**08-04-0127-10-F**	**04/01/08 07:11**	**Aqueous**	**GC 4**	**04/02/08**	**04/02/08 16:26**	**080402B01**

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111MW2WINF	**08-04-0127-11-D**	**04/01/08 07:35**	**Aqueous**	**GC 4**	**04/03/08**	**04/03/08 12:40**	**080403B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	770	50	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	94	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-695-91**	**N/A**	**Aqueous**	**GC 4**	**04/02/08**	**04/02/08 12:02**	**080402B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	93	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-695-92**	**N/A**	**Aqueous**	**GC 4**	**04/03/08**	**04/03/08 04:30**	**080403B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	84	38-134			

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	04/02/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-04-0127
Cameron Park, CA 95682-8861		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
02111DPEWINF	**08-04-0127-6-A**	**04/01/08 07:30**	**Aqueous**	**GC/MS Z**	**04/05/08**	**04/06/08 05:54**	**080405L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	23	5.0	10		Tert-Butyl Alcohol (TBA)	7900	1000	100	
Ethylbenzene	29	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)	17	5.0	10		Tert-Amyl-Methyl Ether (TAME)	11	5.0	10	
Methyl-t-Butyl Ether (MTBE)	2300	50	100						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	115	73-157		Dibromofluoromethane	116	82-142	
Toluene-d8	99	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	**08-04-0127-7-A**	**04/01/08 07:25**	**Aqueous**	**GC/MS Z**	**04/05/08**	**04/06/08 06:24**	**080405L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	16	2.5	5		Tert-Butyl Alcohol (TBA)	2300	500	50	
Ethylbenzene	12	2.5	5		Diisopropyl Ether (DIPE)	ND	2.5	5	
Toluene	ND	2.5	5		Ethyl-t-Butyl Ether (ETBE)	ND	2.5	5	
Xylenes (total)	7.7	2.5	5		Tert-Amyl-Methyl Ether (TAME)	5.1	2.5	5	
Methyl-t-Butyl Ether (MTBE)	860	25	50						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	117	73-157		Dibromofluoromethane	116	82-142	
Toluene-d8	100	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
02111ASWEFF	**08-04-0127-8-A**	**04/01/08 07:19**	**Aqueous**	**GC/MS Z**	**04/02/08**	**04/02/08 18:44**	**080402L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	1700	200	20	
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)	38	10	20						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	96	73-157		Dibromofluoromethane	97	82-142	
Toluene-d8	100	82-112		1,4-Bromofluorobenzene	99	75-105	

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

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

Date Received: 04/02/08
Work Order No: 08-04-0127
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	**08-04-0127-9-A**	**04/01/08 07:14**	**Aqueous**	**GC/MS Z**	**04/05/08**	**04/06/08 06:54**	**080405L02**

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	120	73-157		Dibromofluoromethane	119	82-142	
Toluene-d8	100	82-112		1,4-Bromofluorobenzene	94	75-105	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111WEFF	**08-04-0127-10-A**	**04/01/08 07:11**	**Aqueous**	**GC/MS Z**	**04/03/08**	**04/03/08 12:48**	**080403L01**

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	110	73-157		Dibromofluoromethane	108	82-142	
Toluene-d8	99	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
02111MW2WINF	**08-04-0127-11-A**	**04/01/08 07:35**	**Aqueous**	**GC/MS Z**	**04/05/08**	**04/06/08 07:24**	**080405L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	45	5.0	10		Tert-Butyl Alcohol (TBA)	1100	100	10	
Ethylbenzene	48	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)	12	5.0	10		Tert-Amyl-Methyl Ether (TAME)	ND	5.0	10	
Methyl-t-Butyl Ether (MTBE)	590	25	50						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	118	73-157		Dibromofluoromethane	120	82-142	
Toluene-d8	100	82-112		1,4-Bromofluorobenzene	96	75-105	

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

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

Date Received: 04/02/08
Work Order No: 08-04-0127
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	**099-12-703-140**	**N/A**	**Aqueous**	**GC/MS Z**	**04/02/08**	**04/02/08 12:02**	**080402L01**

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	106	73-157		Dibromofluoromethane	104	82-142	
Toluene-d8	100	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	**099-12-703-141**	**N/A**	**Aqueous**	**GC/MS Z**	**04/02/08**	**04/03/08 00:45**	**080402L02**

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	99	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	**099-12-703-142**	**N/A**	**Aqueous**	**GC/MS Z**	**04/03/08**	**04/03/08 12:18**	**080403L01**

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	106	73-157		Dibromofluoromethane	106	82-142	
Toluene-d8	99	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.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 04/02/08
Work Order No: 08-04-0127
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	**099-12-703-152**	**N/A**	**Aqueous**	**GC/MS Z**	**04/05/08**	**04/06/08 01:23**	**080405L02**

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	113	82-142	
Toluene-d8	100	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	**099-12-703-153**	**N/A**	**Aqueous**	**GC/MS BB**	**04/07/08**	**04/07/08 12:44**	**080407L01**

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	93	73-157		Dibromofluoromethane	95	82-142	
Toluene-d8	101	82-112		1,4-Bromofluorobenzene	101	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: 04/02/08
Work Order No: 08-04-0127
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
02111DPEAINF	**Air**	**GC 19**	**N/A**	**04/02/08**	**080402D01**

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	530	550	4	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	04/02/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-04-0127
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
02111DPEWINF	**Aqueous**	**GC 4**	**04/02/08**	**04/02/08**	**080402S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	108	111	38-134	2	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	04/02/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-04-0127
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
02111MW2WINF	**Aqueous**	**GC 4**	**04/03/08**	**04/03/08**	**080403S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	106	90	38-134	12	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: 04/02/08
Work Order No: 08-04-0127
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
08-03-2067-16	**Aqueous**	**GC/MS Z**	**04/02/08**	**04/02/08**	**080402S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	112	112	86-122	0	0-8	
Carbon Tetrachloride	112	112	78-138	0	0-9	
Chlorobenzene	107	108	90-120	0	0-9	
1,2-Dibromoethane	111	103	70-130	8	0-30	
1,2-Dichlorobenzene	111	109	89-119	2	0-10	
1,1-Dichloroethene	115	114	52-142	1	0-23	
Ethylbenzene	112	115	70-130	3	0-30	
Toluene	111	111	85-127	1	0-12	
Trichloroethene	108	108	78-126	0	0-10	
Vinyl Chloride	110	100	56-140	10	0-21	
Methyl-t-Butyl Ether (MTBE)	129	116	64-136	11	0-28	
Tert-Butyl Alcohol (TBA)	113	111	27-183	1	0-60	
Diisopropyl Ether (DIPE)	118	111	78-126	6	0-16	
Ethyl-t-Butyl Ether (ETBE)	131	123	67-133	6	0-21	
Tert-Amyl-Methyl Ether (TAME)	131	119	63-141	10	0-21	
Ethanol	90	95	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: 04/02/08
Work Order No: 08-04-0127
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
08-03-2341-4	**Aqueous**	**GC/MS Z**	**04/02/08**	**04/03/08**	**080402S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	109	115	86-122	5	0-8	
Carbon Tetrachloride	109	114	78-138	5	0-9	
Chlorobenzene	106	109	90-120	3	0-9	
1,2-Dibromoethane	105	113	70-130	7	0-30	
1,2-Dichlorobenzene	108	110	89-119	2	0-10	
1,1-Dichloroethene	110	117	52-142	5	0-23	
Ethylbenzene	112	113	70-130	1	0-30	
Toluene	109	112	85-127	3	0-12	
Trichloroethene	106	110	78-126	3	0-10	
Vinyl Chloride	97	103	56-140	6	0-21	
Methyl-t-Butyl Ether (MTBE)	117	132	64-136	11	0-28	
Tert-Butyl Alcohol (TBA)	113	111	27-183	2	0-60	
Diisopropyl Ether (DIPE)	109	120	78-126	9	0-16	
Ethyl-t-Butyl Ether (ETBE)	122	133	67-133	9	0-21	
Tert-Amyl-Methyl Ether (TAME)	120	130	63-141	8	0-21	
Ethanol	93	104	11-167	12	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: 04/02/08
Work Order No: 08-04-0127
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**	**04/03/08**	**04/03/08**	**080403S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	110	103	86-122	6	0-8	
Carbon Tetrachloride	114	106	78-138	7	0-9	
Chlorobenzene	107	101	90-120	6	0-9	
1,2-Dibromoethane	110	104	70-130	6	0-30	
1,2-Dichlorobenzene	107	102	89-119	4	0-10	
1,1-Dichloroethene	113	107	52-142	6	0-23	
Ethylbenzene	112	105	70-130	7	0-30	
Toluene	109	103	85-127	5	0-12	
Trichloroethene	109	101	78-126	8	0-10	
Vinyl Chloride	101	91	56-140	11	0-21	
Methyl-t-Butyl Ether (MTBE)	113	108	64-136	5	0-28	
Tert-Butyl Alcohol (TBA)	111	105	27-183	5	0-60	
Diisopropyl Ether (DIPE)	111	105	78-126	6	0-16	
Ethyl-t-Butyl Ether (ETBE)	113	108	67-133	4	0-21	
Tert-Amyl-Methyl Ether (TAME)	110	106	63-141	4	0-21	
Ethanol	104	104	11-167	0	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: 04/02/08
Work Order No: 08-04-0127
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
08-03-2572-5	**Aqueous**	**GC/MS Z**	**04/05/08**	**04/06/08**	**080405S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	82	109	86-122	28	0-8	3,4
Carbon Tetrachloride	89	123	78-138	33	0-9	4
Chlorobenzene	86	107	90-120	22	0-9	3,4
1,2-Dibromoethane	85	100	70-130	16	0-30	
1,2-Dichlorobenzene	88	105	89-119	17	0-10	3,4
1,1-Dichloroethene	80	111	52-142	32	0-23	4
Ethylbenzene	84	107	70-130	24	0-30	
Toluene	84	108	85-127	25	0-12	3,4
Trichloroethene	79	106	78-126	29	0-10	4
Vinyl Chloride	105	95	56-140	9	0-21	
Methyl-t-Butyl Ether (MTBE)	78	99	64-136	24	0-28	
Tert-Butyl Alcohol (TBA)	99	105	27-183	6	0-60	
Diisopropyl Ether (DIPE)	93	121	78-126	26	0-16	4
Ethyl-t-Butyl Ether (ETBE)	76	99	67-133	27	0-21	4
Tert-Amyl-Methyl Ether (TAME)	65	80	63-141	21	0-21	
Ethanol	116	117	11-167	0	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: 04/02/08
Work Order No: 08-04-0127
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
08-04-0548-3	**Aqueous**	**GC/MS BB**	**04/07/08**	**04/07/08**	**080407S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	109	107	86-122	1	0-8	
Carbon Tetrachloride	89	89	78-138	0	0-9	
Chlorobenzene	100	102	90-120	1	0-9	
1,2-Dibromoethane	97	95	70-130	2	0-30	
1,2-Dichlorobenzene	99	96	89-119	3	0-10	
1,1-Dichloroethene	87	88	52-142	0	0-23	
Ethylbenzene	98	97	70-130	1	0-30	
Toluene	103	101	85-127	2	0-12	
Trichloroethene	100	99	78-126	1	0-10	
Vinyl Chloride	81	83	56-140	2	0-21	
Methyl-t-Butyl Ether (MTBE)	85	85	64-136	0	0-28	
Tert-Butyl Alcohol (TBA)	108	96	27-183	12	0-60	
Diisopropyl Ether (DIPE)	83	89	78-126	7	0-16	
Ethyl-t-Butyl Ether (ETBE)	88	90	67-133	2	0-21	
Tert-Amyl-Methyl Ether (TAME)	96	93	63-141	3	0-21	
Ethanol	62	51	11-167	21	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: 08-04-0127
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
097-09-002-6,984	**Air**	**GC/MS AA**	**N/A**	**04/02/08**	**080402L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	117	116	60-156	1	0-40	
Toluene	113	111	56-146	2	0-43	
Ethylbenzene	113	110	52-154	2	0-38	
p/m-Xylene	107	105	42-156	2	0-41	
o-Xylene	105	101	52-148	4	0-38	

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: 08-04-0127
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
097-09-002-6,987	**Air**	**GC/MS NN**	**N/A**	**04/02/08**	**080402L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	122	116	60-156	5	0-40	
Toluene	121	119	56-146	2	0-43	
Ethylbenzene	119	118	52-154	1	0-38	
p/m-Xylene	117	115	42-156	2	0-41	
o-Xylene	118	116	52-148	2	0-38	

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: 08-04-0127
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
097-09-002-6,988	**Air**	**GC/MS NN**	**N/A**	**04/03/08**	**080403L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	119	119	60-156	0	0-40	
Toluene	120	119	56-146	1	0-43	
Ethylbenzene	117	116	52-154	1	0-38	
p/m-Xylene	114	114	42-156	1	0-41	
o-Xylene	116	114	52-148	1	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: 08-04-0127
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
099-12-695-91	**Aqueous**	**GC 4**	**04/02/08**	**04/02/08**	**080402B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	98	94	78-120	4	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:	08-04-0127
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
099-12-695-92	**Aqueous**	**GC 4**	**04/03/08**	**04/03/08**	**080403B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	95	104	78-120	8	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: 08-04-0127
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
099-12-703-140	**Aqueous**	**GC/MS Z**	**04/02/08**	**04/02/08**	**080402L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	109	109	87-117	0	0-7	
Carbon Tetrachloride	109	109	78-132	1	0-8	
Chlorobenzene	106	106	88-118	0	0-8	
1,2-Dibromoethane	108	107	80-120	1	0-20	
1,2-Dichlorobenzene	105	106	88-118	1	0-8	
1,1-Dichloroethene	112	111	71-131	0	0-14	
Ethylbenzene	111	112	80-120	1	0-20	
Toluene	107	109	85-127	1	0-7	
Trichloroethene	106	109	85-121	3	0-11	
Vinyl Chloride	94	97	64-136	2	0-10	
Methyl-t-Butyl Ether (MTBE)	111	110	67-133	0	0-16	
Tert-Butyl Alcohol (TBA)	107	108	34-154	1	0-19	
Diisopropyl Ether (DIPE)	108	107	80-122	1	0-8	
Ethyl-t-Butyl Ether (ETBE)	112	111	73-127	1	0-11	
Tert-Amyl-Methyl Ether (TAME)	110	110	69-135	0	0-12	
Ethanol	101	99	34-124	2	0-44	

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: 08-04-0127
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
099-12-703-141	**Aqueous**	**GC/MS Z**	**04/02/08**	**04/02/08**	**080402L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	104	106	87-117	3	0-7	
Carbon Tetrachloride	101	107	78-132	6	0-8	
Chlorobenzene	99	103	88-118	3	0-8	
1,2-Dibromoethane	105	104	80-120	1	0-20	
1,2-Dichlorobenzene	103	107	88-118	4	0-8	
1,1-Dichloroethene	105	110	71-131	5	0-14	
Ethylbenzene	105	110	80-120	4	0-20	
Toluene	101	106	85-127	4	0-7	
Trichloroethene	106	110	85-121	4	0-11	
Vinyl Chloride	92	96	64-136	3	0-10	
Methyl-t-Butyl Ether (MTBE)	120	114	67-133	5	0-16	
Tert-Butyl Alcohol (TBA)	106	104	34-154	1	0-19	
Diisopropyl Ether (DIPE)	102	104	80-122	1	0-8	
Ethyl-t-Butyl Ether (ETBE)	121	118	73-127	3	0-11	
Tert-Amyl-Methyl Ether (TAME)	126	120	69-135	5	0-12	
Ethanol	84	80	34-124	5	0-44	

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: 08-04-0127
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
099-12-703-142	**Aqueous**	**GC/MS Z**	**04/03/08**	**04/03/08**	**080403L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	107	107	87-117	0	0-7	
Carbon Tetrachloride	107	107	78-132	0	0-8	
Chlorobenzene	105	103	88-118	1	0-8	
1,2-Dibromoethane	108	106	80-120	2	0-20	
1,2-Dichlorobenzene	106	106	88-118	1	0-8	
1,1-Dichloroethene	106	108	71-131	2	0-14	
Ethylbenzene	108	108	80-120	0	0-20	
Toluene	106	107	85-127	1	0-7	
Trichloroethene	104	104	85-121	0	0-11	
Vinyl Chloride	93	95	64-136	1	0-10	
Methyl-t-Butyl Ether (MTBE)	113	113	67-133	1	0-16	
Tert-Butyl Alcohol (TBA)	107	105	34-154	1	0-19	
Diisopropyl Ether (DIPE)	107	109	80-122	1	0-8	
Ethyl-t-Butyl Ether (ETBE)	111	113	73-127	1	0-11	
Tert-Amyl-Methyl Ether (TAME)	111	111	69-135	0	0-12	
Ethanol	103	86	34-124	18	0-44	

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: 08-04-0127
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
099-12-703-152	Aqueous	GC/MS Z	04/05/08	04/05/08	080405L02

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	94	98	87-117	5	0-7	
Carbon Tetrachloride	104	111	78-132	7	0-8	
Chlorobenzene	94	101	88-118	7	0-8	
1,2-Dibromoethane	94	100	80-120	6	0-20	
1,2-Dichlorobenzene	94	98	88-118	4	0-8	
1,1-Dichloroethene	97	105	71-131	8	0-14	
Ethylbenzene	95	103	80-120	8	0-20	
Toluene	94	99	85-127	5	0-7	
Trichloroethene	97	103	85-121	7	0-11	
Vinyl Chloride	107	109	64-136	3	0-10	
Methyl-t-Butyl Ether (MTBE)	81	83	67-133	2	0-16	
Tert-Butyl Alcohol (TBA)	86	92	34-154	6	0-19	
Diisopropyl Ether (DIPE)	94	97	80-122	3	0-8	
Ethyl-t-Butyl Ether (ETBE)	78	80	73-127	2	0-11	
Tert-Amyl-Methyl Ether (TAME)	70	73	69-135	4	0-12	
Ethanol	103	116	34-124	12	0-44	

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: 08-04-0127
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
099-12-703-153	Aqueous	GC/MS BB	04/07/08	04/07/08	080407L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	104	108	87-117	3	0-7	
Carbon Tetrachloride	92	91	78-132	1	0-8	
Chlorobenzene	102	103	88-118	1	0-8	
1,2-Dibromoethane	93	94	80-120	0	0-20	
1,2-Dichlorobenzene	98	98	88-118	0	0-8	
1,1-Dichloroethene	90	90	71-131	0	0-14	
Ethylbenzene	103	103	80-120	1	0-20	
Toluene	101	102	85-127	1	0-7	
Trichloroethene	100	101	85-121	1	0-11	
Vinyl Chloride	83	81	64-136	2	0-10	
Methyl-t-Butyl Ether (MTBE)	81	82	67-133	1	0-16	
Tert-Butyl Alcohol (TBA)	96	95	34-154	1	0-19	
Diisopropyl Ether (DIPE)	85	88	80-122	3	0-8	
Ethyl-t-Butyl Ether (ETBE)	83	87	73-127	5	0-11	
Tert-Amyl-Methyl Ether (TAME)	90	91	69-135	2	0-12	
Ethanol	61	61	34-124	1	0-44	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-04-0127

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.
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

0127

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:	0500	Temp:	40
Off-site Time:	0845	Temp:	48
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	0758	4108			x		2	x					x	x	x			x	5-oxygenates requested are MTBE, DIPE, ETBE, TAME, and TBA.
2	02111ASAEFF	0800				x		2	x					x	x	x			x	
3	02111ASYSINF	0755				x		2	x					x	x	x			x	
4	02111AGAC1	0753				x		2	x					x	x	x			x	
5	02111AEFF	0750				x		2	x					x	x	x		x		
6	02111DPEWINF	0730			x			6				x		x	x		x		x	
7	02111ASWINF	0725			x			6				x		x	x		x		x	
8	02111ASWEFF	0719			x			6				x		x	x		x		x	
9	02111WGAC1	0714			x			6				x		x	x		x		x	
10	02111WEFF	0711			x			6				x		x	x		x	x		
11	02111MW2WINF	0734	4108		x			6				x		x	x		x		x	
12	TB2111 4108	0758	4108					2												Hold

Sampler's Name: Chris Hill	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Stratus Environmental, Inc.	Stratus	4108	1500			
Shipment Date: 4108						
Shipment Method: GSO						
Shipment Tracking No: 925526159 7					4/2/08	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

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 0 4 - 0 1 2 7

Cooler 1 of 2

SAMPLE RECEIPT FORM

CLIENT: Stratus DATE: 4/2/08

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.
_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

3.2 °C Temperature blank.
_____ °C IR thermometer.
_____ Ambient temperature.

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	✓		
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: JP

COMMENTS:

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 04 - 0127

Cooler 2 of 2

SAMPLE RECEIPT FORM

CLIENT: Stratus DATE: 4/2/08

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.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

_____ °C Temperature blank.
_____ °C IR thermometer.
✓ Ambient temperature.

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	✓		
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: JP

COMMENTS:

STRATUS
ENVIRONMENTAL, INC.

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

June 2, 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 (May 6, 12, 20, 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 May 6, 2008.

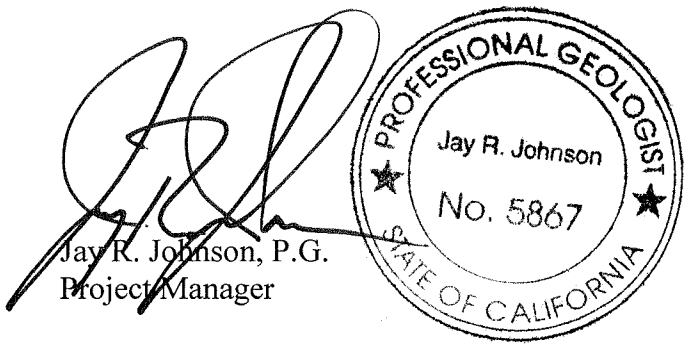
Variations from Scope of Work: The DPE system was shutdown on April 14, 2008, due to transfer pump contactor malfunction. The contactor was replaced and the DPE system was re-started on May 6, 2008. Per directions with BP-ARCO and Broadbent and Associates, Inc., the site visit frequency was changed to weekly from bi-monthly.

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: 5-6-08
Onsite Time: 0515
Offsite Time: 0745
Equipment Manufacturer/Model#

Technician: CHILL
Weather Conditions: Clear
Ambient Temperature: 48

System Information

System Status Upon Arrival:	Operational	☐	Non-Operational	☒	Restart
System Status Upon Departure:	Operational	☒	Non-Operational	☐	

Electric Meter Reading: N/M
Hour Meter Reading: 1564
Totalizer Reading Prior to Air Stripper: 211354
PID Calibration Date: 4-28-08
Totalizer Reading After Air Stripper: 830030

Field Measurements

Parameter	Influent (after blower, 2111DPEAINF)	Air Stripper (2111ASAEFF)	System Influent (2111ASYSINF)	Stack Air Flow (2111AEFF)	Comments
Differential Pressure, "wc		25 "HZO			
Air Velocity, FPM		2030			
Pipe Diameter, inches	3	4	4	3	
Air Flow Rate, cfm			190		
Applied Vacuum, "wc	20 "Hg	.40 "HZO	NA	NA	
Temperature, deg F		128	108		
PID Readings, ppmv	102	1	56	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	0					
MW-3	0	0					
MW-7	100	15					
Manifold	0						

Signature: [signature]
Date: 5-6-08

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	5/6/08 0702	02111AGAC1	5/6/08 0656
02111ASAEFF	0700	02111AEFF	0654
02111ASYSINF	0658		
Analyses Required: GRO, BTEX, and MTBE			

Operation & Maintenance Notes

Install New contact Air Trans pump For DPE system Restart

Install New Magnetic gauge on Air Stripper

Clean Strainers

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: 5/6/08

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

ORIGINAL

Date: 5-6-08
Onsite Time: 0615
Offsite Time: 0745

Technician: CHILL
Weather Conditions: Clear/cloudy
Ambient Temperature 48

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

Transfer Pump Hour Meter Reading: NA

Effluent Flow Totalizer Reading: 806356

No. of Carbon Vessels: 2

Lead Carbon Vessel Pressure (psi): 10

~~Effluent Water Characteristics~~
(Quarterly by Field Instrument)
pH: 7.8
Temperature: 15.1 °C

Well ID	~~Hour Meter Reading~~	Totalizer Reading	Total Depth	Pump Depth	
MW-2	182137				

182100

Sampling Information

Sample ID	Date & Time	Sample ID	Date & Time
02111DPEWINF	5608 0630	02111MW2WINF	5608 0645
02111ASWINF	0625		
02111ASWEFF	0620		
02111WGAC1	0614		
02111WEFF	0611		
TB2111 5008	0650		

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

Notes:

Signature: [signature] Date: 5608

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

ORIGINAL

Date: 5-12-08
Onsite Time: 0945
Offsite Time: 0540
Equipment Manufacturer/Model#

Technician: CHM
Weather Conditions: Clear
Ambient Temperature: 45

System Information

System Status Upon Arrival: Operational [X] Non-Operational [ ]
System Status Upon Departure: Operational [X] Non-Operational [ ]
Electric Meter Reading: NM
Hour Meter Reading: 1705
Totalizer Reading Prior to Air Stripper: 253510
PID Calibration Date: 5-12-08
Totalizer Reading After Air Stripper: 868640

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		2116			
Pipe Diameter, inches					
Air Flow Rate, cfm			190		
Applied Vacuum, "wc	18" Hg	.25	NA	NA	
Temperature, deg F		134	116		
PID Readings, ppmv	11	0	11	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	12					
V-2	50	12					
V-3	50	12					
MW-1	0						
MW-3	0						
MW-7	100	12					
MW-5	100	12					

Signature: [signature]
Date: 5/20/08

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: 51208

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

ORIGINAL

Date: 51208
Onsite Time: 0445
Offsite Time: 0540

Technician: CHILL
Weather Conditions: Clear
Ambient Temperature 48

System Status Upon Arrival: [X] Operational [ ] Non-operational
System Status At Departure: [X] Operational [ ] Non-operational
Transfer Pump: [X] Operational [ ] Non-operational

Transfer Pump Hour Meter Reading: _____

Effluent Flow Totalizer Reading: 822743

No. of Carbon Vessels: 2

Lead Carbon Vessel Pressure (psi): 10

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

Well ID	Hour Meter Reading	Totalizer Reading	Total Depth	Pump Depth	
MW-2		204300			

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: 5-12-08

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

ORIGINAL

Date: 5-20-08
Onsite Time: 0700
Offsite Time: 0800
Equipment Manufacturer/Model#

Technician: CHILL
Weather Conditions: Cloud
Ambient Temperature: 45

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: 1706
Totalizer Reading Prior to Air Stripper: 253876
PID Calibration Date: 5-20-08
Totalizer Reading After Air Stripper: 868970

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		2300			
Pipe Diameter, inches					
Air Flow Rate, cfm			180		
Applied Vacuum, "wc	20 "HG	.40	NA	NA	
Temperature, deg F		124	95		
PID Readings, ppmv	133	3	68	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	open				
MW-7	100	15					
MW-8	100	0	close				

Signature: [signature]
Date: 52008

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
Opened MW-3 now we have concentrations last visit Did not have MW-3 open only had 11 PPM Now have 133 MW-3 by waste oil tank
Will have to change Filters water Every other week was 3 weeks From last change
Clean stingers

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: 5 2008

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

ORIGINAL

Date: 5-20-08
Onsite Time: 0700
Offsite Time: 0800

Technician: CHILL
Weather Conditions: Clear
Ambient Temperature 48

System Status Upon Arrival: ☐ Operational ☒ Non-operational High level oil/water separ. Filters Plugged/change
System Status At Departure: ☒ Operational ☐ Non-operational
Transfer Pump: ☒ Operational ☐ Non-operational

Transfer Pump Hour Meter Reading: NA

Effluent Flow Totalizer Reading: 844640

No. of Carbon Vessels: 10

Lead Carbon Vessel Pressure (psi):

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

Well ID	Hour Meter Reading	Totalizer Reading	Total Depth	Pump Depth	
MW-2		204500			

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:
Change Water Filters

Signature: [signature] Date: 5 20 08

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

ORIGINAL

Date: 5.27.08
Onsite Time: 0615
Offsite Time: 0720
Equipment Manufacturer/Model#

Technician: CHICC
Weather Conditions: Clouds
Ambient Temperature: 48

System Information

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

Electric Meter Reading: NM
Hour Meter Reading: 1874
Totalizer Reading Prior to Air Stripper: 331410
PID Calibration Date: 5.27.08
Totalizer Reading After Air Stripper: 941230

Field Measurements

Parameter	Influent (after blower, 2111DPEAINF)	Air Stripper (2111ASAEFF)	System Influent (2111ASYSINF)	Stack Air Flow (2111AEFF)	Comments
Differential Pressure, "wc		26			
Air Velocity, FPM		2114			
Pipe Diameter, inches	3	4	4	3	
Air Flow Rate, cfm			190		
Applied Vacuum, "wc	16"Hg	.30	NA	NA	
Temperature, deg F		135	120		
PID Readings, ppmv	27	1	16	4	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	10					
V-2	50	10					
V-3	50	10					
MW-1	~~0~~	~~0~~					
MW-3	100	10					
MW-7	100	10					
MW8	~~0~~	~~0~~					

Signature: [signature]
Date: 52708

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: 52708

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

ORIGINAL

Date: 5 2 7 08
Onsite Time: 0615
Offsite Time: 0720

Technician: CHAD
Weather Conditions: 48
Ambient Temperature: Cloudy

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

Transfer Pump Hour Meter Reading: NA

Effluent Flow Totalizer Reading: 914563

No. of Carbon Vessels: 2

Lead Carbon Vessel Pressure (psi): 10

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

Well ID	Hour Meter Reading	Totalizer Reading	Total Depth	Pump Depth	
MW-2		231700			

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: 5 2 7 08

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: 0515	Temp: 48
Off-site Time: 0745	Temp:
Sky Conditions: Clouds/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:	shaves@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	0702	5/05			x		2	x					x	x	x			x	5-oxygenates requested are MTBE, DIPE, ETBE, TAME, and TBA.
2	02111ASAEFF	0702				x		2	x					x	x	x			x	
3	02111ASYSINF	0658				x		2	x					x	x	x			x	
4	02111AGAC1	0656				x		2	x					x	x	x			x	
5	02111AEFF	0654				x		2	x					x	x	x			x	
6	02111DPEWINF	0630			x			4				x		x	x		x		x	
7	02111ASWINF	0624			x			6				x		x	x		x		x	
8	02111ASWEFF	0626			x			6				x		x	x		x		x	
9	02111WGAC1	0614			x			6				x		x	x		x		x	
10	02111WEFF	0611			x			6				x		x	x		x		x	
11	02111MW2WINF	0644			x			6				x		x	x		x		x	
	TB2111560 5	0650						2												Hold

Sampler's Name:	Chris Hill	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company:	Stratus Environmental, Inc.						
Shipment Date:	5/05		5/05	1600			
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

Calscience
Environmental
Laboratories, Inc.

May 21, 2008

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

Subject: **Calscience Work Order No.:** **08-05-0578**
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 5/7/2008 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.

CASE NARRATIVE – 08-05-0578

Data Qualifiers - EPA 8260:

080507S01:

The % recoveries for MtBE were below acceptance criteria in the MS/MSD. The % recoveries were within criteria in the LCS/LCSD. The MS/MSD has been flagged "3" within the report.

"3" = LN, AY

LN = MS and/or MSD below acceptance limits. See Blank Spike (LCS).
AY = Matrix Interference Suspected

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received: 05/07/08
3330 Cameron Park Drive, Suite 550	Work Order No: 08-05-0578
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	**08-05-0578-1-A**	**05/06/08 07:02**	**Air**	**GC/MS II**	**N/A**	**05/07/08 17:00**	**080507L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.88	0.048	95		Xylenes (total)	0.52	0.095	95	
Toluene	0.25	0.048	95		Methyl-t-Butyl Ether (MTBE)	8.6	1.9	950	
Ethylbenzene	1.4	0.048	95						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	107	57-129			1,2-Dichloroethane-d4	108	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	**08-05-0578-2-A**	**05/06/08 07:00**	**Air**	**GC/MS II**	**N/A**	**05/07/08 16:13**	**080507L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.0014	0.00050	1		Xylenes (total)	0.0013	0.0010	1	
Toluene	0.0019	0.00050	1		Methyl-t-Butyl Ether (MTBE)	1.4	0.080	40	
Ethylbenzene	0.00073	0.00050	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	98	57-129			1,2-Dichloroethane-d4	104	47-137		
Toluene-d8	91	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASYSINF	**08-05-0578-3-A**	**05/06/08 06:58**	**Air**	**GC/MS AA**	**N/A**	**05/08/08 13:10**	**080508L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.31	0.025	50		Xylenes (total)	0.19	0.050	50	
Toluene	0.45	0.025	50		Methyl-t-Butyl Ether (MTBE)	7.4	1.0	500	
Ethylbenzene	0.48	0.025	50						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	96	57-129			1,2-Dichloroethane-d4	99	47-137		
Toluene-d8	86	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111AGAC1	**08-05-0578-4-A**	**05/06/08 06:56**	**Air**	**GC/MS AA**	**N/A**	**05/08/08 13:57**	**080508L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0016	3.2		Xylenes (total)	ND	0.0032	3.2	
Toluene	0.0017	0.0016	3.2		Methyl-t-Butyl Ether (MTBE)	0.39	0.040	20	
Ethylbenzene	ND	0.0016	3.2						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	93	57-129			1,2-Dichloroethane-d4	92	47-137		
Toluene-d8	94	78-156							

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	05/07/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-05-0578
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	**08-05-0578-5-A**	**05/06/08 06:54**	**Air**	**GC/MS II**	**N/A**	**05/07/08 14:39**	**080507L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.00050	1		Xylenes (total)	ND	0.0010	1	
Toluene	0.00062	0.00050	1		Methyl-t-Butyl Ether (MTBE)	4.3	0.20	100	
Ethylbenzene	ND	0.00050	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	97	57-129			1,2-Dichloroethane-d4	114	47-137		
Toluene-d8	94	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-09-002-7,110**	**N/A**	**Air**	**GC/MS II**	**N/A**	**05/07/08 13:52**	**080507L01**

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	94	57-129			1,2-Dichloroethane-d4	111	47-137		
Toluene-d8	92	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-09-002-7,112**	**N/A**	**Air**	**GC/MS AA**	**N/A**	**05/08/08 11:32**	**080508L01**

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	93	47-137		
Toluene-d8	96	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-09-002-7,113**	**N/A**	**Air**	**GC/MS K**	**N/A**	**05/08/08 08:31**	**080508L01**

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	105	57-129			1,2-Dichloroethane-d4	102	47-137		
Toluene-d8	98	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: 05/07/08
Work Order No: 08-05-0578
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	**08-05-0578-1-A**	**05/06/08 07:02**	**Air**	**GC 19**	**N/A**	**05/07/08 13:30**	**080507L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	490	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	**08-05-0578-2-A**	**05/06/08 07:00**	**Air**	**GC 19**	**N/A**	**05/07/08 10:25**	**080507L01**

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	**08-05-0578-3-A**	**05/06/08 06:58**	**Air**	**GC 19**	**N/A**	**05/07/08 11:40**	**080507L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	240	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	**08-05-0578-4-A**	**05/06/08 06:56**	**Air**	**GC 19**	**N/A**	**05/07/08 12:54**	**080507L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	17	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	**08-05-0578-5-A**	**05/06/08 06:54**	**Air**	**GC 19**	**N/A**	**05/07/08 11:04**	**080507L01**

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	**099-12-693-39**	**N/A**	**Air**	**GC 19**	**N/A**	**05/07/08 08:35**	**080507L01**

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

Date Received: 05/07/08
Work Order No: 08-05-0578
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
02111DPEWINF	**08-05-0578-6-D**	**05/06/08 06:30**	**Aqueous**	**GC/MS Z**	**05/20/08**	**05/20/08 13:55**	**080520L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	50	100		Tert-Butyl Alcohol (TBA)	7700	1000	100	
Ethylbenzene	56	50	100		Diisopropyl Ether (DIPE)	ND	50	100	
Toluene	ND	50	100		Ethyl-t-Butyl Ether (ETBE)	ND	50	100	
Xylenes (total)	ND	50	100		Tert-Amyl-Methyl Ether (TAME)	ND	50	100	
Methyl-t-Butyl Ether (MTBE)	3800	50	100						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	99	73-157		Dibromofluoromethane	109	82-142	
Toluene-d8	98	82-112		1,4-Bromofluorobenzene	89	75-105	

02111ASWINF	08-05-0578-7-D	05/06/08 06:24	Aqueous	GC/MS Z	05/20/08	05/20/08 14:25	080520L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	20	40		Tert-Butyl Alcohol (TBA)	3800	400	40	
Ethylbenzene	ND	20	40		Diisopropyl Ether (DIPE)	ND	20	40	
Toluene	ND	20	40		Ethyl-t-Butyl Ether (ETBE)	ND	20	40	
Xylenes (total)	ND	20	40		Tert-Amyl-Methyl Ether (TAME)	ND	20	40	
Methyl-t-Butyl Ether (MTBE)	2000	100	200						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	107	73-157		Dibromofluoromethane	110	82-142	
Toluene-d8	98	82-112		1,4-Bromofluorobenzene	89	75-105	

02111ASWEFF	08-05-0578-8-D	05/06/08 06:20	Aqueous	GC/MS Z	05/20/08	05/20/08 14:56	080520L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	10	20		Tert-Butyl Alcohol (TBA)	1200	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)	85	10	20						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	107	73-157		Dibromofluoromethane	110	82-142	
Toluene-d8	97	82-112		1,4-Bromofluorobenzene	89	75-105	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	05/07/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-05-0578
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	**08-05-0578-9-D**	**05/06/08 06:14**	**Aqueous**	**GC/MS Z**	**05/20/08**	**05/20/08 15:56**	**080520L01**

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	102	73-157		Dibromofluoromethane	109	82-142	
Toluene-d8	96	82-112		1,4-Bromofluorobenzene	88	75-105	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111WEFF	**08-05-0578-10-A**	**05/06/08 06:11**	**Aqueous**	**GC/MS Z**	**05/07/08**	**05/07/08 19:04**	**080507L01**

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	127	73-157		Dibromofluoromethane	126	82-142	
Toluene-d8	101	82-112		1,4-Bromofluorobenzene	86	75-105	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111MW2WINF	**08-05-0578-11-D**	**05/06/08 06:45**	**Aqueous**	**GC/MS Z**	**05/20/08**	**05/20/08 15:26**	**080520L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	24	20	40		Tert-Butyl Alcohol (TBA)	600	400	40	
Ethylbenzene	21	20	40		Diisopropyl Ether (DIPE)	ND	20	40	
Toluene	ND	20	40		Ethyl-t-Butyl Ether (ETBE)	ND	20	40	
Xylenes (total)	ND	20	40		Tert-Amyl-Methyl Ether (TAME)	ND	20	40	
Methyl-t-Butyl Ether (MTBE)	460	20	40						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	108	73-157		Dibromofluoromethane	114	82-142	
Toluene-d8	99	82-112		1,4-Bromofluorobenzene	90	75-105	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	05/07/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-05-0578
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	**099-12-703-209**	**N/A**	**Aqueous**	**GC/MS Z**	**05/07/08**	**05/07/08 14:03**	**080507L01**

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	115	73-157		Dibromofluoromethane	116	82-142	
Toluene-d8	99	82-112		1,4-Bromofluorobenzene	90	75-105	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-233**	**N/A**	**Aqueous**	**GC/MS Z**	**05/20/08**	**05/20/08 11:24**	**080520L01**

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	109	73-157		Dibromofluoromethane	110	82-142	
Toluene-d8	95	82-112		1,4-Bromofluorobenzene	85	75-105	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	05/07/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-05-0578
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	**08-05-0578-6-A**	**05/06/08 06:30**	**Aqueous**	**GC 4**	**05/07/08**	**05/07/08 17:06**	**080507B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	1200	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	96	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASWINF	**08-05-0578-7-A**	**05/06/08 06:24**	**Aqueous**	**GC 4**	**05/07/08**	**05/07/08 17:39**	**080507B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	500	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	108	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASWEFF	**08-05-0578-8-A**	**05/06/08 06:20**	**Aqueous**	**GC 4**	**05/07/08**	**05/07/08 18:12**	**080507B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	102	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111WGAC1	**08-05-0578-9-A**	**05/06/08 06:14**	**Aqueous**	**GC 4**	**05/07/08**	**05/07/08 19:04**	**080507B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	101	38-134			

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	05/07/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-05-0578
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	**08-05-0578-10-A**	**05/06/08 06:11**	**Aqueous**	**GC 4**	**05/07/08**	**05/07/08 15:27**	**080507B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	97	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111MW2WINF	**08-05-0578-11-A**	**05/06/08 06:45**	**Aqueous**	**GC 4**	**05/07/08**	**05/07/08 19:37**	**080507B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	650	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	95	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-695-129**	**N/A**	**Aqueous**	**GC 4**	**05/07/08**	**05/07/08 12:55**	**080507B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	97	38-134			

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

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

Stratus Environmental, inc.	Date Received:	05/07/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-05-0578
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**	**05/07/08**	**080507D01**

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	240	240	1	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: 05/07/08
Work Order No: 08-05-0578
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
08-04-2346-1	Aqueous	GC/MS Z	05/07/08	05/07/08	080507S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	116	111	86-122	5	0-8	
Carbon Tetrachloride	112	107	78-138	4	0-9	
Chlorobenzene	114	109	90-120	5	0-9	
1,2-Dibromoethane	114	111	70-130	2	0-30	
1,2-Dichlorobenzene	115	112	89-119	2	0-10	
1,1-Dichloroethene	112	106	52-142	5	0-23	
Ethylbenzene	123	118	70-130	4	0-30	
Toluene	117	111	85-127	6	0-12	
Trichloroethene	113	107	78-126	5	0-10	
Vinyl Chloride	114	101	56-140	12	0-21	
Methyl-t-Butyl Ether (MTBE)	19	0	64-136	9	0-28	3
Tert-Butyl Alcohol (TBA)	121	133	27-183	9	0-60	
Diisopropyl Ether (DIPE)	120	116	78-126	4	0-16	
Ethyl-t-Butyl Ether (ETBE)	116	110	67-133	6	0-21	
Tert-Amyl-Methyl Ether (TAME)	122	113	63-141	8	0-21	
Ethanol	106	120	11-167	13	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	05/07/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-05-0578
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
08-05-0576-2	Aqueous	GC/MS Z	05/20/08	05/20/08	080520S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	105	105	86-122	1	0-8	
Carbon Tetrachloride	100	97	78-138	3	0-9	
Chlorobenzene	104	105	90-120	1	0-9	
1,2-Dibromoethane	98	105	70-130	7	0-30	
1,2-Dichlorobenzene	105	105	89-119	0	0-10	
1,1-Dichloroethene	99	93	52-142	6	0-23	
Ethylbenzene	113	115	70-130	2	0-30	
Toluene	107	108	85-127	1	0-12	
Trichloroethene	95	94	78-126	2	0-10	
Vinyl Chloride	91	91	56-140	0	0-21	
Methyl-t-Butyl Ether (MTBE)	97	97	64-136	0	0-28	
Tert-Butyl Alcohol (TBA)	113	131	27-183	15	0-60	
Diisopropyl Ether (DIPE)	107	101	78-126	5	0-16	
Ethyl-t-Butyl Ether (ETBE)	103	103	67-133	0	0-21	
Tert-Amyl-Methyl Ether (TAME)	106	108	63-141	2	0-21	
Ethanol	90	108	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:	05/07/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-05-0578
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
02111WEFF	**Aqueous**	**GC 4**	**05/07/08**	**05/07/08**	**080507S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	93	88	38-134	6	0-25	

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:	08-05-0578
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
097-09-002-7,110	Air	GC/MS II	N/A	05/07/08	080507L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	120	124	60-156	4	0-40	
Toluene	107	120	56-146	12	0-43	
Ethylbenzene	112	127	52-154	12	0-38	
p/m-Xylene	112	128	42-156	13	0-41	
o-Xylene	114	132	52-148	15	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:	08-05-0578
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
097-09-002-7,113	Air	GC/MS K	N/A	05/08/08	080508L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	110	125	60-156	13	0-40	
Toluene	114	115	56-146	1	0-43	
Ethylbenzene	118	120	52-154	1	0-38	
p/m-Xylene	119	117	42-156	2	0-41	
o-Xylene	117	119	52-148	1	0-38	

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: 08-05-0578
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
097-09-002-7,112	Air	GC/MS AA	N/A	05/08/08	080508L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	118	117	60-156	0	0-40	
Toluene	121	121	56-146	0	0-43	
Ethylbenzene	130	132	52-154	2	0-38	
p/m-Xylene	125	127	42-156	1	0-41	
o-Xylene	128	130	52-148	1	0-38	

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: 08-05-0578
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
099-12-703-233	Aqueous	GC/MS Z	05/20/08	05/20/08	080520L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	107	106	87-117	1	0-7	
Carbon Tetrachloride	95	97	78-132	3	0-8	
Chlorobenzene	104	107	88-118	2	0-8	
1,2-Dibromoethane	106	110	80-120	3	0-20	
1,2-Dichlorobenzene	106	107	88-118	1	0-8	
1,1-Dichloroethene	95	97	71-131	3	0-14	
Ethylbenzene	113	113	80-120	0	0-20	
Toluene	107	106	85-127	1	0-7	
Trichloroethene	94	96	85-121	2	0-11	
Vinyl Chloride	91	94	64-136	3	0-10	
Methyl-t-Butyl Ether (MTBE)	109	106	67-133	3	0-16	
Tert-Butyl Alcohol (TBA)	104	99	34-154	4	0-19	
Diisopropyl Ether (DIPE)	100	106	80-122	6	0-8	
Ethyl-t-Butyl Ether (ETBE)	98	107	73-127	9	0-11	
Tert-Amyl-Methyl Ether (TAME)	111	115	69-135	3	0-12	
Ethanol	99	92	34-124	7	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:	08-05-0578
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
099-12-703-209	Aqueous	GC/MS Z	05/07/08	05/07/08	080507L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	109	110	87-117	1	0-7	
Carbon Tetrachloride	105	104	78-132	1	0-8	
Chlorobenzene	108	106	88-118	2	0-8	
1,2-Dibromoethane	109	106	80-120	2	0-20	
1,2-Dichlorobenzene	109	112	88-118	2	0-8	
1,1-Dichloroethene	104	106	71-131	2	0-14	
Ethylbenzene	117	114	80-120	2	0-20	
Toluene	108	109	85-127	1	0-7	
Trichloroethene	107	112	85-121	4	0-11	
Vinyl Chloride	100	104	64-136	5	0-10	
Methyl-t-Butyl Ether (MTBE)	114	112	67-133	1	0-16	
Tert-Butyl Alcohol (TBA)	108	112	34-154	4	0-19	
Diisopropyl Ether (DIPE)	117	114	80-122	2	0-8	
Ethyl-t-Butyl Ether (ETBE)	119	114	73-127	4	0-11	
Tert-Amyl-Methyl Ether (TAME)	117	118	69-135	1	0-12	
Ethanol	105	91	34-124	15	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:	08-05-0578
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
099-12-695-129	Aqueous	GC 4	05/07/08	05/07/08	080507B01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	95	99	78-120	5	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-05-0578

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.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Atlantic Richfield Company

A BP affiliated company

Chain of Custody Record — ORIGINAL — RUSH

0578

Page 1 of 1

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: 0515	Temp: 48
Off-site Time: 0745	Temp:
Sky Conditions: Clouds/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	0702	5/6/8			x		2	x					x	x	x			x	5-oxygenates requested are MTBE, DIPE, ETBE, TAME, and TBA.
2	02111ASAEFF	0700				x		2	x					x	x	x			x	
3	02111ASYSINF	0658				x		2	x					x	x	x			x	
4	02111AGAC1	0656				x		2	x					x	x	x			x	
5	02111AEFF	0654				x		2	x					x	x	x		x		
6	02111DPEWINF	0630			x			6				x		x	x		x		x	
7	02111ASWINF	0624			x			6				x		x	x		x		x	
8	02111ASWEFF	0620			x			6				x		x	x		x		x	
9	02111WGAC1	0614			x			6				x		x	x		x		x	
10	02111WEFF	0611			x			6				x		x	x		x	x		
11	02111MW2WINF	0644			x			6				x		x	x		x		x	
12	TB2111560605	0650						2												Hold

Sampler's Name:	Chris Hill
Sampler's Company:	Stratus Environmental, Inc.
Shipment Date:	5/6/08
Shipment Method:	GSO
Shipment Tracking No:	925540166

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Stratus	5/6/08	1600			
				5/7/08	0800

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 - 05 - 0578

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Stratus DATE: 5/7/08

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.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

3.6 °C Temperature blank.
_____ °C IR thermometer.
_____ Ambient temperature.

Initial: HP

CUSTODY SEAL INTACT:

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

Initial: HP

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: HP

COMMENTS:

STRATUS
ENVIRONMENTAL, INC.

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

July 1, 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 / Steve Carter

Phone Number: (530) 676-6007 / (530) 676-6004

On-Site Supplier Representatives: Chris Hill and Greg Wilkins

Number of Site Visits: 4 (June 2, 9, 16, and 23, 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 June 2, 2008.

Variations from Scope of Work: None.

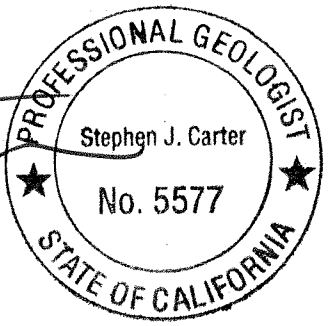
The attachments include field data sheets, chain of custody documentation, and the certified analytical results. The information is being provided to BP-ARCO's Scoping Supplier for use in preparing a report for regulatory submittal. This submittal is limited to presentation of collected data and does 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

for 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: 6-2-08
Onsite Time: 0500
Offsite Time: 0700
Equipment Manufacturer/Model#

Technician: CHUY
Weather Conditions: Clouds
Ambient Temperature: 48

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒ High H30
System Status Upon Departure: Operational ☑ Non-Operational ☐
Electric Meter Reading: 54700
Hour Meter Reading: 1973
Totalizer Reading Prior to Air Stripper: 371824
PID Calibration Date: 6208
Totalizer Reading After Air Stripper: 978320

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		2108			
Pipe Diameter, inches					
Air Flow Rate, cfm			180		
Applied Vacuum, "wc	21 "Hg	.38	NA	NA	
Temperature, deg F		130	104		
PID Readings, ppmv	45	0	20	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	17					
MW-7	100	15					
MW-5	0						

Signature: [signature]
Date: 6208

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	6208 0633	02111AGAC1	6208 0627
02111ASAEFF	〉 0631	02111AEFF	〉 0624
02111ASYSINF	〉 0629		
Analyses Required: GRO, BTEX, and MTBE			

Operation & Maintenance Notes
Stingers cleaned

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: 6208

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

ORIGINAL

Date: 6-20-08
Onsite Time: 0500
Offsite Time: 0700

Technician: CHILL
Weather Conditions: Clouds
Ambient Temperature: 48

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: 949693

No. of Carbon Vessels: 2

Lead Carbon Vessel Pressure (psi): 11

Effluent Water Characteristics
(Quarterly by Field Instrument)
pH: 7.9
Temperature: 17.4°C

Well ID	Hour Meter Reading	Totalizer Reading	Total Depth	Pump Depth	
MW-2		247893			

Sampling Information			
Sample ID	Date & Time	Sample ID	Date & Time
02111DPEWINF	6208 0607	02111MW2WINF	6208 0612
02111ASWINF	0601		
02111ASWEFF	0559		
02111WGAC1	0556		
02111WEFF	0552		
TB2111 6208	0616		

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

Notes:
Change H2O Filters

Signature: _____ Date: 6208

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

ORIGINAL

Date: 6908
Onsite Time: 0715
Offsite Time: 0805
Equipment Manufacturer/Model#

Technician: CHILL
Weather Conditions: Clear
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: 2076
Totalizer Reading Prior to Air Stripper: 412936
PID Calibration Date: 6.9.08
Totalizer Reading After Air Stripper: 1016260

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		2350			
Pipe Diameter, inches					
Air Flow Rate, cfm			185		
Applied Vacuum, "wc	20"Hg	.40	NA	NA	
Temperature, deg F		~~95°F~~	95°F		
PID Readings, ppmv	58	0	28	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-8	0						

Signature: [signature]
Date: 6908

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
Re-Set MW-7 Stinger (Clean H2O)

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: 6/9/05

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

ORIGINAL

Date: 6908
Onsite Time: 0715
Offsite Time: 0805

Technician: CHILC
Weather Conditions: Clear
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: NM

Effluent Flow Totalizer Reading: 984702

No. of Carbon Vessels: 2

Lead Carbon Vessel Pressure (psi): 12

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

Well ID	Hour Meter Reading	Totalizer Reading	Total Depth	Pump Depth	
MW-2		264970			

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: 6908

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

ORIGINAL

Date: 06-16-08
Onsite Time: 0716
Offsite Time: 0925
Equipment Manufacturer/Model#

Technician: G. Wilkins / CH2M
Weather Conditions: Overcast
Ambient Temperature: 50's

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒ High H2O
System Status Upon Departure: Operational ☒ Non-Operational ☐
Electric Meter Reading: N/M
Hour Meter Reading: 2131.5
Totalizer Reading Prior to Air Stripper: 432543
PID Calibration Date: 06-16-08
Totalizer Reading After Air Stripper: 1034360

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		1248			
Pipe Diameter, inches					
Air Flow Rate, cfm			180		
Applied Vacuum, "wc	20 Hg	.30	NA	NA	
Temperature, deg F		122.5	106		
PID Readings, ppmv	639	~~639~~ 52	121	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		14					
V-3		15					
MW-1	Closed						
MW-3	100	15					
MW-7	100	15					
MW-8	closed						

Signature: [signature] Date: 06-16-08

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
Changed 2 Filters (cartridge)
Reset Stinger

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: 06-16-08

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

ORIGINAL

Date: 06-16-08
Onsite Time: 0716
Offsite Time: 0925

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

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: N/M

Effluent Flow Totalizer Reading: 1001527

No. of Carbon Vessels: 2

Lead Carbon Vessel Pressure (psi): 20

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	0271791.2			

Sampling Information			
Sample ID	Date & Time	Sample ID	Date & Time
02111DPEWINF	N/A	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: 06-16-08

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

ORIGINAL

Date: 06-23-08
Onsite Time: 0724
Offsite Time: 0900
Equipment Manufacturer/Model#

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

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒ High H_2O
System Status Upon Departure: Operational ☒ Non-Operational ☐
Electric Meter Reading: N/M
Hour Meter Reading: 02183.0
Totalizer Reading Prior to Air Stripper: 45183
PID Calibration Date: 0623-08
Totalizer Reading After Air Stripper: 105510

Field Measurements

Parameter	Influent (after blower, 2111DPEAINF)	Air Stripper (2111ASAEFF)	System Influent (2111ASYSINF)	Stack Air Flow (2111AEFF)	Comments
Differential Pressure, "wc		19			
Air Velocity, FPM		1432			
Pipe Diameter, inches					
Air Flow Rate, cfm			170		
Applied Vacuum, "wc	20 Hg	.42	NA	NA	
Temperature, deg F		115.2	93		
PID Readings, ppmv	1218	0	155.	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	↓	15					
V-3	↓	15					
MW-1	Closed						
MW-3	100	16					
MW-7	100	16					
MW-8	Closed						

Signature: [signature] Date: 06-23-08

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
Cleaned EFF Totalizer
Reset system
Reset MW-7 Stinger

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: 06-23-08

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

ORIGINAL

Date: 0623-08
Onsite Time: 0724
Offsite Time: 0900

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

System Status Upon Arrival: ☐ Operational ☒ Non-operational High H_2O
System Status At Departure: ☒ Operational ☐ Non-operational
Transfer Pump: ☒ Operational ☐ Non-operational

Transfer Pump Hour Meter Reading: N/A
Effluent Flow Totalizer Reading: 01017867
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	02784263			

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: Date: 06-23-08

Atlantic Richfield Company

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: 0500	Temp: 48
Off-site Time: 0700	Temp: 50
Sky Conditions: Cloudy	
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	0633	6/05			X		2	X					X	X	X			X	5-oxygenates requested are MTBE, DIPE, ETBE, TAME, and TBA.
2	02111ASAEFF	0631				X		2	X					X	X	X			X	
3	02111ASYSINF	0629				X		2	X					X	X	X			X	
4	02111AGAC1	0627				X		2	X					X	X	X			X	
5	02111AEFF	0624				X		2	X					X	X	X			X	
6	02111DPEWINF	0607			X			6				X		X	X		X		X	
7	02111ASWINF	0600			X			6				X		X	X		X		X	
8	02111ASWEFF	0559			X			6				X		X	X		X		X	
9	02111WGAC1	0556			X			6				X		X	X		X		X	
10	02111WEFF	0552			X			6				X		X	X		X		X	
11	02111MW2WINF	0612	6/05		X			6				X		X	X		X		X	
	TB2111060905	0616	6/05					2												Hold

Sampler's Name:	Chris Hill
Sampler's Company:	Stratus Environmental, Inc.
Shipment Date:	6/20/05
Shipment Method:	GSO
Shipment Tracking No:	

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Michael Hatten	6/20/05	1600			

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.

June 13, 2008

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

Subject: **Calscience Work Order No.:** **08-06-0105**
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 6/3/2008 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,

Linda Scharpenberg

Calscience Environmental
Laboratories, Inc.
Linda Scharpenberg
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	06/03/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-06-0105
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	**08-06-0105-1-A**	**06/02/08 06:33**	**Air**	**GC/MS ZZ**	**N/A**	**06/03/08 21:26**	**080603L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.13	0.015	30		Xylenes (total)	0.10	0.030	30	
Toluene	0.019	0.015	30		Methyl-t-Butyl Ether (MTBE)	2.6	0.60	300	
Ethylbenzene	0.10	0.015	30						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	99	57-129			1,2-Dichloroethane-d4	108	47-137		
Toluene-d8	119	78-156							

02111ASAEFF	08-06-0105-2-B	06/02/08 06:31	Air	GC/MS ZZ	N/A	06/03/08 16:48	080603L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.00050	1		Xylenes (total)	ND	0.0010	1	
Toluene	0.0039	0.00050	1		Methyl-t-Butyl Ether (MTBE)	0.24	0.025	12.5	
Ethylbenzene	ND	0.00050	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	93	57-129			1,2-Dichloroethane-d4	108	47-137		
Toluene-d8	105	78-156							

02111ASYSINF	08-06-0105-3-B	06/02/08 06:39	Air	GC/MS ZZ	N/A	06/03/08 22:10	080603L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.040	0.0050	10		Xylenes (total)	0.026	0.010	10	
Toluene	ND	0.0050	10		Methyl-t-Butyl Ether (MTBE)	2.8	0.20	100	
Ethylbenzene	0.029	0.0050	10						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	97	57-129			1,2-Dichloroethane-d4	117	47-137		
Toluene-d8	116	78-156							

02111AGAC1	08-06-0105-4-B	06/02/08 06:27	Air	GC/MS ZZ	N/A	06/03/08 22:55	080603L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0012	2.5		Xylenes (total)	ND	0.0025	2.5	
Toluene	0.0035	0.0012	2.5		Methyl-t-Butyl Ether (MTBE)	0.90	0.20	100	
Ethylbenzene	ND	0.0012	2.5						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	97	57-129			1,2-Dichloroethane-d4	115	47-137		
Toluene-d8	106	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: 06/03/08
Work Order No: 08-06-0105
Preparation: N/A
Method: EPA TO-15
Units: ppm (v/v)

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	**08-06-0105-5-B**	**06/02/08 06:24**	**Air**	**GC/MS ZZ**	**N/A**	**06/03/08 17:34**	**080603L01**

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)	0.38	0.020	10	
Ethylbenzene	ND	0.00050	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	88	57-129			1,2-Dichloroethane-d4	114	47-137		
Toluene-d8	99	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-09-002-7,196**	**N/A**	**Air**	**GC/MS ZZ**	**N/A**	**06/03/08 15:12**	**080603L01**

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	110	47-137		
Toluene-d8	107	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-09-002-7,199**	**N/A**	**Air**	**GC/MS ZZ**	**N/A**	**06/04/08 14:25**	**080604L01**

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	91	57-129			1,2-Dichloroethane-d4	109	47-137		
Toluene-d8	103	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-09-002-7,201**	**N/A**	**Air**	**GC/MS AA**	**N/A**	**06/04/08 14:57**	**080604L01**

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	102	57-129			1,2-Dichloroethane-d4	112	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:	06/03/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-06-0105
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	**08-06-0105-1-A**	**06/02/08 06:33**	**Air**	**GC 38**	**N/A**	**06/03/08 16:20**	**080603L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	140	13	1		ppm (v/v)

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASAEFF	**08-06-0105-2-A**	**06/02/08 06:31**	**Air**	**GC 38**	**N/A**	**06/03/08 17:01**	**080603L01**

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	**08-06-0105-3-A**	**06/02/08 06:39**	**Air**	**GC 38**	**N/A**	**06/03/08 17:55**	**080603L01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	61	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	**08-06-0105-4-A**	**06/02/08 06:27**	**Air**	**GC 38**	**N/A**	**06/03/08 18:49**	**080603L01**

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
02111AEFF	**08-06-0105-5-A**	**06/02/08 06:24**	**Air**	**GC 38**	**N/A**	**06/04/08 10:34**	**080604L01**

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	**099-12-693-49**	**N/A**	**Air**	**GC 38**	**N/A**	**06/03/08 10:22**	**080603L01**

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:	06/03/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-06-0105
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
Method Blank	**099-12-693-50**	**N/A**	**Air**	**GC 38**	**N/A**	**06/04/08 08:31**	**080604L01**

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

Date Received: 06/03/08
Work Order No: 08-06-0105
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
02111DPEWINF	**08-06-0105-6-B**	**06/02/08 06:07**	**Aqueous**	**GC/MS BB**	**06/05/08**	**06/06/08 11:05**	**080605L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	10	20		Tert-Butyl Alcohol (TBA)	460	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)	470	10	20						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	125	73-157		Dibromofluoromethane	118	82-142	
Toluene-d8	99	82-112		1,4-Bromofluorobenzene	88	75-105	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASWINF	**08-06-0105-7-B**	**06/02/08 06:01**	**Aqueous**	**GC/MS BB**	**06/05/08**	**06/06/08 11:37**	**080605L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	5.0	10		Tert-Butyl Alcohol (TBA)	310	100	10	
Ethylbenzene	ND	5.0	10		Diisopropyl Ether (DIPE)	ND	5.0	10	
Toluene	ND	5.0	10		Ethyl-t-Butyl Ether (ETBE)	ND	5.0	10	
Xylenes (total)	ND	5.0	10		Tert-Amyl-Methyl Ether (TAME)	ND	5.0	10	
Methyl-t-Butyl Ether (MTBE)	340	5.0	10						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	119	73-157		Dibromofluoromethane	117	82-142	
Toluene-d8	98	82-112		1,4-Bromofluorobenzene	88	75-105	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASWEFF	**08-06-0105-8-B**	**06/02/08 05:59**	**Aqueous**	**GC/MS BB**	**06/05/08**	**06/06/08 12:09**	**080605L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	250	100	10	
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)	19	0.50	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,2-Dichloroethane-d4	124	73-157		Dibromofluoromethane	115	82-142	
Toluene-d8	97	82-112		1,4-Bromofluorobenzene	88	75-105	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	06/03/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-06-0105
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	**08-06-0105-9-A**	**06/02/08 05:56**	**Aqueous**	**GC/MS BB**	**06/04/08**	**06/04/08 21:02**	**080604L01**

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	122	73-157			Dibromofluoromethane	114	82-142		
Toluene-d8	101	82-112			1,4-Bromofluorobenzene	87	75-105		

02111WEFF	**08-06-0105-10-A**	**06/02/08 05:52**	**Aqueous**	**GC/MS BB**	**06/03/08**	**06/03/08 20:43**	**080603L01**

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	120	73-157			Dibromofluoromethane	117	82-142		
Toluene-d8	100	82-112			1,4-Bromofluorobenzene	91	75-105		

02111MW2WINF	**08-06-0105-11-A**	**06/02/08 06:12**	**Aqueous**	**GC/MS BB**	**06/04/08**	**06/04/08 21:34**	**080604L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	18	10	20		Tert-Butyl Alcohol (TBA)	360	200	20	
Ethylbenzene	11	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)	330	10	20						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	130	73-157			Dibromofluoromethane	117	82-142		
Toluene-d8	100	82-112			1,4-Bromofluorobenzene	87	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: 06/03/08
Work Order No: 08-06-0105
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	**099-12-703-257**	**N/A**	**Aqueous**	**GC/MS BB**	**06/03/08**	**06/03/08 14:48**	**080603L01**

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	115	73-157		Dibromofluoromethane	108	82-142	
Toluene-d8	96	82-112		1,4-Bromofluorobenzene	88	75-105	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-260**	**N/A**	**Aqueous**	**GC/MS BB**	**06/04/08**	**06/04/08 14:35**	**080604L01**

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	115	73-157		Dibromofluoromethane	111	82-142	
Toluene-d8	96	82-112		1,4-Bromofluorobenzene	87	75-105	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-263**	**N/A**	**Aqueous**	**GC/MS BB**	**06/05/08**	**06/06/08 04:07**	**080605L02**

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	115	73-157		Dibromofluoromethane	106	82-142	
Toluene-d8	97	82-112		1,4-Bromofluorobenzene	87	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: 06/03/08
Work Order No: 08-06-0105
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	**08-06-0105-6-E**	**06/02/08 06:07**	**Aqueous**	**GC 4**	**06/03/08**	**06/04/08 07:09**	**080603B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	60	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	81	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASWINF	**08-06-0105-7-E**	**06/02/08 06:01**	**Aqueous**	**GC 4**	**06/03/08**	**06/04/08 13:44**	**080603B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	87	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	80	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111ASWEFF	**08-06-0105-8-E**	**06/02/08 05:59**	**Aqueous**	**GC 4**	**06/03/08**	**06/04/08 08:15**	**080603B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	82	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111WGAC1	**08-06-0105-9-E**	**06/02/08 05:56**	**Aqueous**	**GC 4**	**06/03/08**	**06/04/08 08:48**	**080603B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	83	38-134			

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	06/03/08
3330 Cameron Park Drive, Suite 550	Work Order No:	08-06-0105
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	**08-06-0105-10-E**	**06/02/08 05:52**	**Aqueous**	**GC 4**	**06/03/08**	**06/03/08 16:23**	**080603B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	77	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
02111MW2WINF	**08-06-0105-11-E**	**06/02/08 06:12**	**Aqueous**	**GC 4**	**06/03/08**	**06/04/08 09:21**	**080603B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	470	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	88	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-695-155**	**N/A**	**Aqueous**	**GC 4**	**06/03/08**	**06/03/08 11:23**	**080603B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	88	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-695-157**	**N/A**	**Aqueous**	**GC 4**	**06/03/08**	**06/04/08 03:20**	**080603B02**

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.

Quality Control - Duplicate

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

Date Received: 06/03/08
Work Order No: 08-06-0105
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
08-06-0102-1	**Air**	**GC 38**	**N/A**	**06/03/08**	**080603D01**

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	640	680	7	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

Stratus Environmental, inc.	Date Received: 06/03/08
3330 Cameron Park Drive, Suite 550	Work Order No: 08-06-0105
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
02111AEFF	**Air**	**GC 38**	**N/A**	**06/04/08**	**080604D01**

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

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	06/03/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-06-0105
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
08-05-2076-4	**Aqueous**	**GC 4**	**06/03/08**	**06/03/08**	**080603S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	90	93	38-134	4	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.	Date Received: 06/03/08
3330 Cameron Park Drive, Suite 550	Work Order No: 08-06-0105
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
08-06-0104-3	**Aqueous**	**GC 4**	**06/03/08**	**06/04/08**	**080603S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	94	98	38-134	5	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	06/03/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-06-0105
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
08-06-0103-5	**Aqueous**	**GC/MS BB**	**06/03/08**	**06/03/08**	**080603S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	103	99	86-122	4	0-8	
Carbon Tetrachloride	107	111	78-138	4	0-9	
Chlorobenzene	99	105	90-120	6	0-9	
1,2-Dibromoethane	103	111	70-130	8	0-30	
1,2-Dichlorobenzene	99	101	89-119	2	0-10	
1,1-Dichloroethene	105	106	52-142	1	0-23	
Ethylbenzene	104	111	70-130	6	0-30	
Toluene	103	102	85-127	1	0-12	
Trichloroethene	94	98	78-126	4	0-10	
Vinyl Chloride	89	96	56-140	8	0-21	
Methyl-t-Butyl Ether (MTBE)	109	105	64-136	4	0-28	
Tert-Butyl Alcohol (TBA)	102	109	27-183	6	0-60	
Diisopropyl Ether (DIPE)	107	107	78-126	1	0-16	
Ethyl-t-Butyl Ether (ETBE)	107	107	67-133	1	0-21	
Tert-Amyl-Methyl Ether (TAME)	104	100	63-141	3	0-21	
Ethanol	93	107	11-167	15	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: 06/03/08
Work Order No: 08-06-0105
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
08-06-0287-4	**Aqueous**	**GC/MS BB**	**06/04/08**	**06/04/08**	**080604S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	93	93	86-122	0	0-8	
Carbon Tetrachloride	101	93	78-138	9	0-9	
Chlorobenzene	93	92	90-120	1	0-9	
1,2-Dibromoethane	103	103	70-130	1	0-30	
1,2-Dichlorobenzene	93	95	89-119	2	0-10	
1,1-Dichloroethene	102	91	52-142	12	0-23	
Ethylbenzene	95	96	70-130	1	0-30	
Toluene	95	95	85-127	1	0-12	
Trichloroethene	89	92	78-126	3	0-10	
Vinyl Chloride	88	80	56-140	10	0-21	
Methyl-t-Butyl Ether (MTBE)	110	92	64-136	17	0-28	
Tert-Butyl Alcohol (TBA)	99	103	27-183	4	0-60	
Diisopropyl Ether (DIPE)	108	92	78-126	16	0-16	
Ethyl-t-Butyl Ether (ETBE)	101	93	67-133	9	0-21	
Tert-Amyl-Methyl Ether (TAME)	102	100	63-141	2	0-21	
Ethanol	95	79	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: 06/03/08
3330 Cameron Park Drive, Suite 550	Work Order No: 08-06-0105
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
08-05-2596-16	**Aqueous**	**GC/MS BB**	**06/05/08**	**06/06/08**	**080605S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	107	102	86-122	5	0-8	
Carbon Tetrachloride	116	114	78-138	2	0-9	
Chlorobenzene	101	97	90-120	4	0-9	
1,2-Dibromoethane	102	102	70-130	0	0-30	
1,2-Dichlorobenzene	98	100	89-119	2	0-10	
1,1-Dichloroethene	112	116	52-142	3	0-23	
Ethylbenzene	104	103	70-130	1	0-30	
Toluene	105	100	85-127	6	0-12	
Trichloroethene	101	97	78-126	4	0-10	
Vinyl Chloride	93	97	56-140	4	0-21	
Methyl-t-Butyl Ether (MTBE)	112	109	64-136	2	0-28	
Tert-Butyl Alcohol (TBA)	97	108	27-183	11	0-60	
Diisopropyl Ether (DIPE)	110	113	78-126	3	0-16	
Ethyl-t-Butyl Ether (ETBE)	113	111	67-133	1	0-21	
Tert-Amyl-Methyl Ether (TAME)	109	104	63-141	5	0-21	
Ethanol	88	106	11-167	18	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:	08-06-0105
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
097-09-002-7,196	Air	GC/MS ZZ	N/A	06/03/08	080603L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	108	79	60-156	31	0-40	
Toluene	118	91	56-146	25	0-43	
Ethylbenzene	119	93	52-154	25	0-38	
p/m-Xylene	117	92	42-156	23	0-41	
o-Xylene	124	98	52-148	23	0-38	

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: 08-06-0105
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
097-09-002-7,201	Air	GC/MS AA	N/A	06/04/08	080604L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	107	113	60-156	5	0-40	
Toluene	109	114	56-146	4	0-43	
Ethylbenzene	118	120	52-154	2	0-38	
p/m-Xylene	114	117	42-156	2	0-41	
o-Xylene	120	122	52-148	2	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:	08-06-0105
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
097-09-002-7,199	Air	GC/MS ZZ	N/A	06/04/08	080604L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	90	91	60-156	1	0-40	
Toluene	105	107	56-146	1	0-43	
Ethylbenzene	111	113	52-154	2	0-38	
p/m-Xylene	109	111	42-156	2	0-41	
o-Xylene	117	119	52-148	2	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:	08-06-0105
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
099-12-695-155	Aqueous	GC 4	06/03/08	06/03/08	080603B01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	100	98	78-120	2	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: 08-06-0105
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
099-12-695-157	Aqueous	GC 4	06/03/08	06/04/08	080603B02

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	106	106	78-120	0	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: 08-06-0105
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
099-12-703-257	Aqueous	GC/MS BB	06/03/08	06/03/08	080603L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	100	99	87-117	1	0-7	
Carbon Tetrachloride	99	98	78-132	1	0-8	
Chlorobenzene	102	96	88-118	6	0-8	
1,2-Dibromoethane	100	103	80-120	3	0-20	
1,2-Dichlorobenzene	96	98	88-118	1	0-8	
1,1-Dichloroethene	99	92	71-131	7	0-14	
Ethylbenzene	109	102	80-120	7	0-20	
Toluene	102	101	85-127	1	0-7	
Trichloroethene	96	96	85-121	0	0-11	
Vinyl Chloride	91	83	64-136	9	0-10	
Methyl-t-Butyl Ether (MTBE)	92	89	67-133	4	0-16	
Tert-Butyl Alcohol (TBA)	85	93	34-154	9	0-19	
Diisopropyl Ether (DIPE)	97	93	80-122	5	0-8	
Ethyl-t-Butyl Ether (ETBE)	97	92	73-127	4	0-11	
Tert-Amyl-Methyl Ether (TAME)	101	101	69-135	1	0-12	
Ethanol	72	80	34-124	10	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: 08-06-0105
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
099-12-703-260	Aqueous	GC/MS BB	06/04/08	06/04/08	080604L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	95	94	87-117	1	0-7	
Carbon Tetrachloride	104	100	78-132	5	0-8	
Chlorobenzene	90	96	88-118	6	0-8	
1,2-Dibromoethane	89	96	80-120	7	0-20	
1,2-Dichlorobenzene	94	92	88-118	2	0-8	
1,1-Dichloroethene	105	101	71-131	4	0-14	
Ethylbenzene	97	99	80-120	2	0-20	
Toluene	96	94	85-127	2	0-7	
Trichloroethene	95	92	85-121	3	0-11	
Vinyl Chloride	95	90	64-136	5	0-10	
Methyl-t-Butyl Ether (MTBE)	95	95	67-133	0	0-16	
Tert-Butyl Alcohol (TBA)	83	88	34-154	5	0-19	
Diisopropyl Ether (DIPE)	100	98	80-122	3	0-8	
Ethyl-t-Butyl Ether (ETBE)	91	97	73-127	6	0-11	
Tert-Amyl-Methyl Ether (TAME)	92	95	69-135	3	0-12	
Ethanol	95	97	34-124	2	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:	08-06-0105
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
099-12-703-263	**Aqueous**	**GC/MS BB**	**06/05/08**	**06/06/08**	**080605L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	97	98	87-117	1	0-7	
Carbon Tetrachloride	108	110	78-132	2	0-8	
Chlorobenzene	95	94	88-118	1	0-8	
1,2-Dibromoethane	99	100	80-120	0	0-20	
1,2-Dichlorobenzene	97	95	88-118	2	0-8	
1,1-Dichloroethene	113	116	71-131	2	0-14	
Ethylbenzene	100	103	80-120	3	0-20	
Toluene	99	97	85-127	2	0-7	
Trichloroethene	108	104	85-121	4	0-11	
Vinyl Chloride	95	97	64-136	2	0-10	
Methyl-t-Butyl Ether (MTBE)	107	106	67-133	1	0-16	
Tert-Butyl Alcohol (TBA)	85	94	34-154	10	0-19	
Diisopropyl Ether (DIPE)	106	103	80-122	3	0-8	
Ethyl-t-Butyl Ether (ETBE)	109	104	73-127	4	0-11	
Tert-Amyl-Methyl Ether (TAME)	101	98	69-135	3	0-12	
Ethanol	77	75	34-124	2	0-44	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-06-0105

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.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Atlantic Richfield Company

A BP affiliated company

Chain of Custody Record

ORIGINAL RUSH 0105

Page 1 of 1

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: 0500	Temp: 48
Off-site Time: 0709	Temp: 50
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	

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	0633	6/20/08			x		2	x					x	x	x			x	5-oxygenates requested are MTBE, DIPE, ETBE, TAME, and TBA.
2	02111ASAEFF	0631				x		2	x					x	x	x			x	
3	02111ASYSINF	0629				x		2	x					x	x	x			x	
4	02111AGAC1	0627				x		2	x					x	x	x			x	
5	02111AEFF	0624				x		2	x					x	x	x			x	
6	02111DPEWINF	0607			x			6				x		x	x		x		x	
7	02111ASWINF	0601			x			6				x		x	x		x		x	
8	02111ASWEFF	0559			x			6				x		x	x		x		x	
9	02111WGAC1	0556			x			6				x		x	x		x		x	
10	02111WEFF	0552			x			6				x		x	x		x		x	
11	02111MW2WINF	0612	6/20/08		x			6				x		x	x		x		x	
12	TB2111062008	0616	6/20/08					2												Hold

Sampler's Name:	Chris Hill
Sampler's Company:	Stratus Environmental, Inc.
Shipment Date:	6/20/08
Shipment Method:	GSO
Shipment Tracking No:	509688738

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Chris Hill Stratus	6/20/08	1600			
				6/20/08	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 - 06 - 0105

Cooler 1 of 2

SAMPLE RECEIPT FORM

CLIENT: Stratus DATE: 6/3/08

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.
_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

_____ °C Temperature blank.
_____ °C IR thermometer.
✓ Ambient temperature.

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	✓		
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: JP

COMMENTS:

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 06 - 0105

Cooler 2 of 2

SAMPLE RECEIPT FORM

CLIENT: Stratus DATE: 6/3/08

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.
_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

2.6 °C Temperature blank.
_____ °C IR thermometer.
_____ Ambient temperature.

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	✓		
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: JP

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 May 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 April 2008
2	Table 1– Sewer Discharge Summary Report

Comments:

Dear Ms. Treece:

Please find attached for your review the *Monthly Discharge Report* for April 2008, for the remediation system at ARCO Service Station No. 2111, located at 1156 Davis Street, San Leandro, California. A total of approximately 111,462 gallons of treated groundwater were discharged to the sanitary sewer between March 17, 2008 and April 22, 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: March 17, 2008 to April 22, 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: 111,462 U. S. Gallons

Signature of Certifying Official: _____

Printed Name of Official: Jay R. Johnson, P.G.

Title: Project Manager

Date: May 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 the discharge to the sewer. The DPE system was shutdown on March 17, 2008, due to float malfunction on the DPE system. The GETS was found non-functioning on April 1, 2008, due to power failure. The floats were replaced on the DPE system and the remediation systems were re-started momentarily on April 1, 2008 and shutdown after sampling, pending receipt of analytical results and replacement of transfer pump. Upon receipt of analytical results and compliance verification, the remediation systems were re-started on April 14, 2008. However, the DPE system shutdown immediately due to transfer pump contactor malfunction. The GETS was left operational on April 14, 2008 and the DPE system will be re-started in May 2008 after replacing the contactor.

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

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.

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)

[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.

[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.

STRATUS
ENVIRONMENTAL, INC.

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

TRANSMITTAL

Date May 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 May 2008
2	Table 1– Sewer Discharge Summary Report

Comments:

Dear Ms. Treece:

Please find attached for your review the *Monthly Discharge Report* for May 2008, for the remediation system at ARCO Service Station No. 2111, located at 1156 Davis Street, San Leandro, California. A total of approximately 156,880 gallons of treated groundwater were discharged to the sanitary sewer between April 22, 2008 and May 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: April 22, 2008 to May 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: 35

Total monthly discharge: 156,880 U. S. Gallons

Signature of Certifying Official: _____

Printed Name of Official: Jay R. Johnson, P.G.

Title: Project Manager

Date: May 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 the discharge to the sewer. The DPE system was shutdown on April 14, 2008, due to transfer pump contactor malfunction. The DPE system was re-started on May 6, 2008, after replacing the contactor.

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	System Start-up	5,560
	1/29/07 8:00	3,000	
	1/29/07[1] 12:00	5,000	
	01/30/07	6,200	
	01/31/07	8,560	
February-07	2/1/07 5:15	16,860	114,230
	2/2/07 5:00	25,480	
	2/5/07 5:00	33,400	
	2/20/07 6:30	122,790	
March-07	3/5/07[2] 5:00	130,565	10,472
	3/8/07[3] 4:50	132,951	
	3/14/07[4] 7:00	NM	
	3/29/07[5] 10:00	133,262	
April-07	4/2/07[6] 5:30	170,596	66,881
	4/10/07[7] 5:00	NM	
	4/23/07[8] 7:00	172,210	
	4/26/07 6:00	200,143	
May-07	5/1/2007[9] 4:50	220,892	210,103
	5/15/2007[10] 5:00	225,297	
	5/29/07 8:30	410,246	
June-07	6/4/2007[11] 5:00	429,450	19,976
	6/12/2007[12] 5:00	430,092	
	6/26/2007[13] 4:30	430,222	

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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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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

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.

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)

[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.

[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.

STRATUS
ENVIRONMENTAL, INC.

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

TRANSMITTAL

Date June 27, 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 June 2008
2	Table 1– Sewer Discharge Summary Report

Comments:

Dear Ms. Treece:

Please find attached for your review the *Monthly Discharge Report* for June 2008, for the remediation system at ARCO Service Station No. 2111, located at 1156 Davis Street, San Leandro, California. A total of approximately 103,304 gallons of treated groundwater were discharged to the sanitary sewer between May 27, 2008 and June 23, 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: May 27, 2008 to June 23, 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: 27

Total monthly discharge: 103,304 U. S. Gallons

Signature of Certifying Official: _____

Printed Name of Official: Jay R. Johnson, P.G.

Title: Project Manager

Date: June 27, 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 the discharge to the sewer. The remediation systems were found non-functioning during site visits conducted on June 2, June 9, June 16, and June 23, 2008, due to high-water level alarm in the air stripper tank and were re-started on the same respective days after re-setting the air-stripper level alarm.

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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

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[1] Submersible pump at well MW-2 was shutdown. This pump will be re-started after troubleshooting the level floats/controller malfunction.

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