

Atlantic Richfield Company (a BP affiliated company)

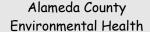
P.O. Box 1257 San Ramon, CA 94583

Phone: (925) 275-3801 Fax: (925) 275-3815

30 October 2007



9:16 am, Nov 02, 2007





Re: Third Quarter 2007 Ground-Water Monitoring and Remediation System Status Report

Atlantic Richfield Company (a BP affiliated company) Station #2111

1156 Davis Street San Leandro, California ACEH Case #RO0000494

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

Submitted by:

Paul Supple

Environmental Business Manger

Third Quarter 2007 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



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

30 October 2007

Project No. 06-08-615

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



30 October 2007

Project No. 06-08-615

ROBERT H

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

Attn.: Mr. Paul Supple

Re:

Third Quarter 2007 Ground-Water Monitoring and Remediation System Status Report, Atlantic Richfield Company (a BP affiliated company) Station #2111, 1156 Davis Street,

San Leandro, California; ACEH Case #RO0000494

Dear Mr. Supple:

Attached is the *Third Quarter 2007 Ground-Water Monitoring and Remediation System Status Report* for Atlantic Richfield Company Station #2111 (herein referred to as Station #2111) located at 1156 Davis Street, San Leandro, California (Site). This report presents results of ground-water monitoring conducted at Station #2111 during the Third Quarter 2007, and summarizes the performance of the remediation system during the same period.

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

Sincerely,

BROADBENT & ASSOCIATES, INC.

Thomas A. Venus, P.E.

Senior Engineer

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

Principal Hydrogeologist

Enclosures

cc: Mr. Steven Plunkett, 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

ARIZONA CALIFORNIA NEVADA TEXAS

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 City of San Leandro Special Discharge Permit SD-036; Facility Permits/Permitting Agency: Bay Area Air Quality Management District Plant 16189

WORK PERFORMED THIS QUARTER (Third Quarter 2007):

- 1. Prepared and submitted Second Quarter 2007 report.
- 2. Conducted ground-water monitoring/sampling for Third Quarter 2007. Work performed on 17 July 2007 by Stratus Environmental, Inc (Stratus).
- 3. Performed routine operation, maintenance and performance monitoring of the Dual-Phase Extraction (DPE) treatment system. Work performed by Stratus.
- 4. Submitted monthly discharge reports for July, August and September 2007 to the City of San Leandro. Work performed by Stratus.

WORK PROPOSED FOR NEXT QUARTER (Fourth Quarter 2007):

- 1. Prepared and submitted this Third Quarter 2007 Ground-Water Monitoring and Remediation System Status Report (contained herein).
- 2. Conduct quarterly ground-water monitoring/sampling for Fourth Quarter 2007.
- 3. Continue operation, maintenance and performance monitoring of the DPE treatment system.
- 4. Submit monthly discharge reports for October, November and December 2007.

QUARTERLY RESULTS SUMMARY:

Ground-Water Monitoring/Sampling/Remediation
Quarterly: MW-1 through MW-8
Quarterly: MW-1 through MW-5, MW-7 and MW-8
Annually (3Q): MW-6
No
0 gallons
1.44 gallons (MW-2)
14.08 ft (MW-6) to 23.75 ft (MW-7)
Southeast
0.05 ft/ft
DPE treatment system
01/29/2007
SVE: V-1, V-2, V-3, MW-1, MW-3, MW-7, MW-8
GWE: MW-2
Bi-weekly
Monthly

OHADTEDI V DECHI TE CHAMADV (Continued).

QUARTERLY RESULTS SUMMAR	$\mathbf{R}\mathbf{Y}$ (Continued):	}		
Gallons of ground water treated and	This Quarter		Cumulative	
discharged:	160,494		591,443	
Total operation hours to date:	332		1460	_
Mass Removal (pounds)				
Gasoline range organics (GRO):	0.579 (GWE)	140.6 (SVE)	4.261 (GWE)	298.34 (SVE)
Benzene:	0.001 (GWE)		0.038 (GWE)	
Methyl-tert butyl ether (MTBE):	0.691 (GWE)		4.639 (GWE)	_
Ground-water DPE system influent				
sample results (µg/L):	7/2/2007	8/1/2007	9/5/2007	
GRO:	370	470	410	_
Benzene:	<5.0	5.5	5.6	_
MTBE:	400	600	580	
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 (μg/L):				
GRO:	180	660	1,200	
Benzene:	< 0.50	<1.0	0.79	
MTBE:	11	11	14	
Soil vapor DPE system effluent				
sample results (μg/L):				
GRO:	<10	<10	< 50	
Benzene:	<0.10	< 0.10	< 0.50	
MTBE:	< 0.50	< 0.50	< 0.50	

DISCUSSION:

Third quarter 2007 ground-water monitoring and sampling was conducted at Station #2111 on 17 July 2007 by Stratus personnel. Water levels were gauged in the eight wells at the Site. No irregularities were noted during water level gauging. Depth to water measurements ranged from 14.08 ft at MW-6 to 23.75 ft at MW-7. Resulting ground-water surface elevations ranged from 23.03 ft above mean sea level in well MW-6 to 14.79 ft at well MW-7. Water level elevations were between historic minimum and maximum ranges for each well, as summarized in Table 1, with the following exceptions: water level elevations reached historic minimum values in wells MW-1, MW-2, MW-3, and MW-7. Water level elevations yielded a potentiometric ground-water flow direction and gradient to the southeast at approximately 0.05 ft/ft, generally inconsistent with historical data (see Table 3). Ground-water monitoring field data sheets are provided within Appendix A. Measured depths to ground water and respective ground-water elevations are summarized in Table 1. Historic free product thickness and cumulative product recovery from well MW-2 is presented in Table 4. Potentiometric ground-water elevation contours are presented in Drawing 1.

Consistent with the current ground-water sampling schedule, water samples were collected from wells MW-1 through MW-8. No irregularities were reported during sampling this quarter. Samples were submitted under chain-of-custody protocol to Test America Analytical Testing Corporation (Morgan Hill, California), for analysis of Gasoline Range Organics (GRO, C4-12) by the LUFT GCMS Method; for Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) by EPA Method 8260B; and tert-Amyl

Page 3

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. The laboratory noted that the GRO concentrations in the samples collected in wells MW-2, MW-5, MW-7 and MW-8 were partly due to individual peak(s) in the quantitation range. No other significant irregularities were encountered during laboratory analysis of the samples. Ground-water sampling field data sheets and the laboratory analytical report, including chain-of-custody documentation, are provided in Appendix A.

Concentrations of GRO were detected above the laboratory reporting limit in four of the eight wells sampled at concentrations up to 1,100 micrograms per liter ($\mu g/L$) in well MW-2. Benzene was detected above the laboratory reporting limit in one of the eight wells sampled at a concentration of 53 $\mu g/L$ in well MW-2. Ethylbenzene was detected above the laboratory reporting limit in one of the eight wells sampled at a concentration of 28 $\mu g/L$ in well MW-2. TAME was detected above the laboratory reporting limit in four of the eight wells sampled at concentrations up to 2.3 $\mu g/L$ in well MW-1. TBA was detected above the laboratory reporting limit in three of the eight wells sampled at concentrations up to 1,100 $\mu g/L$ in well MW-5. MTBE was detected above the laboratory reporting limit in seven of the eight wells sampled at concentrations up to 1,300 $\mu g/L$ in well MW-2. The remaining fuel additives and oxygenates were not detected above their laboratory reporting limits in the eight wells sampled this quarter.

Detected analyte concentrations were within the historic minimum and maximum ranges recorded for each well, with the following exceptions: the concentration of GRO in wells MW-2 and MW-7 reached historic minimum values of 1,100 μ g/L and 560 μ g/L, respectively, and the concentration of MTBE in well MW-5 reached a historic minimum value of 6.6 μ g/L. Historic laboratory analytical results are summarized in Table 1 and Table 2. The most recent GRO, Benzene, and MTBE concentrations are also presented in Drawing 1. A copy of the Laboratory Analytical Report, including chain-of-custody documentation is provided in Appendix A. Ground-water monitoring data (GEO_WELL) and laboratory analytical results (EDF) were uploaded to the GeoTracker AB2886 database. Upload confirmation pages are provided in Appendix B.

For the Third Quarter 2007 period from 2 July 2007 to 17 September 2007, the DPE system reportedly operated approximately 18 percent of the time. During this period, a total of 160,494 gallons of ground water was treated and discharged. During the Third Quarter 2007, approximately 141 pounds of GRO (23.11 gallons), approximately 0.001 pounds of benzene (0.0001 gallons), and approximately 0.691 pounds of MTBE (0.1118 gallons) was 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 20 days between 2 July 2007 and 17 September 2007 based on the hour meter reading. Stratus found the system non-operational upon arrival at the Site on 10 July 2007 due to a high liquid level in the oil/water separator. The filters were changed and then the system was restarted. Stratus found the system again non-operational upon arrival at the Site on 17 July 2007 due to a high water level in the air stripper. The system was restarted before departing from the Site. Stratus found the system non-operational upon arrival at the Site on 1 August 2007 due to a high water level in the air stripper. The system was restarted, samples were collected and then the system was shut down pending receipt of the laboratory results. On 7 August 2007 Stratus restarted the system after receiving the analytical results from the sample collected on 1 August 2007. Stratus found the system non-operational upon arrival at the Site on 20 August 2007 due to a high liquid level in the oil/water separator. The system was restarted prior to departure. Stratus found the system non-operational upon arrival at the site on 5 September 2007 due to a high liquid level in the oil/water separator. The system was restarted, samples were collected, and then the system was shut down pending receipt of laboratory

results. On 11 September 2007 Stratus restarted the system after receiving the analytical results from the sample collected on 5 September 2007. Stratus found the system again non-operational upon arrival at the Site on 17 September 2007 due to a high liquid level in the oil/water separator. Following maintenance on the float levels within the oil/water separator, an attempt was made to restart the system. The system was then shut down again due to a high liquid level in the oil/water separator. Further maintenance and troubleshooting will be conducted in October 2007 and the system will be restarted following these procedures. Copies of Stratus' remediation system operation and maintenance data packages for Third Quarter 2007 are contained within Appendix C. Copies of Stratus' remediation system monthly discharge reports for Third Quarter 2007 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 Test America (Morgan Hill, 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:

Figure 1.

Drawing 1.	Ground-Water Elevation Contour and Analytical Summary Map – 17 July 2007
Table 1.	Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses
Table 2.	Summary of Fuel Additives Analytical Data
Table 3.	Historical Ground-Water Flow Direction and Gradient
Table 4.	Approximate Cumulative Floating Product Recovered
Table 5.	Soil Vapor Extraction System and Ground-Water Extraction System Monthly Discharge Analytical Results Summary
Table 6.	Ground-Water Extraction System Performance Data
Table 7.	Ground-Water Extraction System Effluent Data
Table 8.	Operational Uptime Information of the Soil Vapor Extraction System
Table 9.	Soil Vapor Extraction System Flow Rates and Air Sample Analytical Results
Table 10.	Soil Vapor Extraction and Emission Rates

Cumulative GWE Mass Removal for GRO, Benzene, and MTBE

GWE Influent Concentrations for GRO, Benzene, and MTBE Figure 2. Figure 3. SVE System Influent Concentration vs. Time Figure 4. SVE System Cumulative GRO Mass Removed vs. Time Appendix A. Stratus Ground-Water Sampling Data Package (Includes Field Data Sheets and Laboratory Analytical Report with Chain-of-Custody Documentation) Appendix B. GeoTracker Upload Confirmations Stratus Remediation System Operation and Maintenance Data Packages (Includes Field Appendix C. Data Sheets, Laboratory Reports, and Chain-of-Custody Documentation) Stratus Remediation System Monthly Discharge Reports (Includes Brief Statements Appendix D.

Summarizing Operations and Discharge Summary Tables)

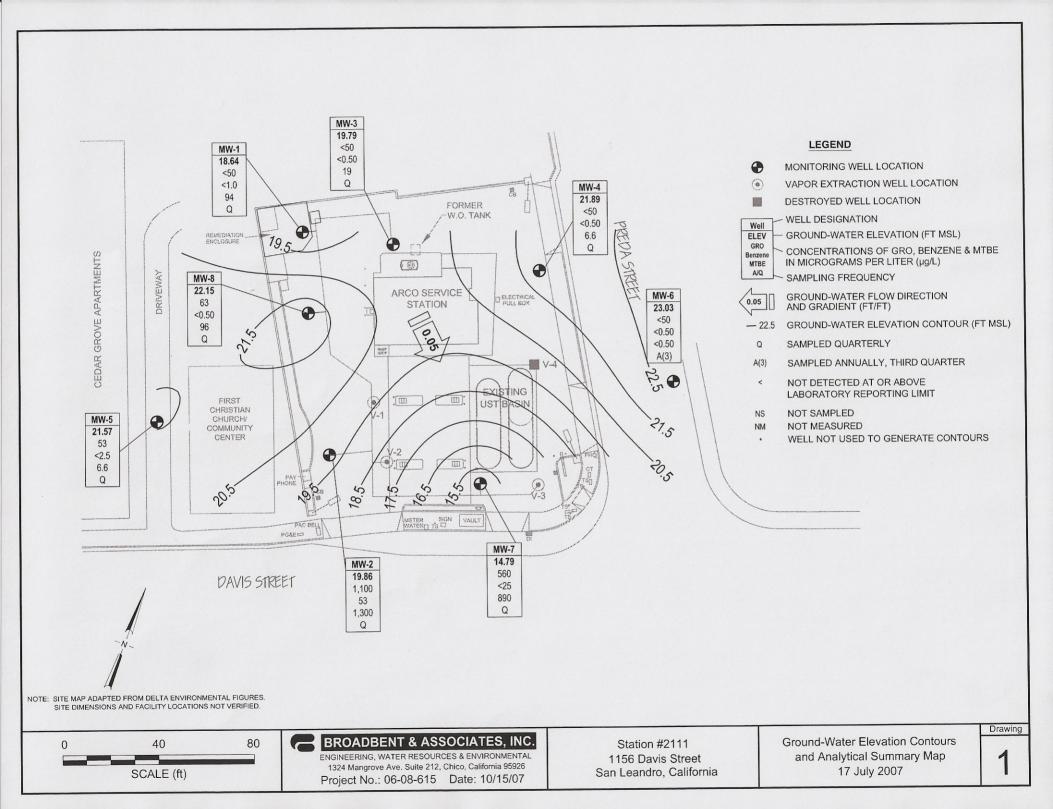


Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses
Station #2111, 1156 Davis St, San Leandro, CA

				Top of	Bottom of		Water Level			Concentra	tions in (µ	g/L)			
Well and			TOC	Screen	Screen	DTW	Elevation	GRO/			Ethyl-	Total		DO	
Sample Date	P/NP	Comments	(feet msl)	(ft bgs)	(ft bgs)	(feet bgs)	(feet msl)	TPHg	Benzene	Toluene	Benzene	Xylenes	MTBE	(mg/L)	pН
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		с	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		С	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
MW-2															

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses
Station #2111, 1156 Davis St, San Leandro, CA

				Top of	Bottom of		Water Level			Concentra	tions in (µ	g/L)			
Well and			TOC	Screen	Screen	DTW	Elevation	GRO/			Ethyl-	Total		DO	
Sample Date	P/NP	Comments	(feet msl)	(ft bgs)	(ft bgs)	(feet bgs)	(feet msl)	ТРНд	Benzene	Toluene	Benzene	Xylenes	MTBE	(mg/L)	pН
MW-2 Cont.															
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	О	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
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

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses
Station #2111, 1156 Davis St, San Leandro, CA

				Top of	Bottom of		Water Level			Concentra	tions in (µ	σ/Ι.)			
Well and			TOC	Screen	Screen	DTW	Elevation	GRO/		Concentra	Ethyl-	Total		DO	
Sample Date	P/NP	Comments	(feet msl)	(ft bgs)	(ft bgs)	(feet bgs)	(feet msl)	TPHg	Benzene	Toluene	Benzene	Xylenes	MTBE	(mg/L)	pН
MW-2 Cont.															
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
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	1	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
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

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses
Station #2111, 1156 Davis St, San Leandro, CA

				Top of	Bottom of		Water Level			Concentra	tions in (µ	g/L.)			
Well and			тос	Screen	Screen	DTW	Elevation	GRO/		0011001101	Ethyl-	Total		DO	
Sample Date	P/NP	Comments	(feet msl)	(ft bgs)	(ft bgs)	(feet bgs)	(feet msl)	TPHg	Benzene	Toluene	Benzene	Xylenes	MTBE	(mg/L)	pН
MW-3 Cont.															
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
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
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

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses
Station #2111, 1156 Davis St, San Leandro, CA

				Top of	Bottom of		Water Level			Concentra	tions in (μ	g/L)			
Well and			TOC	Screen	Screen	DTW	Elevation	GRO/			Ethyl-	Total		DO	
Sample Date	P/NP	Comments	(feet msl)	(ft bgs)	(ft bgs)	(feet bgs)	(feet msl)	TPHg	Benzene	Toluene	Benzene	Xylenes	MTBE	(mg/L)	pН
MW-4 Cont.															
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
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
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

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses
Station #2111, 1156 Davis St, San Leandro, CA

				Top of	Bottom of		Water Level			Concentra	tions in (µ;	g/L.)			
Well and			TOC	Screen	Screen	DTW	Elevation	GRO/			Ethyl-	Total		DO	
Sample Date	P/NP	Comments	(feet msl)	(ft bgs)	(ft bgs)	(feet bgs)	(feet msl)	TPHg	Benzene	Toluene	Benzene	Xylenes	MTBE	(mg/L)	pН
MW-5 Cont.															
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
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
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								

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses
Station #2111, 1156 Davis St, San Leandro, CA

				Top of	Bottom of		Water Level			Concentra	tions in (µ	g/L)		1	
Well and			TOC	Screen	Screen	DTW	Elevation	GRO/			Ethyl-	Total		DO	
Sample Date	P/NP	Comments	(feet msl)	(ft bgs)	(ft bgs)	(feet bgs)	(feet msl)	TPHg	Benzene	Toluene	Benzene	Xylenes	MTBE	(mg/L)	pН
MW-6 Cont.														ı	
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
MW-7														i	
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
10/9/2002	NP	d	38.68	12.0	27.00	17.16	21.52	110,000	1,500	4,400	820	5,400	7,000/120,000	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

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses
Station #2111, 1156 Davis St, San Leandro, CA

				Top of	Bottom of		Water Level			Concentra	tions in (µ	g/L)			
Well and Sample Date	P/NP	Comments	TOC (feet msl)	Screen (ft bgs)	Screen (ft bgs)	DTW (feet bgs)	Elevation (feet msl)	GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	МТВЕ	DO (mg/L)	pН
	1/111	Comments	(leet liisi)	(It bgs)	(It bgs)	(leet bgs)	(leet list)	IIIIg	Delizene	Toruene	Delizene	Aylenes	WIIDE	(IIIg/L)	pii
MW-7 Cont.															
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
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
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

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

 $\mu g/L = Micrograms per liter$

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.
- 1 = 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

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 methods 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				Concentration	ons in (µg/L)				
Sample Date	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	Comments
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	
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	
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	

Table 2. Summary of Fuel Additives Analytical Data Station #2111, 1156 Davis St, San Leandro, CA

Well and				Concentration	ons in (µg/L)				
Sample Date	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	Comments
MW-3									
4/7/2003	<100	<20	75	<0.50	<0.50	6.5			
7/9/2003	<100	<20		<0.50	<0.50	4.2			
02/05/2004	<100	<20	52 37	<0.50		3.1			
					<0.50		<0.50	<0.50	_
04/05/2004	<100	<20 44	53	<0.50	<0.50	3.7	<0.50	<0.50	a
07/13/2004	<100		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	
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	
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	_
7/19/2000	<300	<20	3.4	<0.50	<0.50	0.09	<0.50	<0.50	r

Table 2. Summary of Fuel Additives Analytical Data Station #2111, 1156 Davis St, San Leandro, CA

Well and	Concentrations in (µg/L)											
Sample Date	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	Comments			
MW-4 Cont.												
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				
	2500	~20	0.0	V0.50	\0.50	1.7	V0.50	~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			
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				
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												

Table 2. Summary of Fuel Additives Analytical Data Station #2111, 1156 Davis St, San Leandro, CA

Well and				Concentration	ons in (µg/L)				
Sample Date	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	Comments
MW-7 Cont.									
4/7/2002	z5 000	1 000	710	-25	-25	-25			
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	
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	
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	

Table 2. Summary of Fuel Additives Analytical Data Station #2111, 1156 Davis St, San Leandro, CA

Well and				Concentration					
Sample Date	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	Comments
MW-8 Cont.									
7/17/2007	<300	110	96	< 0.50	< 0.50	1.2	<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

 $\mu g/L = Micrograms per Liter$

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

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
	N 14' E14' E 1	uct Recovered (gallons):	1.44

FOOTNOTES:

NA Not applicable

 $^{(1) \ \} Free \ product \ encountered, \ but \ unable \ to \ gauge.$

ND Non-detect

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	MtB
	SVE-Influent	Air (mg/m³)	77	<0.5	<0.5	<0.5	<0.5			9.4
	SVE A/S-Effluent	Air (mg/m³)	<10	0.19	< 0.10	0.10	< 0.20			5.1
	SVE-Effluent	Air (mg/m³)	<10	<0.10	< 0.10	< 0.10	< 0.20			< 0.5
1/29/2007										
	GWE-Influent	Water (µg/L)	2,000	35	<12	23	14	<12	1,800	1,30
	GWE A/S-Effluent GWE-Effluent	Water (µg/L)	92	<0.50	<0.50	< 0.50	<0.50	< 0.50	1,900	150
		Water (µg/L)	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.5
	SVE-Influent	Air (mg/m³)	400	10 ²	< 0.50	4.7	2.9 ²			21
	SVE A/S-Effluent	Air (mg/m³)	<10	< 0.10	< 0.10	< 0.10	<0.20			< 0.5
	SVE-Effluent	Air (mg/m³)	<10	< 0.10	< 0.10	< 0.10	< 0.20			< 0.5
2/5/2007										
	GWE-Influent	Water (µg/L)	1,4001	25	<5.0	15	7.9	7.5	1,700	1,60
	GWE A/S-Effluent	Water (µg/L)	320 ¹	<0.50	<0.50	<0.50	<0.50			
	GWE-Effluent	Water (µg/L)	<50	<0.50	<0.50	<0.50		0.65	1,600	170
							<0.50	<0.50	<20	<0.5
	SVE-Influent	Air (mg/m³)	100	2.3^{2}	<0.50	1.2	1.6			26
	SVE A/S-Effluent	Air (mg/m³)	11	0.10	< 0.10	0.13	< 0.20			10
	SVE-Effluent	Air (mg/m³)	<10	0.17	<0.10	0.28	< 0.20			<0.5
3/5/2007										
	GWE-Influent	Water (µg/L)	1,500 ¹	20	< 5.0	16	15	5.6	1,600	1,60
	GWE A/S-Effluent	Water (µg/L)	220¹	< 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	<0.5
	SVE-Influent	Air (mg/m³)	190	4.32	<0.50	1.1	2.5		-20	30
	SVE A/S-Effluent	Air (mg/m³)	<10	<0.10	< 0.10	<0.10	< 0.20			5.2
	SVE-Effluent	Air (mg/m³)	<10	<0.10	<0.10					
4/2/2007	3 V D-Enfacil	All (Inglii)	<10	<0.10	<0.10	< 0.10	<0.20			<0.5
4/2/2007										
	GWE-Influent	Water (µg/L)	1,000'	7.1	<5.0	6.7	16	6.6	1,200	1,20
	GWE A/S-Effluent	Water (µg/L)	941	<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	<0.5
	SVE-Influent	Air (mg/m³)	160	<0.50	<0.50	<0.50	0.97			18
	SVE A/S-Effluent	Air (mg/m³)	<50	< 0.50	< 0.50	<0.50	<0.50			11
	SVE-Effluent	Air (mg/m³)	<50	<0.50	< 0.50	<0.50	< 0.50			<0.5
5/1/2007										
	GWE-Influent	Water (µg/L)	900,	<5.0	<5.0	<5.0	9.0	5.2	740	900
	GWE A/S-Effluent	Water (µg/L)	76'	< 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	<0.5
	SVE-Influent	Air (mg/m³)	330	0.56	0.89	1.8	2.6			14
	SVE A/S-Effluent	Air (mg/m³)	<50	< 0.50	0.67	<0.50	1.3			3.7
	SVE-Effluent	Air (mg/m³)	<50	< 0.50	<0.50	< 0.50	< 0.50			<0.5
6/4/2007										
	GWE-Influent	Water (µg/L)	5401	<5.0	<5.0	13	12	<5.0	520	670
	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	<0.5
	SVE-Influent	Air (mg/m³)	180	<0.50	<0.50	<0.50	<1.0			11
	SVE A/S-Effluent	Air (mg/m³)	<10	< 0.10	<0.10	< 0.10	<0.20			0.87
	SVE-Effluent	Air (mg/m³)	<10	< 0.10	< 0.10	< 0.10	< 0.20			< 0.5
7/2/2007										
	GWE-Influent	Water (µg/L)	370°	<5.0	<5.0	<5.0	<5.0	<5.0	<200	400
	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	<0.5
	SVE-Influent	Air (mg/m³)	660	<1.0	<1.0	1.2	2.2	-0.50	-2-17	11
	SVE A/S-Effluent	Air (mg/m³)	11	0.25	<0.10	0.21	0.22			11
	SVE-Effluent	Air (mg/m³)	<10	< 0.10	<0.10	<0.10	< 0.20			<0.5
8/1/2007			-10	-0.10	-0.10	-5.10	-0,20			V
	GWE-Influent	Water (µg/L)	470	5.5	<5.0	9.1	17	<5.0	870	600
	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	28 < 20	<0.5
	SVE-Influent	Air (mg/m³)	1,200	0.79	<0.50	1.5	3.8			14
	SVE A/S-Effluent	Air (mg/m³)	<50	<0.50	<0.50 <0.50	<0.50	<0.50			5.1
	SVE-Effluent	Air (mg/m³)	<50	<0.50	<0.50	< 0.50	<0.50			<0.5
9/5/2007	D Dillinoin	(~50	~U.JU	~0.50	~0.50	VU.3U			~ (),3
21312001	GWE-Influent	Water (µg/L)	410	5.6	<5.0	10	28	~= n	020	
	GWE-Influent	Water (µg/L)	410 <50	<0.50	<5.0 <0.50			<5.0	830	580
	GWE-Effluent	Water (µg/L)	<50 <50	<0.50	<0.50 <0.50	<0.50	<0.50	<0.50 <0.50	830 <20	37 <0.5
						<0.50	< 0.50			

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

 $^{\circ}$ = Hydrocarbon result partly due to individual peak(s) in quantitation range $^{\circ}$ = Primary and confirm results varied by > 40% RPD

Table 6 Ground-Water Extraction System Performance Data

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

							<u>G</u> I	10			<u>Ben</u>	zene			M	TBE	
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		170,596	40,031	0.99	1,000	0.01	0.417	2.023	7.1	1.6E-04	0.005	0.030	1,200	1.7E-02	0.467	2.132
INFL	05/01/07		225,297	54,701	1.31	900	0.01	0.433	2.457	<5.0	7.6E-05	0.002	0.033	900	1.7E-02	0.479	2.611
INFL	06/04/07		429,450	204,153	4.17	540	0.04	1.226	3.683	<5.0	1.3E-04	0.004	0.037	670	3.9E-02	1.337	3.947
INFL	07/02/07		480,377	50,927	1.26	370	0.01	0.193	3.876	<5.0	0.0E+00	0.000	0.037	400	8.1E-03	0.227	4.174
INFL	08/01/07		580,301	99,924	2.31	470	0.01	0.350	4.226	5.5	3.5E-05	0.001	0.038	600	1.4E-02	0.417	4.591
INFL	09/05/07		589,944	9,643	0.19	410	0.00	0.035	4.261	5.6	5.7E-06	0.000	0.038	580	1.4E-02 1.4E-03	0.047	4.639
			QUARTER 2	2007			artist Color								2012	0.047	4.032
	VATER DISC		(0)		160,494	as of 9/5/200	17										
	DISCHARO				1.71												
	OUNDS REM							0.579				0.001				0.691	
	ALLONS RI):					0.095				0.000				0.112	
	OUNDS REM								4.261				0.038				4.639
	ALLONS RE		-		589,944				0.699				0.005				0.751
		1 CARB	ON LOADIN	G:		14.9%											
xplanatio		11.															
	= Microgram	•															
	= Gallons per																
-	= Pounds per	-	•														
	= Gasoline ra = Methyl tert																
	asoline = 6.1																
	enzene = 7.34																
	4tBE = 6.18 p																
	= Not applica		ganon														
Λ	- Not applica	DIE															

- 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

Assumptions:

Table 7 Ground-Water Extraction System Effluent Data

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

								Efflu	ent Concentra	itions		
Sample ID	Date Sampled	Notes	Totalizer Value (gallons)	Monthly Volume (gallons)	Average Discharge Rate (gpm)	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

REPORTING PERIOD: THIRD QUARTER 2007

PERIOD WATER DISCHARGED (gal):

160,494 as of 9/5/2007

AVERAGE DISCHARGE RATE (gpm)

1.71

Explanations:

NΑ

μg/L = Micrograms per liter
mg/L = Milligrams per liter
gpm = Gallons per minute
GRO = Gasoline Range Organics
MtBE = Methyl tertiary butyl ether

= Data not available

Table 8 OPERATIONAL UPTIME INFORMATION FOR THE SOIL VAPOR EXTRACTION SYSTEM

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

Date	Hr. Meter	No. of Days B	etween Sam	pling Dates	Cumulat	ive Days	Percent
Date	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%

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

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

ъ.	Flow Rate	Vacuum	Sampling			Ana	lytes (mg/m³)		
Date	(cfm)	(in Hg)	Port	GRO	Benzene	Toluene	Ethylbenzene	Xylenes	MtBE
,			Influent	77	< 0.5	< 0.5	<0.5	<1.0	9.4
01/29/07	198	21.0	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
			Influent	400	10	< 0.5	4.7	2.9	21
02/05/07	200	19.0	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
			Influent	100	2.3	< 0.50	1.2	1.6	26
03/05/07	180	24.0	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
			Influent	190	4.3	< 0.50	1.1	2.5	30
04/02/07	180	NR	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
			Influent	160	< 0.50	< 0.50	< 0.50	0.97	18
05/01/07	180	NR	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
			Influent	330	0.56	0.89	1.8	2.6	14
06/04/07	190	NR	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
			Influent	180	< 0.50	< 0.50	< 0.50	<1.0	11
07/02/07	200	NR	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
			Influent	660	<1.0	<1.0	1.2	2.2	11
08/01/07	200	NR	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
			Influent	1,200	0.79	< 0.50	1.5	3.8	14
09/05/07	190	NR	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

= not recorded

NR

Notes:

mg/m³ in Hg = milligrams per cubic meter

= inches of mercury

cfm = cubic feet per second

GRO = gasoline range organics

MtBE = methyl tertiary butyl ether

Table 10

SOIL VAPOR EXTRACTION SYSTEM EXTRACTION AND EMISSION RATES

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

Date		ion Rate from s (lbs/day)	Emissions Atmosphere		1	ion Removal iency, %	Cumulat Remov	
	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
Air Permit Limits DRE shall be at le Daily emmission	east 95%		/OC in any one da	•				
Wells (lbs/day)	=	min 19.27 <u>lbs/day</u>	cu meter	cut	ft	454,000 mg	day	
Dest. Removal = Efficiency %		19.27 - (<0.12) 19.27	x 100 = 99.35%					

Efficiency, %

Notes

* = Benzene 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

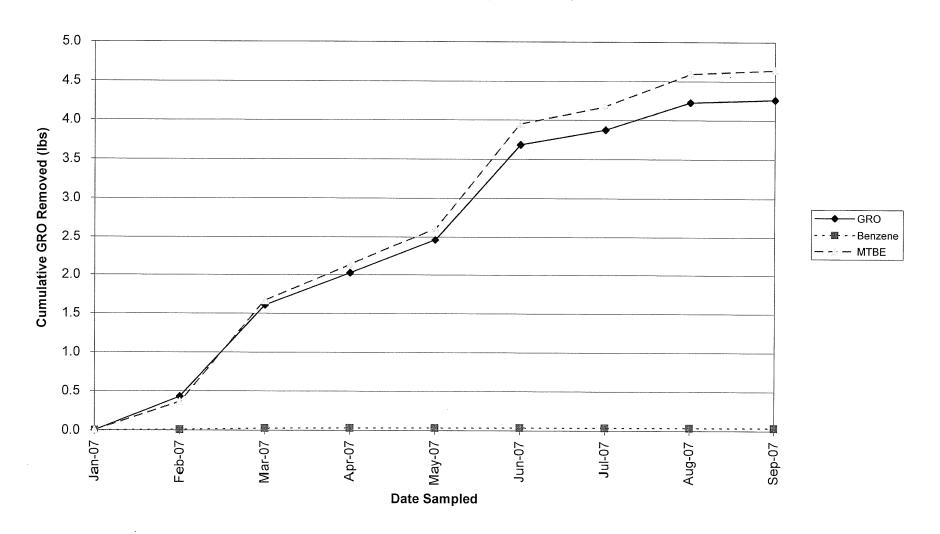


Figure 2

GWE Influent Concentrations for GRO, Benzene, and MTBE

Station #2111, 1156 Davis Street, San Leandro, California

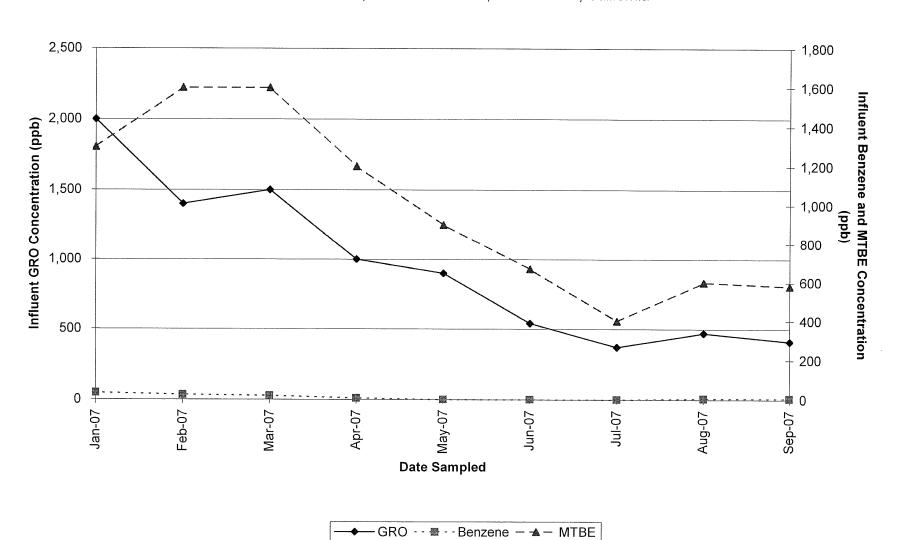


Figure 3
SVE System Influent Concentration vs.Time
Station #2111, 1156 Davis Street, San Leandro, California

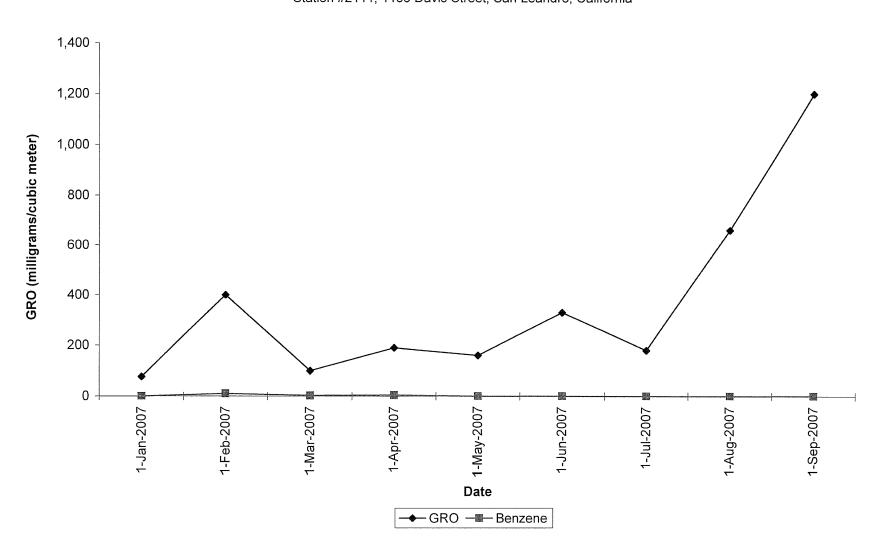
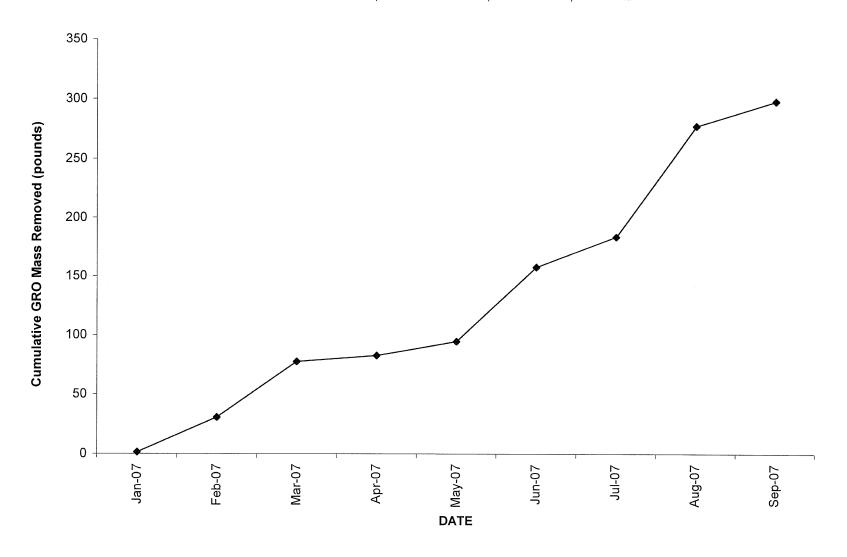


Figure 4
SVE System Cumulative GRO Mass Removed vs. Time
Station #2111, 1156 Davis Street, San Leandro, California



APPENDIX A

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



August 9, 2007

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: Sandy Hayes / Jay Johnson

Phone Number: (530) 676-6000

On-Site Supplier Representatives: Vince Zalutka and David DeMello

Date: July 17, 2007

Arrival: 04:30 Departure: 07:15

Weather Conditions: Clear

Unusual Field Conditions: None

Scope of Work Performed: Quarterly monitoring and sampling

Variations from Work Scope: None

This submittal presents the tabulation of data collected in association with routine groundwater monitoring. The attachments include field data sheets, chain of custody documentation and 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,

Jay R. Johnson, P.G.

Project Manager

STRATUS ENVIRONMENTAL THE

Jay R. Johnson

No. 5867

Attachments:

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

CC: Mr. Paul Supple, BP/ARCO



Global ID: T0600101764

Site Address 1156 Davis St.
City San Leandro
Sampled By: David D & VinceZ

ORIGINAL

Site Number Arco 2111
Project No E2111-03 Project PM Jay Johnson Date -07-17-07

Signature	 1/,	Date: 7-/7-07	7
	 7		

							Ü		-VJ								*-	6 VOA	's		_
	Wate	er Level Data	}				Purge V	olume Ca	alculations			W	'ell Pui	rge Me	hod		Sa	mple Rec	ord	Field Data	
WellID	Time	Depth to water feet	Top of Screen feet		Casir Col	ng Water umn (A)	Well Diameter (Inches)	Multiplier Value (B)	Three Casing Volumes (Gallons)	Actu Wat Purg (Gallo	er ed	No Purge	Bailer	Pump	Other	ĺ	DTW At nple Time	Sample I.D.	Sample time	Dissolved Oxygen (mg/L)	
MW-1	0624	20.85	12.5	26.08		Ø	4	2	Ø	Ø		Х				No	Runge	MW-1	0626	191	
MW-2	DGOZ	18.00	12	26.52		1	4	2	Ī			1						MW-2	0614	4.04	
MW-3	0648		12	26.16			4	2									/	MW-3	2647	4.75 3.73	
MW-4	0530	16,10	10	21,45			4	2										MW-4	0537	3.73	į
MW-5	0440		9.5	23,47			2	0.5										MW-5	0445 0520 0554	5.02.	
MW-6	0513	14.08	10	20.31			2	0.5								Ц		MW-6	0520	4.40	Ì
MW-7	0547	23.75	12	26.29			4	2	<u> </u>			Ц						MW-7	0554	4.23	ĺ
MW-8	0610	.16.76	18	38.88		 	2	0.5	4	4		4				Ц	!	MW-8	0617	1.85	i
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Site Address 1156 Davis St.

City San Leandro

Sampled By: David D & VinceZ

Site Number Arco 2111

Project No E2111-03

Project PM Jay Johnson

Date 7-/7-07

ORIGINAL

Vell ID		MW	1-1 O	626	Well ID			1-2 00	
urge start tim	Brile Ne	Oa	for		purge start time	Sis	uple 1	Port N	O OTAR
	Temp C	рН	cond	gallons		Temp C	рН	cond	gallons
ime				-	time	22.0	7.09	689	Ф
ime	20.1	6.98	679	B	time				
ime	_				time				
ime					time				
ourge stop tim	ne <i>O</i>	RP (179)		purge stop time	or	p (183)	
Well ID		MV	1-3 0	647	Well ID			V-4 05	
ourge start tin	ne <i>18 a</i>	iler.	No	Odor	purge start time	30	ciler	No	Odor
	Temp C	рН	cond	gallons		Temp C	pН	cond	gallons
time	19.6	7.27	678	8	time	20.2	6.87	763	82
time					time				
time					time				
time		-		<u> </u>	time				
purge stop tin	ne OR	P (177)	purge stop time)	ORP	(17.	ر ج
Well ID			V-5 04		Well ID				520
Purge start tir	ne Ba	iler	N	o Odor	Purge start time	e Bar	In_	No O	Dor
	Temp C	pН	cond	gallons		Temp C	рН	cond	gallons
time	20,1	7.02	7/2	8	time	20.9	7.02	684	\$
time					time				/
time					time				
time		<u> </u>			time		Í		<u> </u>
purge stop tir	ne	ORP	(14.	2)	purge stop time	e OK		55)	
Well ID		MV	N-7 C	554	Well ID		M\	N-8 06	
purge start tir	me Bo	riler	No	Odor	purge start time	e Bac	/re	no of	
	Temp C	pН	cond	gallons		Temp C	pН	cond	gallons
time	19.7	7.41	699	*	time	20.1	6.97	676	0
time	۷				time				1
time				<u> </u>	time				
time					time		1		
purge stop ti	me	ORP	(170	()	purge stop tim	e <i>Ø</i>	er (180)	

Atlantic Richfield Company

Chain of Custody Record

Project Name: ARCO 2111

ORIGINAL

BP BU/AR Region/Enfos Segment:

BP > Americas > West > Retail > Alameda > 2111

State or Lead Regulatory Agency:

Requested Due Date (mm/dd/yy): 57

STD-TAT

On-site Time: 0430	Temp: 60 3	
Off-site Time: 07/5	Temp: 60 s	
Sky Conditions: 2/2006		
Meteorological Events:		
Wind Speed:	Direction.	

			· · · · · · · · · · · · · · · · · · ·	,,				
Lab Name: TestAmerica	BP/AR Facility No	o.: 2111	Consultant/Contractor:	Stratus Environmental, Inc.				
Address: 885 Jarvis Drive	BP/AR Facility Ad	ddress: 1156 Davis Street,	San Leandro	Address: 3330 Cameron Park Drive, Suite 550				
Morgan Hill, CA 95937	Site Lat/Long:			Cameron Park, CA 95682				
Lab PM: Lisa Race	California Global II	ID No.: T0600101764		Consultant/Contractor Proje	ect No.: E2111-03			
Tele/Fax: 408-782-8156 408-782-6308 (fax)	Enfos Project No.:	G0C28-0028		Consultant/Contractor PM:	Jay Johnson			
BP/AR PM Contact: Paul Supple	Provision or OOC	(circle one) Provision		Tele/Fax: (530) 676-6	6000 / (530) 676-6005			
Address: 2010 Crow Canyon Place, Suite 150	Phase/WBS:	04-Monitoring		Report Type & QC Level:	Level 1 with EDF			
San Ramon, CA	Sub Phase/Task:	03-Analytical		E-mail EDD To: shaye:	s@stratusinc.net			
Tele/Fax: 925-275-3506	Cost Element:	01-Contractor labor		Invoice to: Atlantic Richfie	eld Co.			
Lab Bottle Order No: Matrix		Preservative	ALL BY 820 Request	ed Analysis				
Item No. Sample Description Time Date Description Agir Air	Laboratory No.	No. of Containers Unpreserved H ₂ SO ₄ HNO ₃ HCl Methanol	GRO/BTEX/Oxy* 1,2-DCA Ethanol EDB	DRO	Sample Point Lat/Long and Comments *Oxy= MTBE,TAME,ETBE,DIPE,TBA			
1 MW-1 0626 07/17 X		3 X	XXXX					
2 MW-2 0614 1 1		3						
3 MW-3 0647		3						
4 MW-4 0537		3						
5 MW-5 0445		6						
6 MW-6 0520		3						
7 MW-7 0554		3						
8 MW-8 0617		3	111 1					
9 TB-2111 0450 4		2			HOLD			
10								
Sampler's Name: Day is De Mello	Reling	quished By / Affiliation	Date Time	Accepted By /	Affiliation Date Time			
Sampler's Company: STRA YUS ENVIRON WENTAL	Twil Jesa	quished By / Affiliation	07-17-07 09/2	Cheno Une Test	Affiliation Date Time Affiliation Date Time Affiliation O412			
Shipment Date: 7/17/07 Shipment Method: The Posson		,		7				
Shipment Method: Tu Poesou								
Shipment Tracking No:								
Special Instructions: Please cc results to rmiller	@broadbentinc.com							
Custody Seals In Place: Yes / No Temp Blank	Yes) No Coo	oler Temp on Receipt: °F/	C Trip Blank	esy No MS/MSD	Sample Submitted: Yes / No			



1 August, 2007

Jay Johnson Stratus Environmental Inc. [Arco] 3330 Cameron Park Dr., Suite 550 Cameron Park, CA 95682

RE: ARCO #2111, San Leandro, CA Work Order: MQG0660

Enclosed are the results of analyses for samples received by the laboratory on 07/17/07 19:25. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa Race

Senior Project Manager

CA ELAP Certificate # 1210

The results in this laboratory report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the BPGCLN Technical Specifications, applicable Federal, State, local regulations and certification requirements as well as the methodologies as described in laboratory SOPs reviewed by the BPGCLN. This entire report was reviewed and approved for release.





Stratus Environmental Inc. [Arco] Project: ARCO #2111, San Leandro, CA MQG0660
3330 Cameron Park Dr., Suite 550 Project Number: G0C28-0028 Reported:
Cameron Park CA, 95682 Project Manager: Jay Johnson 08/01/07 16:40

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MQG0660-01	Water	07/17/07 06:26	07/17/07 19:25
MW-2	MQG0660-02	Water	07/17/07 06:14	07/17/07 19:25
MW-3	MQG0660-03	Water	07/17/07 06:47	07/17/07 19:25
MW-4	MQG0660-04	Water	07/17/07 05:37	07/17/07 19:25
MW-5	MQG0660-05	Water	07/17/07 04:45	07/17/07 19:25
MW-6	MQG0660-06	Water	07/17/07 05:20	07/17/07 19:25
MW-7	MQG0660-07	Water	07/17/07 05:54	07/17/07 19:25
MW-8	MQG0660-08	Water	07/17/07 06:17	07/17/07 19:25
TB-2111	MQG0660-09	Water	07/17/07 04:50	07/17/07 19:25

The carbon range for the TPH-GRO has been changed from C6-C10 to C4-C12. The carbon range for TPH-DRO has been changed from C10-C28 to C10-C36. EPA 8015B has been modified to better meet the requirements of California regulatory agencies. These samples were received with no custody seals.





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0028
Project Manager: Jay Johnson

MQG0660 Reported: 08/01/07 16:40

Total Purgeable Hydrocarbons by GC/MS (CA LUFT) TestAmerica - Morgan Hill, CA

				0					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-1 (MQG0660-01) Water Sampled:	07/17/07 06:26	Received	: 07/17/07	19:25					
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	7G26008	07/26/07	07/26/07	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		100 %	60-1	25	"	и	"	"	
Surrogate: Dibromofluoromethane		102 %	75-1	20	"	"	"	"	
Surrogate: Toluene-d8		95 %	80-1.	20	"	"	"	n .	
Surrogate: 4-Bromofluorobenzene		85 %	60-1	35	"	"	"	"	
MW-2 (MQG0660-02) Water Sampled:	07/17/07 06:14	Received:	07/17/07	19:25					
Gasoline Range Organics (C4-C12)	1100	250	ug/l	5	7G26008	07/26/07	07/26/07	LUFT GCMS	PV
Surrogate: 1,2-Dichloroethane-d4		99 %	60-1.	25	"	"	"	"	
Surrogate: Dibromofluoromethane		100 %	75-1.	20	"	"	n	n	
Surrogate: Toluene-d8		100 %	80-1.	20	"	n	"	"	
Surrogate: 4-Bromofluorobenzene		97 %	60-1.	35	"	"	"	n .	
MW-3 (MQG0660-03) Water Sampled:	07/17/07 06:47	Received:	07/17/07	19:25					
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	7G25004	07/25/07	07/25/07	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		110 %	60-12	25	"	"	"	11	
Surrogate: Dibromofluoromethane		108 %	75-12	20	"	"	"	"	
Surrogate: Toluene-d8		93 %	80-12	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95 %	60-1.	35	"	"	"	n .	
MW-4 (MQG0660-04) Water Sampled:	07/17/07 05:37	Received:	07/17/07	19:25					
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	7G24017	07/24/07	07/25/07	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		104 %	60-12	25	11	"	11	n	-
Surrogate: Dibromofluoromethane		97 %	75-12	20	"	"	"	"	
Surrogate: Toluene-d8		96 %	80-12	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89 %	60-13	35	"	n	"	п	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0028
Project Manager: Jay Johnson

MQG0660 Reported: 08/01/07 16:40

Total Purgeable Hydrocarbons by GC/MS (CA LUFT) TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (MQG0660-05) Water Sampled: 07/1	7/07 04:45	Received:	07/17/07	19:25	***************************************				
Gasoline Range Organics (C4-C12)	53	50	ug/l	1	7G26008	07/26/07	07/26/07	LUFT GCMS	PV
Surrogate: 1,2-Dichloroethane-d4		106 %	60-1.	25	"	"	"	11	
Surrogate: Dibromofluoromethane		99 %	75-12	20	"	n	"	"	
Surrogate: Toluene-d8		100 %	80-12	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89 %	60-1.	35	"	"	"	"	
MW-6 (MQG0660-06) Water Sampled: 07/1	7/07 05:20	Received:	07/17/07	19:25					
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	7G24017	07/24/07	07/25/07	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		107 %	60-12	25	"	"	"	u	
Surrogate: Dibromofluoromethane		98 %	75-12	20	"	"	"	"	
Surrogate: Toluene-d8		95 %	80-12	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88 %	60-13	35	n	"	n	"	
MW-7 (MQG0660-07) Water Sampled: 07/1	7/07 05:54	Received:	07/17/07	19:25					
Gasoline Range Organics (C4-C12)	560	250	ug/l	5	7G26008	07/26/07	07/26/07	LUFT GCMS	PV
Surrogate: 1,2-Dichloroethane-d4		102 %	60-12	25	"	"	"	"	
Surrogate: Dibromofluoromethane		98 %	75-12	20	"	"	"	"	
Surrogate: Toluene-d8		99 %	80-12	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89 %	60-13	35	"	"	"	"	
MW-8 (MQG0660-08) Water Sampled: 07/1	7/07 06:17	Received:	07/17/07 1	9:25					
Gasoline Range Organics (C4-C12)	63	50	ug/l	1	7G24017	07/24/07	07/25/07	LUFT GCMS	PV
Surrogate: 1,2-Dichloroethane-d4		110 %	60-12	25	"	"	"	"	
Surrogate: Dibromofluoromethane		100 %	75-12	20	"	"	"	"	
Surrogate: Toluene-d8		95 %	80-12	20	"	"	u u	"	
Surrogate: 4-Bromofluorobenzene		89 %	60-13	35	"	"	"	"	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0028
Project Manager: Jay Johnson

MQG0660 Reported: 08/01/07 16:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-1 (MQG0660-01) Water	Sampled: 07/17/07 06:26	Received	: 07/17/07	7 19:25					
tert-Amyl methyl ether	2.3	1.0	ug/l	2	7G24017	07/24/07	07/25/07	EPA 8260B	
Benzene	ND	1.0	11	**	11	**	#	п	
tert-Butyl alcohol	ND	40	"	H	"	"	#	II.	
Di-isopropyl ether	ND	1.0	n	II.	11	11	tt .	н	
1,2-Dibromoethane (EDB)	ND	1.0	II	П	11	11	II .	II.	
1,2-Dichloroethane	ND	1.0	п	11	ii	11	II	н	
Ethanol	ND	600	н	"	"	"	H	П	
Ethyl tert-butyl ether	ND	1.0	**	n	Ü	H	Ħ	11	
Ethylbenzene	ND	1.0	11	n	н	II	II.	*	
Methyl tert-butyl ether	94	1.0	"	II .	u u	"	п	tt.	
Toluene	ND	1.0	ıı .	#	"	н	"	II .	
Xylenes (total)	ND	1.0	"	ii	"		TI	și și	
Surrogate: Dibromofluoromethan	e	104 %	75-	120	"	"	"	u	
Surrogate: 1,2-Dichloroethane-d4	1	106 %	60-	125	"	"	"	"	
Surrogate: Toluene-d8		97 %	80-	120	"	"	"	n	
Surrogate: 4-Bromofluorobenzene	?	94 %	60-	135	"	"	"	"	
MW-2 (MQG0660-02) Water	Sampled: 07/17/07 06:14	Received:	07/17/07	19:25					
tert-Amyl methyl ether	ND	10	ug/l	20	7G24017	07/24/07	07/25/07	EPA 8260B	
Benzene	53	10	**	п	0	11	ii.	*	
tert-Butyl alcohol	1000	400	n	п	#	п	II.	n	
Di-isopropyl ether	ND	10	11	#	**	н	н	II .	
1,2-Dibromoethane (EDB)	ND	10	**	#	ır	u	н	II	
1,2-Dichloroethane	ND	10	n	п	п	"	u	99	
Ethanol	ND	6000	n	n	**	11	II	H .	
Ethyl tert-butyl ether	ND	10	n	#	#	II .	11	n	
Ethylbenzene	28	10	n	"	"	**	**	II.	
Methyl tert-butyl ether	1300	10	"	11	11	**	**	II .	
Toluene	ND	10	u	II .	п	Ħ	#	**	
Xylenes (total)	ND	10	н	11	31	11	JI.	"	
Surrogate: Dibromofluoromethan	2	99 %	75-1	120	"	11	"	"	
Surrogate: 1,2-Dichloroethane-d4	!	107 %	60-1	125	"	"	"	"	
Surrogate: Toluene-d8		99 %	80-	120	"	n .	"	"	
Surrogate: 4-Bromofluorobenzene		95 %	60-1		"	n	"	и	
- "									





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0028
Project Manager: Jay Johnson

MQG0660 Reported: 08/01/07 16:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-3 (MQG0660-03) Water San	npled: 07/17/07 06:47	Received	: 07/17/07 1	9:25					
tert-Amyl methyl ether	1.5	0.50	ug/l	1	7G25004	07/25/07	07/25/07	EPA 8260B	
Benzene	ND	0.50	н	н	It	"	11	41	
tert-Butyl alcohol	ND	20	"	п	"	**	"	n	
Di-isopropyl ether	ND	0.50	II .	"	H	tt	11	11	
1,2-Dibromoethane (EDB)	ND	0.50	**	Ħ	п	11	#	H	
1,2-Dichloroethane	ND	0.50	H	**	"	"	#	11	
Ethanol	ND	300	11	н	п	n .	II	11	
Ethyl tert-butyl ether	ND	0.50	н	0	•	**	"	U	
Ethylbenzene	ND	0.50	п	u	II .	#	п	#	
Methyl tert-butyl ether	19	0.50	**	n .	+1	п	u	tt	
Toluene	ND	0.50	II	**	H	0	"	н	
Xylenes (total)	ND	0.50	H	II.	n	II .	11	n	
Surrogate: Dibromofluoromethane		108 %	75-12	0	"	"	"	п	
Surrogate: 1,2-Dichloroethane-d4		110 %	60-12.	5	"	"	"	"	
Surrogate: Toluene-d8		93 %	80-12	0	"	"	"	n .	
Surrogate: 4-Bromofluorobenzene		95 %	60-13.	5	"	"	"	"	
MW-4 (MQG0660-04) Water Sam	npled: 07/17/07 05:37	Received:	07/17/07 1	9:25					
tert-Amyl methyl ether	1.7	0.50	ug/l	1	7G24017	07/24/07	07/25/07	EPA 8260B	
Benzene	ND	0.50	n	#1	u	n	"	II.	
tert-Butyl alcohol	ND	20	II .	u	11	n	#	"	
Di-isopropyl ether	ND	0.50	н	II	11	II .	11	"	
1,2-Dibromoethane (EDB)	ND	0.50	11		н	11	n	н	
1,2-Dichloroethane	ND	0.50	11	н	и	"	II	н	
Ethanol	ND	300	**	II	H	II	н	n	
Ethyl tert-butyl ether	ND	0.50	tt .	H	п	**	n	п	
Ethylbenzene	ND	0.50	n	"	п	n	11	u	
Methyl tert-butyl ether	6.6	0.50	n	п	#	п	**	п	
Гoluene	ND	0.50	н	**	10	11	ır	11	
Xylenes (total)	ND	0.50	0	H	H	U	**	tt.	
		97 %	75-120)	"	"	"	"	
Surrogate: Dibromofluoromethane		9/ /0	10 120	,					
Surrogate: Dibromofluoromethane Surrogate: 1,2-Dichloroethane-d4		104 %	60-125		"	"	n .	u	
				ō	"	"	"	n 11	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0028
Project Manager: Jay Johnson

MQG0660 Reported: 08/01/07 16:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-5 (MQG0660-05) Water Samp	led: 07/17/07 04:45	Received	: 07/17/07 1	9:25					
tert-Amyl methyl ether	ND	2.5	ug/l	5	7G24017	07/24/07	07/25/07	EPA 8260B	
Benzene	ND	2.5	II.	11	n .	n	"	ii .	
tert-Butyl alcohol	1100	100	"	II .	ŧ	**	II	Ħ	
Di-isopropyl ether	ND	2.5	11	**	11	TI .	n	П	
1,2-Dibromoethane (EDB)	ND	2.5	H	II	II	п	11	**	
1,2-Dichloroethane	ND	2.5	**	"	*	"	II	n	
Ethanol	ND	1500	U	H	n	11	#	п	
Ethyl tert-butyl ether	ND	2.5	#	0	#	11	11	"	
Ethylbenzene	ND	2.5	H	*1	11	**	11	п	
Methyl tert-butyl ether	6.6	2.5	D	11	11	U	H	II .	
Toluene	ND	2.5	#	11	11	п	H	**	
Xylenes (total)	ND	2.5	"	н	rt .	"	II	n .	
Surrogate: Dibromofluoromethane		94 %	75-12	0	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		100 %	60-12	5	"	"	"	"	
Surrogate: Toluene-d8		98 %	80-12	0	"	"	n	n	
Surrogate: 4-Bromofluorobenzene		85 %	60-13	5	"	"	"	"	
MW-6 (MQG0660-06) Water Samp	led: 07/17/07 05:20	Received:	07/17/07 1	9:25					
tert-Amyl methyl ether	ND	0.50	ug/l	1	7G24017	07/24/07	07/25/07	EPA 8260B	
Benzene	ND	0.50	II .	11	11	II.	H	**	
tert-Butyl alcohol	ND	20	**	"	"	н	П	II	
Di-isopropyl ether	ND	0.50	"	11	II.	"	**	**	
1,2-Dibromoethane (EDB)	ND	0.50	II	II .	11	п	11	н	
1,2-Dichloroethane	ND	0.50	"	н	"	**	11	II .	
Ethanol	ND	300	n	11	II	"	#	#	
Ethyl tert-butyl ether	ND	0.50	U	41	11	n	D .	u	
Ethylbenzene	ND	0.50	11	**	и	"	n	II .	
Methyl tert-butyl ether	ND	0.50	Ц	If	0	Ħ	n	**	
Toluene	ND	0.50	n	**	**	п	Ш	II	
Xylenes (total)	ND	0.50		H	n	н	11	n	
Surrogate: Dibromofluoromethane		98 %	75-12)	11	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		107 %	60-12.	5	"	"	"	n	
Surrogate: Toluene-d8		95 %	80-120)	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88 %	60-13.	5	"	n	"	"	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0028
Project Manager: Jay Johnson

MQG0660 Reported: 08/01/07 16:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 (MQG0660-07) Water	Sampled: 07/17/07 05:54	Received	: 07/17/07	19:25					
tert-Amyl methyl ether	ND	25	ug/l	50	7G24017	07/24/07	07/25/07	EPA 8260B	
Benzene	ND	25	н	11	IF	Ħ	"	11	
tert-Butyl alcohol	ND	1000	П	#	11	tt.	**	If	
Di-isopropyl ether	ND	25	n	**	#1	II	"	II .	
1,2-Dibromoethane (EDB)	ND	25	H	**	"	11	n	TF.	
1,2-Dichloroethane	ND	25	11	11	11	п	n	11	
Ethanol	ND	15000	**	n	и	п	II	Ħ	
Ethyl tert-butyl ether	ND	25	#	II.	n	11	II	8	
Ethylbenzene	ND	25	**	н	n	**	II.		
Methyl tert-butyl ether	890	25	**	п	11	**	II .	11	
Toluene	ND	25	#	11	"	н	Ü	11	
Xylenes (total)	ND	25	**	11	H	"	II	**	
Surrogate: Dibromofluoromethan	ne	100 %	75-1	120	"	"	n	"	
Surrogate: 1,2-Dichloroethane-d-	4	106 %	60-1	125	"	"	"	"	
Surrogate: Toluene-d8		98 %	80-1	120	"	"	"	"	
Surrogate: 4-Bromofluorobenzen	e	87 %	60-1	135	"	"	"	"	
MW-8 (MQG0660-08) Water	Sampled: 07/17/07 06:17	Received	: 07/17/07	19:25					
tert-Amyl methyl ether	1.2	0.50	ug/l	1	7G24017	07/24/07	07/25/07	EPA 8260B	
Benzene	ND	0.50	n	II	**	0	II	и	
tert-Butyl alcohol	110	20	"	II	#	#	II	и	
Di-isopropyl ether	ND	0.50	n	ш	R	"	11	н	
1,2-Dibromoethane (EDB)	ND	0.50	n	11	п	"	11	H	
1,2-Dichloroethane	ND	0.50	II	"	#1	tt t	"	Ш	
Ethanol	ND	300	II	11	11	tt.	"	II .	
Ethyl tert-butyl ether	ND	0.50	H	n	**	u	II.	н	
Ethylbenzene	ND	0.50	11	H	"	11	H	**	
Methyl tert-butyl ether	96	0.50	11	Ш	11	11	IT	**	
Toluene	ND	0.50	**	II.	n	11	11	**	
Xylenes (total)	ND	0.50		11	II .	t)		tt.	
Surrogate: Dibromofluoromethan	ne e	100 %	75-1	20	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d-	4	110 %	60-1	25	rr .	"	n	"	
Surrogate: Toluene-d8		95 %	80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	е	89 %	60-1	35	"	"	"	"	





Project: ARCO #2111, San Leandro, CA

MQG0660 Reported: 08/01/07 16:40

Project Number: G0C28-0028
Project Manager: Jay Johnson

Total Purgeable Hydrocarbons by GC/MS (CA LUFT) - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7G24017 - EPA 5030B P/T/	LUFT GCMS									110103
Blank (7G24017-BLK1)	ZCTT GCMB			Prepared	& Analyze	d: 07/24/	07			
Gasoline Range Organics (C4-C12)	ND	50	ug/l	r.oparoa	a rinary ze	, G // L I/			***************************************	
Surrogate: 1,2-Dichloroethane-d4	2.86		"	2.50		114	60-125			
Surrogate: Dibromofluoromethane	2.78		"	2.50		111	75-120			
Surrogate: Toluene-d8	2.54		"	2.50		102	80-120			
Surrogate: 4-Bromofluorobenzene	2.44		"	2.50		98	60-135			
Laboratory Control Sample (7G24017	-BS2)			Prepared o	& Analyze	d: 07/24/	07			
Gasoline Range Organics (C4-C12)	409	50	ug/l	500		82	65-120			
Surrogate: 1,2-Dichloroethane-d4	2.66	***************************************	"	2.50		106	60-125			
Surrogate: Dibromofluoromethane	2.59		"	2.50		104	75-120			
Surrogate: Toluene-d8	2.63		"	2.50		105	80-120			
Surrogate: 4-Bromofluorobenzene	2.62		"	2.50		105	60-135			
Laboratory Control Sample Dup (7G2	4017-BSD2)			Prepared &	& Analyze	d: 07/24/	07			
Gasoline Range Organics (C4-C12)	409	50	ug/l	500		82	65-120	0.04	20	NTA
Surrogate: 1,2-Dichloroethane-d4	2.71		"	2.50		108	60-125			
Surrogate: Dibromofluoromethane	2.60		"	2.50		104	75-120			
Surrogate: Toluene-d8	2.57		"	2.50		103	80-120			
Surrogate: 4-Bromofluorobenzene	2.60		"	2.50		104	60-135			
Batch 7G25004 - EPA 5030B P/T /	LUFT GCMS									
Blank (7G25004-BLK1)				Prepared &	& Analyze	d: 07/25/0)7			
Gasoline Range Organics (C4-C12)	ND	50	ug/l	***************************************			ar in the contract of the cont			
Surrogate: 1,2-Dichloroethane-d4	2.41		"	2.50		96	60-125			
Surrogate: Dibromofluoromethane	2.48		n	2.50		99	75-120			
Surrogate: Toluene-d8	2,33		"	2.50		93	80-120			
Surrogate: 4-Bromofluorobenzene	2.43		"	2.50		97	60-135			





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0028
Project Manager: Jay Johnson

MQG0660 Reported: 08/01/07 16:40

Total Purgeable Hydrocarbons by GC/MS (CA LUFT) - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Allaryte	Result	Ellitt	Ontis	Devei	Result	70KEC	Linits	KI D	Limit	Notes
Batch 7G25004 - EPA 5030B P/T /	LUFT GCMS									
Laboratory Control Sample (7G25004	-BS2)			Prepared 6	& Analyze	ed: 07/25/	07			
Gasoline Range Organics (C4-C12)	501	50	ug/l	500		100	65-120			
Surrogate: 1,2-Dichloroethane-d4	2.38		"	2,50		95	60-125			
Surrogate: Dibromofluoromethane	2.42		"	2.50		97	75-120			
Surrogate: Toluene-d8	2.55		"	2.50		102	80-120			
Surrogate: 4-Bromofluorobenzene	2.70		"	2.50		108	60-135			
Laboratory Control Sample Dup (7G2	5004-BSD2)			Prepared o	& Analyze	ed: 07/25/	07			
Gasoline Range Organics (C4-C12)	492	50	ug/l	500		98	65-120	2	20	
Surrogate: 1,2-Dichloroethane-d4	2.25		"	2.50		90	60-125			
Surrogate: Dibromofluoromethane	2,38		n	2.50		95	75-120			
Surrogate: Toluene-d8	2.35		"	2.50		94	80-120			
Surrogate: 4-Bromofluorobenzene	2.56		"	2.50		102	60-135			
Batch 7G26008 - EPA 5030B P/T /	LUFT GCMS									
Blank (7G26008-BLK1)				Prepared &	& Analyze	ed: 07/26/0	07			
Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Surrogate: 1,2-Dichloroethane-d4	2.47		"	2.50		99	60-125			
Surrogate: Dibromofluoromethane	2.55		"	2.50		102	75-120			
Surrogate: Toluene-d8	2.45		"	2.50		98	80-120			
Surrogate: 4-Bromofluorobenzene	2.30		"	2.50		92	60-135			
Laboratory Control Sample (7G26008	-BS2)			Prepared &	& Analyze	ed: 07/26/0	07			
Gasoline Range Organics (C4-C12)	433	50	ug/l	500		87	65-120			
Surrogate: 1,2-Dichloroethane-d4	2.48		"	2.50		99	60-125			
Surrogate: Dibromofluoromethane	2.45		"	2.50		98	75-120			
Surrogate: Toluene-d8	2.63		"	2.50		105	80-120			
Surrogate: 4-Bromofluorobenzene	2.57		"	2.50		103	60-135			





885 Jarvis Drive Morgan Hill, CA 95037 (408) 776-9600 FAX (408) 782-6308 www.testamericainc.com

Stratus Environmental Inc. [Arco] 3330 Cameron Park Dr., Suite 550 Cameron Park CA, 95682

Project: ARCO #2111, San Leandro, CA

MQG0660 Reported:

Project Number: G0C28-0028
Project Manager: Jay Johnson

08/01/07 16:40

Total Purgeable Hydrocarbons by GC/MS (CA LUFT) - Quality Control TestAmerica - Morgan Hill, CA

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 7G26008 - EPA 5030B P/T / LUFT GCMS

Laboratory Control Sample Dup (7G2		Prepared & Analyzed: 07/26/07												
Gasoline Range Organics (C4-C12)	417	50	ug/l	500	83	65-120	4	20						
Surrogate: 1,2-Dichloroethane-d4	2.44		"	2.50	98	60-125								
Surrogate: Dibromofluoromethane	2.46		"	2.50	98	75-120								
Surrogate: Toluene-d8	2.61		"	2.50	104	80-120								
Surrogate: 4-Bromofluorobenzene	2.63		"	2.50	105	60-135								





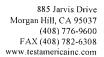
Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0028
Project Manager: Jay Johnson

MQG0660 Reported: 08/01/07 16:40

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7G24017 - EPA 5030B P/T	/ EPA 8260B									
Blank (7G24017-BLK1)				Prepared	& Analyze	ed: 07/24/0	07			
tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	п							
tert-Butyl alcohol	ND	20	II.							
Di-isopropyl ether	ND	0.50	H							
1,2-Dibromoethane (EDB)	ND	0.50	**							
1,2-Dichloroethane	ND	0.50	"							
Ethanol	ND	300	п							
Ethyl tert-butyl ether	ND	0.50	U							
Ethylbenzene	ND	0.50	**							
Methyl tert-butyl ether	ND	0.50	"							
Toluene	ND	0.50	II .							
Xylenes (total)	ND	0.50	п							
Surrogate: Dibromofluoromethane	2.78		"	2.50		111	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.86		"	2.50		114	60-125			
Surrogate: Toluene-d8	2.54		"	2.50		102	80-120			
Surrogate: 4-Bromofluorobenzene	2.44		"	2.50		98	60-135			
Laboratory Control Sample (7G2401)	7-BS1)			Prepared &	& Analyze	d: 07/24/0)7			
tert-Amyl methyl ether	13.0	0.50	ug/l	10.0		130	65-135			
Benzene	11.1	0.50	tt	10.0		111	75-120			
tert-Butyl alcohol	220	20	п	200		110	60-135			
Di-isopropyl ether	12.6	0.50	**	10.0		126	70-130			
1,2-Dibromoethane (EDB)	12.3	0.50	11	10.0		123	80-135			
1,2-Dichloroethane	12.4	0.50	II	10.0		124	70-125			
Ethanol	206	300	11	200		103	15-150			
Ethyl tert-butyl ether	12.8	0.50	"	10.0		128	65-130			
Ethylbenzene	11.8	0.50	II.	10.0		118	75-120			
Methyl tert-butyl ether	12.8	0.50	II .	10.0		128	50-140			
Toluene	11.9	0.50	"	10.0		119	75-120			
Xylenes (total)	36.1	0.50	**	30.0		120	75-130			
Surrogate: Dibromofluoromethane	2.67		"	2.50		107	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.65		"	2.50		106	60-125			
Surrogate: Toluene-d8	2.55		"	2.50		102	80-120			
Surrogate: 4-Bromofluorobenzene	2.65		"	2.50		106	60-135			





Project: ARCO #2111, San Leandro, CA

MQG0660 Project Number: G0C28-0028 Reported: Project Manager: Jay Johnson 08/01/07 16:40

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
L			Omts	Level	Resun	70ICEC	Dining	KID	Linit	notes
Batch 7G24017 - EPA 5030B P/T / E										
Matrix Spike (7G24017-MS1)		[QG0660-03]		· · · · · · · · · · · · · · · · · · ·	& Analyze					
tert-Amyl methyl ether	15.4	0.50	ug/l	10.0	1.54	138	65-135			LM,A
Benzene	10.9	0.50	**	10.0	ND	109	75-120			
tert-Butyl alcohol	217	20	"	200	ND	109	60-135			
Di-isopropyl ether	12.7	0.50	"	10.0	ND	127	70-130			
1,2-Dibromoethane (EDB)	12.2	0.50	"	10.0	ND	122	80-135			
1,2-Dichloroethane	12.2	0.50	"	10.0	ND	122	70-125			
Ethanol	198	300	II .	200	ND	99	15-150			
Ethyl tert-butyl ether	12.9	0.50	#	10.0	ND	129	65-130			
Ethylbenzene	11.3	0.50	11	10.0	ND	113	75-120			
Methyl tert-butyl ether	33.5	0.50	0	10.0	18.6	150	50-140			LM,AY
Toluene	11.6	0.50	"	10.0	ND	116	75-120			
Xylenes (total)	34.5	0.50	II	30.0	ND	115	75-130			
Surrogate: Dibromofluoromethane	2.65		"	2.50		106	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.82		"	2.50		113	60-125			
Surrogate: Toluene-d8	2.55		"	2.50		102	80-120			
Surrogate: 4-Bromofluorobenzene	2.72		"	2.50		109	60-135			
Matrix Spike Dup (7G24017-MSD1)	Source: M	QG0660-03F	RE1	Prepared a	& Analyze	d: 07/24/0)7			
tert-Amyl methyl ether	14.9	0.50	ug/l	10.0	1.54	134	65-135	3	25	
Benzene	11.0	0.50	п	10.0	ND	110	75-120	0.6	20	
tert-Butyl alcohol	215	20	н	200	ND	107	60-135	1	25	
Di-isopropyl ether	12.6	0.50	п	10.0	ND	126	70-130	0.6	25	
1,2-Dibromoethane (EDB)	11.8	0.50	0	10.0	ND	118	80-135	4	30	
1,2-Dichloroethane	12.2	0.50	11	10.0	ND	122	70-125	0.5	25	
Ethanol	236	300	и	200	ND	118	15-150	17	25	
Ethyl tert-butyl ether	12.6	0.50	II.	10.0	ND	126	65-130	2	25	
Ethylbenzene	11.3	0.50	**	10.0	ND	113	75-120	0.09	20	
Methyl tert-butyl ether	32,5	0.50	"	10.0	18.6	140	50-140	3	25	
Foluene	11.6	0.50	п	10.0	ND	116	75-120	0.4	25	
Xylenes (total)	34.4	0.50	н	30.0	ND	115	75-130	0.1	20	
Surrogate: Dibromofluoromethane	2.70		11	2.50		108	75-120			
surroguie. Dioromojiuoromemune										
Surrogate: 1,2-Dichloroethane-d4	2.65		"	2.50		106	60-125			
-	2.65 2.52		"	2,50 2,50		106 101	60-125 80-120			





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0028
Project Manager: Jay Johnson

MQG0660 Reported: 08/01/07 16:40

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7G25004 - EPA 5030B P/T										110103
Blank (7G25004-EFA 5050B F/1	/ E1 A 0200D			Prepared of	& Analyza	d: 07/25/	07			
tert-Amyl methyl ether	ND	0.50	ug/l	riepaieu	& Analyze	:a: 07/23/	07			
Benzene	ND	0.50	"							
tert-Butyl alcohol	ND	20	п							
Di-isopropyl ether	ND	0.50	#							
1,2-Dibromoethane (EDB)	ND	0.50	п							
1,2-Dichloroethane	ND	0.50	н							
Ethanol	ND	300	11							
Ethyl tert-butyl ether	ND	0.50	11							
Ethylbenzene	ND	0.50	**							
Methyl tert-butyl ether	ND	0.50	U							
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	Ш							
Surrogate: Dibromofluoromethane	2.48		"	2.50		99	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.41		"	2.50		96	60-125			
Surrogate: Toluene-d8	2.33		"	2.50		93	80-120			
Surrogate: 4-Bromofluorobenzene	2.43		"	2.50		97	60-135			
Laboratory Control Sample (7G25004	-BS1)			Prepared &	& Analyze	d: 07/25/0)7			
tert-Amyl methyl ether	9.49	0.50	ug/l	10.0	•	95	65-135			
Benzene	9.45	0.50	n	10.0		94	75-120			
tert-Butyl alcohol	201	20	n	200		100	60-135			
Di-isopropyl ether	9.57	0.50	**	10.0		96	70-130			
1,2-Dibromoethane (EDB)	9.97	0.50	tt	10.0		100	80-135			
1,2-Dichloroethane	10.2	0.50	n	10.0		102	70-125			
Ethanol	164	300	"	200		82	15-150			
Ethyl tert-butyl ether	10.1	0.50	n	10.0		101	65-130			
Ethylbenzene	9.71	0.50	ш	10.0		97	75-120			
Methyl tert-butyl ether	9.80	0.50	"	10.0		98	50-140			
Toluene	9.65	0.50	п	10.0		96	75-120			
Xylenes (total)	28.2	0.50	#	30.0		94	75-130			
Surrogate: Dibromofluoromethane	2.47		"	2.50		99	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.43		"	2.50		97	60-125			
Surrogate: Toluene-d8	2.38		#	2.50		95	80-120			
Surrogate: 4-Bromofluorobenzene	2.58		"	2.50		103	60-135			





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0028
Project Manager: Jay Johnson

MQG0660 Reported: 08/01/07 16:40

RPD

%REC

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7G25004 - EPA 5030B P/T / I	EPA 8260B									
Matrix Spike (7G25004-MS1)	Source: MQ	G0749-02		Prepared 6	& Analyze	ed: 07/25/	07			
ert-Amyl methyl ether	8.55	0.50	ug/l	10.0	ND	86	65-135			
Benzene	9.72	0.50	n	10.0	ND	97	75-120			
ert-Butyl alcohol	204	20	н	200	ND	102	60-135			
Di-isopropyl ether	9.96	0.50	"	10.0	ND	100	70-130			
,2-Dibromoethane (EDB)	8.84	0.50	u	10.0	ND	88	80-135			
,2-Dichloroethane	9.58	0.50	n	10.0	ND	96	70-125			
thanol	176	300	"	200	ND	88	15-150			
Ethyl tert-butyl ether	9.97	0.50	II.	10.0	ND	100	65-130			
thylbenzene	9.59	0.50	*1	10.0	ND	96	75-120			
Methyl tert-butyl ether	8.86	0.50	II .	10.0	ND	89	50-140			
oluene	9.76	0.50	n .	10.0	ND	98	75-120			
(ylenes (total)	30.0	0.50	41	30.0	ND	100	75-130			
urrogate: Dibromofluoromethane	2.34		"	2.50		94	75-120			
urrogate: 1,2-Dichloroethane-d4	2.17		"	2.50		87	60-125			
urrogate: Toluene-d8	2.44		"	2.50		98	80-120			
urrogate: 4-Bromofluorobenzene	2.46		"	2.50		98	60-135			
Aatrix Spike Dup (7G25004-MSD1)	Source: MQ	G0749-02		Prepared &	& Analyze	d: 07/25/0)7			
ert-Amyl methyl ether	9.81	0.50	ug/l	10.0	ND	98	65-135	14	25	
enzene	9.91	0.50	"	10.0	ND	99	75-120	2	20	
ert-Butyl alcohol	209	20	п	200	ND	105	60-135	3	25	
ri-isopropyl ether	10.2	0.50	H	10.0	ND	102	70-130	2	25	
,2-Dibromoethane (EDB)	9.98	0.50	**	10.0	ND	100	80-135	12	30	
2-Dichloroethane	10.6	0.50	11	10.0	ND	106	70-125	10	25	
thanol	178	300	**	200	ND	89	15-150	I	25	
thyl tert-butyl ether	10.7	0.50	11	10.0	ND	107	65-130	7	25	
thylbenzene	10.6	0.50	31	10.0	ND	106	75-120	10	20	
lethyl tert-butyl ether	10.1	0.50	tt.	10.0	ND	101	50-140	13	25	
oluene	10.1	0.50	n	10.0	ND	101	75-120	3	25	
ylenes (total)	31.0	0.50	"	30.0	ND	103	75-130	3	20	
urrogate: Dibromofluoromethane	2.46		"	2.50		98	75-120			
urrogate: 1,2-Dichloroethane-d4	2.54		"	2.50		102	60-125			
urrogate: Toluene-d8	2.50		"	2.50		100	80-120			
urrogate: 4-Bromofluorobenzene	2.48		"	2.50		99	60-135			



885 Jarvis Drive Morgan Hill, CA 95037 (408) 776-9600 FAX (408) 782-6308 www.testamericainc.com

Stratus Environmental Inc. [Arco]
Project: ARCO #2111, San Leandro, CA
MQG0660
3330 Cameron Park Dr., Suite 550
Project Number: G0C28-0028
Cameron Park CA, 95682
Project Manager: Jay Johnson
08/01/07 16:40

Notes and Definitions

PV Hydrocarbon result partly due to individ. peak(s) in quant. range

LM,AY MS and/or MSD above acceptance limits. See Blank Spike(LCS). Matrix interference suspected.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

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): < 2

STD-TAT

[
On-site Time:0430	Temp: 60 3	
Off-site Time: 07/5	Temp: 60 \$	
Sky Conditions: 2/600		
Meteorological Events:		
Wind Speed: —	Direction.	ᅱ

Lab	Name: TestAmerica						BP/AR Facility No	O .			2	111							To				***************************************				
Add	ress: 885 Jarvis Drive						BP/AR Facility A	-	s·				avis S	treat	San	Laar						ontra			Stratus Environmen		···
Mor	gan Hill, CA 95937				***************************************		Site Lat/Long:		·			, O , O	1015 0	ncor	, san	Lea	naro		$-\ $ AC	ldress	3.				on Park Drive, Su	te 550	
1	PM: Lisa Race						California Global	ID N	Λ·		TO	 5001	0176	1					-	•					k, CA 95682		
Tele	/Fax: 408-782-8156 408-782-630	08 (fax)					Enfos Project No.:		···		**********		0170										ctor Pr				
BP//	AR PM Contact: Paul Supple						Provision or OOC		ole or	(مر		····	visio					***************************************					ctor PN		Jay John		
Add	ress: 2010 Crow Canyon Place, Sui	ite 150				_	Phase/WBS:	(CII		<u> </u>	itorin		VISIO	11					— 	le/Fa					00 / (530) 676-60		
	San Ramon, CA		***************************************				Sub Phase/Task:				lytica	~											Level			with EDF	
Tele	/Fax: 925-275-3506	***************************************		······		-	Cost Element:				tracto	~~~~													@stratusinc.net		
Lab	Bottle Order No:			1	Ma	etrix		7	1		Prese				1	A. /		A D.				tlanti	c Rich	field	I Co.		
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TEST AMERICA SAMPLE RECEIPT LOG

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OF Problem COC	-	<u> </u>							

SRL Revision fl Replaces Rev 7 (07/10/05) IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.

Page ___ of ____

APPENDIX B

GEOTRACKER UPLOAD CONFIRMATIONS

Electronic Submittal Information

Main Menu | View/Add Facilities | Upload EDD | Check EDD

UPLOADING A GEO_WELL FILE

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

Submittal Title: 3Q07 GEO_WELL 2111

Facility Global ID: T0600101764
Facility Name: ARCO #2111

Submittal Date/Time: 10/22/2007 4:35:05 PM

Confirmation Number: 4229357659

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CONTACT SITE <u>ADMINISTRATOR</u>.

Electronic Submittal Information

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Confirmation Number: 8006408989

Date/Time of Submittal: 10/22/2007 10:01:54 AM

Facility Global ID: T0600101764
Facility Name: ARCO #2111

Submittal Title: 3Q07 GW Monitoring **Submittal Type:** GW Monitoring Report

Click here to view the detections report for this upload.

ARCO #2111 Regional Board - Case #: 01-1903

1156 DAVIS SAN FRANCISCO BAY RWQCB (REGION 2)
SAN LEANDRO, CA 94577 Local Agency (lead agency) - Case #: RO0000494

ALAMEDA COUNTY LOP - (SP)

0

0

 CONF #
 TITLE
 QUARTER

 8006408989
 3Q07 GW Monitoring
 Q3 2007

SUBMITTED BY SUBMIT DATE STATUS

Broadbent & Associates, Inc. 10/22/2007 PENDING REVIEW

SAMPLE DETECTIONS REPORT

FIELD POINTS SAMPLED 8
FIELD POINTS WITH DETECTIONS 7
FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL 4
SAMPLE MATRIX TYPES WATER

METHOD QA/QC REPORT

METHOD HOLDING TIME VIOLATIONS

METHODS USED 8260FA,8260TPH
TESTED FOR REQUIRED ANALYTES? Y
LAB NOTE DATA QUALIFIERS Y

QA/QC FOR 8021/8260 SERIES SAMPLESTECHNICAL HOLDING TIME VIOLATIONS

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 N

- MATRIX SPIKE NN

- 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% N

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

<u>SAMPLE</u>	COLLECTED	<u>DETECTIONS > REPDL</u>
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

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Confirmation Number: 4233735024

Date/Time of Submittal: 10/22/2007 9:52:13 AM

Facility Global ID: T0600101764
Facility Name: ARCO #2111

Submittal Title: Monthly System Sampling 0707 **Submittal Type:** Additional Information Report

Click here to view the detections report for this upload.

ARCO #2111 Regional Board - Case #: 01-1903

1156 DAVIS SAN FRANCISCO BAY RWQCB (REGION 2)
SAN LEANDRO, CA 94577 Local Agency (lead agency) - Case #: RO0000494

ALAMEDA COUNTY LOP - (SP)

CONF #TITLEQUARTER4233735024Monthly System Sampling 0707Q3 2007

SUBMITTED BY SUBMIT DATE STATUS

Broadbent & Associates, Inc. 10/22/2007 PENDING REVIEW

SAMPLE DETECTIONS REPORT

FIELD POINTS SAMPLED 6
FIELD POINTS WITH DETECTIONS 4
FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL 3
SAMPLE MATRIX TYPES WATER

METHOD QA/QC REPORT

METHODS USED 8260FA,SW8015B TESTED FOR REQUIRED ANALYTES?

MISSING PARAMETERS NOT TESTED:

- 8260FA REQUIRES ETHANOL TO BE TESTED
- SW8015B REQUIRES DCA12 TO BE TESTED
- SW8015B REQUIRES EDB TO BE TESTED

LAB NOTE DATA QUALIFIERS Y

OA/OC 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 - MATRIX SPIKE - MATRIX SPIKE DUPLICATE Υ - BLANK SPIKE Υ - SURROGATE SPIKE

WATER SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%

MATRIX SPIKE / MATRIX S	PIKE DUPLICATE(S) RPD LESS	THAN 30%	Υ	
SURROGATE SPIKES % RE	RECOVERY BETWEEN 85-115%		Υ	
BLANK SPIKE / BLANK SPI	PIKE DUPLICATES % RECOVERY BETWEEN 70-130%			
SOIL SAMPLES FOR	8021/8260 SERIES			
MATRIX SPIKE / MATRIX S	E / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%			
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%		n/a		
SURROGATE SPIKES % RECOVERY BETWEEN 70-125%		n/a		
BLANK SPIKE / BLANK SPI	LANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%			
FIELD QC SAMPLES				
<u>SAMPLE</u>	COLLECTED	DETECTIONS >	DETECTIONS > REPDL	
QCTB SAMPLES	N	0	0	
QCEB SAMPLES	N	0	0	

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CONTACT SITE <u>ADMINISTRATOR</u>.

Electronic Submittal Information

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Confirmation Number: 7394476413

Date/Time of Submittal: 10/22/2007 9:58:17 AM

Facility Global ID: T0600101764 Facility Name: ARCO #2111

Submittal Title: Monthly System Sampling 0707 2 **Submittal Type:** Soil & Water Investigation Report

Click here to view the detections report for this upload.

ARCO #2111 Regional Board - Case #: 01-1903

1156 DAVIS SAN FRANCISCO BAY RWQCB (REGION 2) SAN LEANDRO, CA 94577 Local Agency (lead agency) - Case #: RO0000494

ALAMEDA COUNTY LOP - (SP)

CONF# **QUARTER** Monthly System Sampling 0707 2 7394476413 Q3 2007

SUBMITTED BY SUBMIT DATE STATUS

PENDING REVIEW Broadbent & Associates, Inc. 10/22/2007

SAMPLE DETECTIONS REPORT

FIELD POINTS SAMPLED 5 # FIELD POINTS WITH DETECTIONS 3 # FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL SAMPLE MATRIX TYPES AIR - UNK. ORIGIN

METHOD QA/QC REPORT

METHODS USED SW8020F TESTED FOR REQUIRED ANALYTES?

MISSING PARAMETERS NOT TESTED:

- SW8020F REQUIRES ETBE TO BE TESTED
- SW8020F REQUIRES TAME TO BE TESTED
- SW8020F REQUIRES DIPE TO BE TESTED
- SW8020F REQUIRES TBA TO BE TESTED
- SW8020F REOUIRES DCA12 TO BE TESTED
- SW8020F REQUIRES EDB TO BE TESTED

LAB NOTE DATA QUALIFIERS

Ν

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 - MATRIX SPIKE Ν - MATRIX SPIKE DUPLICATE Ν

- BLANK SPIKE

- SURROGATE SPIKE

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** Ν 0 **QCEB SAMPLES** Ν 0 **QCAB SAMPLES** 0

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CONTACT SITE ADMINISTRATOR.

Electronic Submittal Information

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Confirmation Number: 4562308847

Date/Time of Submittal: 10/22/2007 10:04:21 AM

Facility Global ID: T0600101764 **Facility Name:** ARCO #2111

Submittal Title: Monthly System Sampling 0807 **Submittal Type:** Soil & Water Investigation Report

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ARCO #2111 Regional Board - Case #: 01-1903

1156 DAVIS SAN FRANCISCO BAY RWQCB (REGION 2)
SAN LEANDRO, CA 94577 Local Agency (lead agency) - Case #: RO0000494

ALAMEDA COUNTY LOP - (SP)

CONF #TITLEQUARTER4562308847Monthly System Sampling 0807Q3 2007

SUBMITTED BY SUBMIT DATE STATUS

Broadbent & Associates, Inc. 10/22/2007 PENDING REVIEW

SAMPLE DETECTIONS REPORT

FIELD POINTS SAMPLED 5
FIELD POINTS WITH DETECTIONS 3
FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL 2
SAMPLE MATRIX TYPES VAPOR

METHOD QA/QC REPORT

METHODS USED SW8020F
TESTED FOR REQUIRED ANALYTES? N

MISSING PARAMETERS NOT TESTED:

- SW8020F REQUIRES ETBE TO BE TESTED
- SW8020F REQUIRES TAME TO BE TESTED
- SW8020F REQUIRES DIPE TO BE TESTED
- SW8020F REQUIRES TBA TO BE TESTED
- SW8020F REQUIRES DCA12 TO BE TESTED
- SW8020F REQUIRES EDB TO BE TESTED

LAB NOTE DATA QUALIFIERS

- BLANK SPIKE - SURROGATE SPIKE N

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 N

- MATRIX SPIKE DUPLICATE

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** Ν 0 **QCEB SAMPLES** Ν 0 **QCAB SAMPLES** 0

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CONTACT SITE ADMINISTRATOR.

Electronic Submittal Information

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Confirmation Number: 2597542464

Date/Time of Submittal: 10/22/2007 10:06:42 AM

Facility Global ID: T0600101764
Facility Name: ARCO #2111

Submittal Title: Monthly System Sampling 0807 2 **Submittal Type:** Soil & Water Investigation Report

Click here to view the detections report for this upload.

ARCO #2111 Regional Board - Case #: 01-1903

1156 DAVIS SAN FRANCISCO BAY RWQCB (REGION 2)
SAN LEANDRO, CA 94577 Local Agency (lead agency) - Case #: RO0000494

ALAMEDA COUNTY LOP - (SP)

 CONF #
 TITLE
 QUARTER

 2597542464
 Monthly System Sampling 0807 2
 Q3 2007

SUBMITTED BY SUBMIT DATE STATUS

Broadbent & Associates, Inc. 10/22/2007 PENDING REVIEW

SAMPLE DETECTIONS REPORT

FIELD POINTS SAMPLED 6
FIELD POINTS WITH DETECTIONS 4
FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL 3
SAMPLE MATRIX TYPES WATER

METHOD QA/QC REPORT

METHODS USED 8260FA,SW8015B
TESTED FOR REQUIRED ANALYTES? N

MISSING PARAMETERS NOT TESTED:

- 8260FA REQUIRES ETHANOL TO BE TESTED
- SW8015B REQUIRES DCA12 TO BE TESTED
- SW8015B REQUIRES EDB TO BE TESTED

LAB NOTE DATA QUALIFIERS

Υ

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 - MATRIX SPIKE - MATRIX SPIKE DUPLICATE Υ - BLANK SPIKE Υ - SURROGATE SPIKE

WATER SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%

MATRIX SPIKE / MATRIX S	SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%		Υ	
SURROGATE SPIKES % RE	ECOVERY BETWEEN 85-115%		N	
BLANK SPIKE / BLANK SPI	KE DUPLICATES % RECOVERY	BETWEEN 70-130%	Υ	
SOIL SAMPLES FOR	3021/8260 SERIES			
MATRIX SPIKE / MATRIX S	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 SPI	BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%			
FIELD QC SAMPLES				
<u>SAMPLE</u>	COLLECTED	DETECTIONS >	DETECTIONS > REPDL	
QCTB SAMPLES	N	0	0	
QCEB SAMPLES	N	0	0	
QCAB SAMPLES	N	0		

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Confirmation Number: 1744145631

Date/Time of Submittal: 10/22/2007 10:09:41 AM

Facility Global ID: T0600101764
Facility Name: ARCO #2111

Submittal Title: Monthly System Sampling 0907 **Submittal Type:** Soil & Water Investigation Report

Click here to view the detections report for this upload.

ARCO #2111 Regional Board - Case #: 01-1903

1156 DAVIS SAN FRANCISCO BAY RWQCB (REGION 2)
SAN LEANDRO, CA 94577 Local Agency (lead agency) - Case #: RO0000494

ALAMEDA COUNTY LOP - (SP)

CONF #TITLEQUARTER1744145631Monthly System Sampling 0907Q3 2007

SUBMITTED BY SUBMIT DATE STATUS

Broadbent & Associates, Inc. 10/22/2007 PENDING REVIEW

SAMPLE DETECTIONS REPORT

FIELD POINTS SAMPLED 5
FIELD POINTS WITH DETECTIONS 3
FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL 2
SAMPLE MATRIX TYPES AIR - UNK. ORIGIN

METHOD QA/QC REPORT

METHODS USED 8260FA,8260TPH

TESTED FOR REQUIRED ANALYTES?

MISSING PARAMETERS NOT TESTED:

- 8260FA REQUIRES ETBE TO BE TESTED
- 8260FA REQUIRES TAME TO BE TESTED
- 8260FA REQUIRES DIPE TO BE TESTED
- 8260FA REQUIRES TBA TO BE TESTED
- 8260FA REQUIRES ETHANOL TO BE TESTED
- 8260FA REQUIRES DBFM TO BE TESTED
- 8260FA REQUIRES BR4FBZ TO BE TESTED
- 8260FA REQUIRES BZMED8 TO BE TESTED

LAB NOTE DATA QUALIFIERS

N

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
- MATRIX SPIKE - MATRIX SPIKE DUPLICATE
- MATRIX SPIKE DUPLICATE N
 BLANK SPIKE Y

- SURROGATE SPIKE			Υ	
WATER SAMPLES FO	OR 8021/8260 SERIES			
MATRIX SPIKE / MATRIX S	SPIKE DUPLICATE(S) % RECOVE	ERY BETWEEN 65-135%	n/a	
MATRIX SPIKE / MATRIX S	SPIKE DUPLICATE(S) RPD LESS	THAN 30%	n/a	
SURROGATE SPIKES % RE	ECOVERY BETWEEN 85-115%		n/a	
BLANK SPIKE / BLANK SPI	IKE DUPLICATES % RECOVERY	BETWEEN 70-130%	n/a	
SOIL SAMPLES FOR	8021/8260 SERIES			
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%				
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%				
SURROGATE SPIKES % RE	ECOVERY BETWEEN 70-125%		n/a	
BLANK SPIKE / BLANK SPI	IKE DUPLICATES % RECOVERY	BETWEEN 70-130%	n/a	
FIELD QC SAMPLES				
<u>SAMPLE</u>	COLLECTED	<u>DETECTIONS ></u>	REPDL	
QCTB SAMPLES	N	0		
QCEB SAMPLES	N	0		

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Electronic Submittal Information

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Confirmation Number: 5175401747

Date/Time of Submittal: 10/22/2007 10:12:15 AM

Facility Global ID: T0600101764 **Facility Name:** ARCO #2111

Submittal Title: Monthly System Sampling 0907 **Submittal Type:** Soil & Water Investigation Report

Click here to view the detections report for this upload.

ARCO #2111 Regional Board - Case #: 01-1903

1156 DAVIS SAN FRANCISCO BAY RWQCB (REGION 2)
SAN LEANDRO, CA 94577 Local Agency (lead agency) - Case #: RO0000494

ALAMEDA COUNTY LOP - (SP)

CONF #TITLEQUARTER5175401747Monthly System Sampling 0907Q3 2007

SUBMITTED BY SUBMIT DATE STATUS

Broadbent & Associates, Inc. 10/22/2007 PENDING REVIEW

SAMPLE DETECTIONS REPORT

FIELD POINTS SAMPLED 6
FIELD POINTS WITH DETECTIONS 4
FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL 4
SAMPLE MATRIX TYPES WATER

METHOD QA/QC REPORT

METHODS USED 8260FA,SW8015B
TESTED FOR REQUIRED ANALYTES? N

MISSING PARAMETERS NOT TESTED:

- 8260FA REQUIRES ETHANOL TO BE TESTED
- SW8015B REQUIRES DCA12 TO BE TESTED
- SW8015B REQUIRES EDB TO BE TESTED

LAB NOTE DATA QUALIFIERS Y

OA/OC 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 - MATRIX SPIKE - MATRIX SPIKE DUPLICATE Υ - BLANK SPIKE Υ - SURROGATE SPIKE

WATER SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%

MATRIX SPIKE / MATRIX S	PIKE DUPLICATE(S) RPD LESS	THAN 30%	Υ		
SURROGATE SPIKES % RE	COVERY BETWEEN 85-115%		N		
BLANK SPIKE / BLANK SPI	SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%				
SOIL SAMPLES FOR	3021/8260 SERIES				
MATRIX SPIKE / MATRIX S	PIKE DUPLICATE(S) % RECOVE	ERY BETWEEN 65-135%	n/a		
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%					
SURROGATE SPIKES % RECOVERY BETWEEN 70-125%					
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%					
FIELD QC SAMPLES					
<u>SAMPLE</u>	COLLECTED	DETECTIONS >	REPDL		
QCTB SAMPLES	N	0			
QCEB SAMPLES	N	0			
QCAB SAMPLES	N	0			

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APPENDIX C

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



August 3, 2007

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 (July 2, 10 and 17, 2007)

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

Operational Status: Continuous operation.

Scope of Work Performed: Conduct routine system operation and maintenance, and record field measurements. Influent, mid-fluent, and effluent air and water samples were collected on July 2, 2007.

Findings and Notes: 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 Staff Engineer

Attachments:

• Field Data Sheets

• Chain of Custody Documentation

• Certified Analytical Results

CC: Paul Supple, BP/ARCO

Jay R. Johnson, P.G. No. 5867
Project Manager

1156 Davis Street San Leandro, California



Dual Phase Extraction and Air Stripper System

Date: 7-2-07 Onsite Time: 6530 Offsite Time: 7800 Equipment Manufacturer/Model#				Technician: Weather Cond Ambient Temp		CHILL Cleu 50	
			System Inf	ormation			
System Status	s Upon Arrival:		Operational	区	Non-Operati	ional	<i>y</i> *
System Status	s Upon Depart	ure:	Operational	冈	Non-Operati	onal	
Electric Meter	Reading:	3721	6		·		
Hour Meter R	eading:	1128	,4	_		•	
Totalizer Read Air Stripper:	ding Prior to	4744	99	PID Calibration	Date:	7.2.07	
Totalizer Read Stripper:	ding After Air	4938	90	-			
			Field Meas	urements			
Parameter Influent (after blower, 2111DPEAINF)		Air Stripper (2111ASAEFF)	System Influent (2111ASYSINF)	Stack Air Flow (2111AEFF)	Comme	ents	
Differential Pre	essure, "wc		25				
Air Velocity, F	РМ	7378	1920				
Pipe Diameter	, inches	9	4	4	3		***************************************
Air Flow Rate,	cfm			200			
Applied Vacuu	ım, "wc	15"46	.25	NA	NA		
Temperature,	deg F	166	121	124			
PID Readings.	, ppmv	63	8	35	Ø	PID for GAC-1	: 🖔
				Measurements			
Well ID	% Open	Applied Vac., "Hg	Total depth, feet bgs	Stinger Depth, feet bgs			
V-1	350	12					
V-2	50	9					
V-3	50	10					
MW-1	100	10					
MW-3	100	10					
MW-7 MW8	100	10					
Signature:	0/	My		Date:	7.2-0	27	

1156 Davis Street San Leandro, California



Dual Phase Extraction and Air Stripper System

	Sam	pling Inform	nation (monthly)		
Sample ID	Date &		Sample ID	Date 8	& Time
02111DPEAINF	7207	0723	02111AGAC1	7207	0717
02111ASAEFF		0721	02111AEFF		0715
02111ASYSINF		0719			
Analyses Required: GRO, B	ΓEX, and MTBΕ				
	Оре	eration & Mai	ntenance Notes		
		· · · · · · · · · · · · · · · · · · ·		***************************************	***
			Michigan Company		

Lab Parameters	Sampling Frequency	Sample Location	Analytical Method
GRO	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8015
втех	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B
MTBE Monthly		02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B
	7		

1156 Davis Street
San Leandro, California
Groundwater Treatment System



					a j a c c c c c c c c c c		
Date: Onsite Time: Offsite Time:	7.2.0 0530 0800	7	- -	Technician Weather C		CHIV Cler 50	
System Status	Upon Arrival:	Ø	Operation	al	Non-operation	onal	,
System Status	At Departure:		Operation	al 🔲	Non-operation	onal	
Transfer Pump) :	区	Operation	al	Non-operation	onal	
Transfer Pump	Hour Meter R	eading:	NA		1	ater Charact	
Effluent Flow T	otalizer Readir	ng:	1803	77	(Quarterly b pH:	y Field Instru	ment) 7.5 7
No. of Carbon	Vessels:	7	-		Temperature	t.	17.78
Lead Carbon V (psi):	essel Pressure	5)	-			
Well ID	Hour Meter	Reading	Totalize	r Reading	Total Depth	Pump Depth	NI STATE OF THE ST
MW-2	NA		241	9		l amp a span	<u> </u>
		Sam	pling Infor	mation			
Sam	ole ID	Date 8	& Time	Sam	nple ID	Date & T	ime
02111DPEWIN	IF	1207	0650	02111MW2	WINF	7207 0	658
02111ASWINF		1	0705				
02111ASWEFF	-		0644				
02111WGAC1			0639				
02111WEFF	**************************************	7207	0637	TB211	(7207	0710	
Lab Para	ameters	Sampling F	requency	Sample	Location	Analytical Me	ethod
GRO, BTEX, & 5-Oxys		Mon	thly	INF& EFF		EPA Method 8260B	
Notes: Stav S, He	ted mi Turned	u-Z I TO ALH	n Ha	ul ur u hen	lea Arvi	wed 149	2
Signature:	Chu 1/	ul		Date:	702	005	

Page 1 of 1

1156 Davis Street

San Leandro, California



vil.

Dual Phase Extraction and Air Stripper System

System			
i -	Information		
System Status Upon Arrival: Operational		Non-Operat	ional High
System Status Upon Departure: Operationa	al 🕡	Non-Operati	ional
Electric Meter Reading:		rton operati	
Hour Meter Reading: 1260.6			
Totalizer Reading Prior to 5 20 295' Air Stripper:	PID Calibratior	n Date:	
Totalizer Reading After Air 537790			
Field Mes	surements		
Parameter Influent (after blower, 2111DPEAINF)	System	Stack Air Flow (2111AEFF)	Comments
Differential Pressure, "wc		(======================================	
Air Velocity, FPM			
Pipe Diameter, inches			
Air Flow Rate, cfm			
Applied Vacuum, "wc	NA	NA	
Temperature, deg F		I IVA	
PID Readings, ppmv			PID for GAC-1:
Other Readings	Measurements	 <u> </u>	
Well ID % Open Applied Vac., Total depth, "Hg feet bgs	, Stinger Depth, feet bgs		
V-1			
V-2			
V-3			
MVV-1			
MW-3			
1000			1
MW-7			

1156 Davis Street San Leandro, California Groundwater Treatment System



Date: Onsite Time: Offsite Time:	7-10-0 0545 0045	7	- - -	Technician Weather C		CHICA Fog 50	
System Status System Status			Operation Operation		Non-operation		of Folder;
Transfer Pump):	区	Operation	al 🔲	Non-operation		
Transfer Pump	Hour Meter Re	eading:	NA		1	ater Charact y Field Instrui	
Effluent Flow T	otalizer Readin	g: 🙏	5235°	<u> </u>	pH:	y r ieid ilistidi	nent)
No. of Carbon	Vessels:			_	Temperature	;;	
Lead Carbon V (psi):	essel Pressure/			_			
Well ID	Hour Meter	Reading	Totalize	r Reading	Total Depth	Pump Depth	
MW-2			_				
						·	
		,	pling Info	mation			
Samı	ple ID	Date 8	k Time	San	nple ID	Date & Ti	me
02111DPEWIN				02111MW2	WINF		
02111ASWINF							
02111ASWEFF 02111WGAC1	_						
02111WGAC1							
021110027							
Lab Par	ameters	Sampling F	requency	Sample	Location	Analytical Me	ethod
GRO, BTEX, & 5-Oxys Mon		thly	INF	& EFF	EPA Method 8	260B	
Notes:		<u> </u>					
Signature	12/1/	h			7-10.	115	

Page 1 of 1

1156 Davis Street

San Leandro, California Dual Phase Extraction and Air Stripper System



Onsite Time: 0500 Offsite Time: 6700 Equipment Manufacturer/Model#			Technician: Weather Cond Ambient Temp		CHILL High Clouds 50	
			System In	formation		
System Statu	ıs Upon Arrival	i:	Operational		Non-Operat	ional X High
System Statu	ıs Upon Deparl	ture:	Operational	IVI	Non-Operat	ional
Electric Mete	r Reading:	425	95	K	von operat	Contractive or
Hour Meter F	Reading:	1320	2.1	manus.		
Totalizer Rea Air Stripper:	ading Prior to	544	148	– PID Calibratior –	Date:	216-07
Totalizer Rea Stripper:	iding After Air	5607	40	_		
			Field Meas	urements		
Para	Parameter Influent (after blower 2111DPEAINF)		Air Stripper (2111ASAEFF)		Stack Air Flow (2111AEFF)	Comments
Differential Pr	essure, "wc		25			
Air Velocity, F	PM	4180	2881			
Pipe Diamete	r, inches	3	4	4	3	
Air Flow Rate	, cfm	200		200		
Applied Vacuu	ım, " we-	16"46	e 28"HZ	D NA	NA	
Temperature,	deg F	150	123	1/25		
PID Readings	, ppmv	80	2-0	172	82	PID for GAC-1:
eric de la companya d				Measurements		
Well ID	% Open	Applied Vac., "Hg	Total depth, feet bgs	Stinger Depth, feet bgs		
V-1	50	8				Mary Annual Control of
V-2	50	10				
V-3	50	10				
MW-1	100	8				
MW-3	100	10				
MW-7	100	10				
mw5	100/	210				
Signature:	Am 1/			Date:	747	07

1156 Davis Street

San Leandro, California

Dual Phase Extraction and Air Stripper System



	Sampling Infor	mation (monthly)	
Sample ID	Date & Time	Sample ID	Date & Time
2111DPEAINF		02111AGAC1	
2111ASAEFF		02111AEFF	
2111ASYSINF			
Analyses Required: GRO,	BTEX. and MTBE		
AND THE INTERPORTATION OF THE CONTRACT OF T	Operation & Ma	aintenance Notes	
		/	
		The second secon	
		· · · · · · · · · · · · · · · · · · ·	
The first control of the property of the prope			
Modernance & ECCLARAGE CONTROL ECCLARAGE ACCUSAGE AND CONTROL ECCLARAGE ACCUSAGE ACC	AND CONTROL OF THE PROPERTY AND	en periodica de la companya de la c	

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
2			

Signature: Mus IM Date: 7-17-07

1156 Davis Street

San Leandro, California **Groundwater Treatment System**



System Status Transfer Pump	7-(7-0 0500 0700 S Upon Arrival: At Departure: O: O: Hour Meter R	口 図 ď	Operation Operation Operation	Ambient	Conditions: Temperature Non-operation Non-operation Non-operation Effluent W	onal	
No. of Carbon	Totalizer Readii Vessels: /essel Pressure	2	4609 - 1	} <u>-</u>	pH: Temperature		
Well ID	Hour Meter	Reading	Totaliz	er Reading	Total Depth	Pump Depth	
MW-2		·	2941				
		Sam	pling Info	rmation			
Samp	ole ID	Date 8			mple ID	Date & Ti	me
02111DPEWIN	F			02111MW	/2WINF		
02111ASWINF							
02111ASWEFF							
02111WGAC1							
02111WEFF							
	A CONTRACTOR OF THE CONTRACTOR						
Lab Para	Lab Parameters Sampling		requency	Sampl	e Location	Analytical Method	
GRO, BTEX	, & 5-Oxys	Mont	hly	IN	-& EFF	EPA Method 8	260B
- Alleren ein Berleg – Sowel der unter son ein der Andre sowe aus der Gestelle der Andre sowel der Gestelle d	Medicania constanti sera i e constanti se constanti se constanti se constanti se constanti se constanti se con			US			
Notes: Run (Qm	nw-Z w Being D	hile o	n 511 14 51	Le Too		Noor Sensor Colonia (Colonia (
Signature: $igcap $	mul	Y		Date:	71176	7	

4	tlar Rich om	ntic nfie	; eld
C	om	pa	ny
	A BP affil	iated con	ıpany

Chain of Custody Record

Project Name: ARCO Facility No. 2111

BP BU/AR Region/Enfos Segment:

BP > Americas > West > Retail > Alameda

State or Lead Regulatory Agency:

California Regional Water Quality Control Board

Requested Due Date (mm/dd/yy):

24 hours for Effluent & STD for others

On-site Time: 0530 Temp: Off-site Time: 0800 Temp: 56 Sky Conditions: Meteorological Events: Wind Speed: Direction:

Lab 1	Name: TestAmerica						BP/AR Facility No).:_	2111										Consi	ıltan	t/Con	tracto	Γ.	Str	ratus E	inviror	ımenta	ıl, Inc.		
Addr	ess: 885 Jarvis Drive						BP/AR Facility Address: 1156 Davis St., San Leandro Site Lat/Long:										Addre	ess:		3330	Cam	eron	Park	Drive,	, Suite	e 550				
Morg	gan Hill, CA 95937						Site Lat/Long:															Came	eron F	'ark,	CA 9	5682				
Lab 1	PM: Lisa Race						California Global	(D)	Vo.:	T0600	1017	64							Const	ıltan	t/Con	tracto	r Proj	ect N	o.:	E21	111-03			
Tele/	Fax: 408-782-8156/ 408-782-630	8					Enfos Project No.:	:	G0C28-	0023									Consu	ıltan	t/Con	tracto	r PM:			Jay	Johns	on		
BP/A	AR PM Contact: Paul Supple						Provision or OOC	(ci	rcle one)		Pro	visio	1						Tele/I	ax:		(530)	676-	6000) / (53	0) 676	6-600	5		
Addr	ess: 2010 Crow Canyon Place, Suit	te 150					Phase/WBS:		03-O&N	1	···								Repor	t Ty	ре &	QC L	evel:			Lev	el I w	ith EDF		
	San Ramon, CA						Sub Phase/Task:		03-Anal	ytical																ısinc.r	<u>net</u>			
	Fax: 925-275-3506/925-275-3815	5					Cost Element:		Subconti														Richfie		0.					
Lab	Bottle Order No:			<u> </u>	Matri	х			<u> </u>	Pres	ervat	tive	Υ		Requ	uest	ed A	naly	sis	Tu	rnar	ound	Time	_						
Item No.	Sample Description	Time	Date	Soil/Solid	Water/Liquid Air	J.II.	Laboratory No.	No. of Containers	res	H ₂ SO ₄	HNO ₃	HCI	Methanol		GRO by 8015	BTEX by 8260	MTBE by 8260			24-hours	Standard				San	-	oint L	at/Long ents	and	
1	02111DPEAINF	0723	727		x			2			Ī				х	х	х	T			х									
2	02111ASAEFF	0721			x			7	1		1				х	x	х				х					delegation of the second of t			,,	
3	02111ASYSINF	0719			x			2							х	х	х				х									
4	02111AGAC1	0717			x			2							х	х	х				х									
5	02111AEFF	0715			х			کر							х	х	х			х										
6																														
7																										***********	**	***************************************		
8																\top		1	\dashv			\top		-						\exists
9											1			1		\top	\neg				1	\top		1						
10															\neg				1				1	\parallel						
Samı	oler's Name: Chuis Hi	77	<u> </u>	/L		一	Re	ling	uished By	/ Affilia	tion		<u></u> _	ᆎ	Dat	e	Tin	ıe T			A	ccepte	d By /	Affil	iation			Date	, Tin	ne
Samp	oler's Company: Stratus Environ	mental, l	lnc.				12/1/1/	ti		94	iVe				QU,		112			<u>. TI</u>	M		·/	,-M				7/2/		mbr
Shipr	nent Date: 7.2.67					4	77-61		7				`							-79,	/ / / 13	-/						117	1	
	ment Method: Starte	フ																												
	ment Tracking No:							_							·													<u> </u>		_
speci.	al Instructions:		Please	cc re	esults to	o bpe	edf@broadbentine	<u> 2.C</u> (om																					4
	Custody Seals In Place: Yes	/No) 1	Ten	ıр В	lank: \	Yes/	No 1 Coole	r T	emp on I	Receipt	:		<u>-</u> F/C		Tri	n B	lank	:: Ye	s //\(\dagger\)	7.0	Is.	MS/	MSD	Sam	nle S	ubmit	ted: Y	es / No	······	$-\parallel$

Atlantic Richfield Company

A BP affiliated company

Chain of Custody Record

Project Name: ARCO Facility No. 2111

BP BU/AR Region/Enfos Segment:

BP > Americas > West > Retail > Alameda State or Lead Regulatory Agency: California Regional Water Quality Control Board

Requested Due Date (mm/dd/yy):

24 hours for Effluent & STD for others

Trip Blank: Yes No

RUSH

On-site Time: 0530	Temp: 56
Off-site Time: 0800	Temp: 56
Sky Conditions:	romp. OP
Meteorological Events:	
Wind Speed:	Direction:

Lab	Name: TestAmerica						BP/AR Facility No.: 2111 Consultant/Contractor: Stratus Environmental, Inc.																			
-	ress: 885 Jarvis Drive						BP/AR Facility Address: 1156 Davis St., San Leandro										Addr					ron Park Drive, Suit			\parallel	
	gan Hill, CA 95937						Site Lat/Long:		•		······································	***************************************											ark, CA 95682			\dashv
	PM: Lisa Race						California Global	ID :	No.:	T060	0101	764						Cons	ultar				ect No.: E2111-03			1
Tele	/Fax: 408-782-8156/ 408-782-6308	8					Enfos Project No.	:	G0C28	-0023						********				t/Cont			Jay Johns			1
	AR PM Contact: Paul Supple						Provision or OOC	(c)	ircle one)		Pre	ovisio	n					Tele/I					6000 / (530) 676-600		~	\parallel
Addı	ress: 2010 Crow Canyon Place, Suit	e 150					Phase/WBS:		03-0&1	Л								l 		pe & (Level 1 w			1
	San Ramon, CA						Sub Phase/Task:		03-Anal	ytical													@stratusinc.net			1
	Fax: 925-275-3506/925-275-3815	5		·			Cost Element:		Subcont	ractor (Cost									: Atla						1
Lab	Bottle Order No:	11		ļ.,	Matr	ix	_			Pre	serva	tive			Requ	estec	l Analy	sis	Tı	ırnaro	und I	ime				آ
Item No.	Sample Description	Time	Date	Soil/Solid	Water/Liquid		Laboratory No.	. of Containers	Unpreserved	H ₂ SO ₄	0,		Methanol		GRO by 8015	5-0xvgenates by 8760			24-hours	Standard			Sample Point L Comm		and	
	02111 DPE WINT			Soj	3 <	ŧ.		No.	Cm	H ₂ S	HNO	HCI	Me		SR(2 2		ll.	24-h	Stan						
1	02111DPWAIN F	0650	7207		х			6				V				χX			Ť	x	i		5-oxygenates reque	sted are		1
2	02111ASWINF 0705	WW4	(x			6				V			x 2	x x		$-\parallel$		х			MTBE, DIPE, ETE			
3	02111ASWEFF	1644			x			6			1	X			x 7	(X				х			TBA.			
4	02111WGAC1	0639			х			6				1			x >	C X				х						
5	02111WEFF	0437			х			6				y			х	(x			х							
6	02111MW2WINF	0458	フマンフ		х			U				人			x x	(x				х						
7																										
8				_																						
9	TB211(7269	0100	7200	_ ,	X	1_		\perp															Hold			
10		,,						2													1					
	oler's Name: Chais HI						Re	ling	ulshed By	/ Affilia	tion	_			Date	1	ime _			Acc	epted	By / A	ffiliation	Date	Time	1
	oler's Company: Stratus Environment Date: 7.2.07	nental, I	nc.			-6	mily	n	1	514	Fi	4			1207	1))	25	D	11Å		M		AH.	7/2/07	ــــــا ا	3
	ment Method: Strutes	· · · · · · · · · · · · · · · · · · ·												_ -		}								/ /		
	nent Tracking No:	·												_ -		 										
	al Instructions:		Please c	c res	ults t	o bo	ledf@broadbentine	a Cr)m							<u> </u>										
		~				- ~P.			716I																	ĺ
	Custody Seals In Place: Yes /	No)	Temp	o Bla	ank: \	Yes/	No Coole	r Te	mp on R	eceipt	:	°F	/C	1	Trin	Rla	nk:/Ye	s No		l N	12/1/21	en e	ample Submitted: V	- / N/a		i

MS/MSD Sample Submitted: Yes / No





17 July, 2007

Jay Johnson Stratus Environmental Inc. [Arco] 3330 Cameron Park Dr., Suite 550 Cameron Park, CA 95682

RE: ARCO #2111, San Leandro, CA Work Order: MQG0025

Enclosed are the results of analyses for samples received by the laboratory on 07/02/07 11:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa Race

Senior Project Manager

CA ELAP Certificate # 1210

The results in this laboratory report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the BPGCLN Technical Specifications, applicable Federal, State, local regulations and certification requirements as well as the methodologies as described in laboratory SOPs reviewed by the BPGCLN. This entire report was reviewed and approved for release.



885 Jarvis Drive Morgan Hill, CA 95037 (408) 776-9600 FAX (408) 782-6308 www.testamericainc.com

Stratus Environmental Inc. [Arco] Project: ARCO #2111, San Leandro, CA MQG0025
3330 Cameron Park Dr., Suite 550 Project Number: G0C28-0023 Reported:
Cameron Park CA, 95682 Project Manager: Jay Johnson 07/17/07 10:46

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
02111DPEAINF	MQG0025-01	Vapor	07/02/07 07:23	07/02/07 11:30
02111ASAEFF	MQG0025-02	Vapor	07/02/07 07:21	07/02/07 11:30
02111ASYSINF	MQG0025-03	Vapor	07/02/07 07:19	07/02/07 11:30
02111AGAC1	MQG0025-04	Vapor	07/02/07 07:17	07/02/07 11:30
02111AEFF	MQG0025-05	Vapor	07/02/07 07:15	07/02/07 11:30

The carbon range for the TPH-GRO has been changed from C6-C10 to C4-C12. The carbon range for TPH-DRO has been changed from C10-C28 to C10-C36. EPA 8015B has been modified to better meet the requirements of California regulatory agencies. These samples were received with no custody seals.





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQG0025 Reported: 07/17/07 10:46

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
02111DPEAINF (MQG0025-01) Vapor	Sampled: 07/02	2/07 07:23	Received	: 07/02/07	11:30				
Gasoline Range Organics (C4-C12)	340	100	mg/m³ Air	10	7G03005	07/03/07	07/03/07 14:35	EPA 8015B/8021B	
Benzene	ND	1.0	"	**	П	tt	"	n	
Toluene	ND	1.0	II .	"	**	II.	II .	16	
Ethylbenzene	ND	1.0	H	11	II	**	"	п	
Xylenes (total)	ND	2.0	11	u	#1	II .	n	H	
Methyl tert-butyl ether	15	5.0		II .	"		н	IF	
Surrogate: a,a,a-Trifluorotoluene		107 %	65-1	40	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	70-1	25	"	n	"	"	
Gasoline Range Organics (C4-C12)	95	24	ppmv	10	II .	н	H	н	
Benzene	ND	0.31	11	"	"	II	н	H	
Toluene	ND	0.27	11	п	11	н	"	н	
Ethylbenzene	ND	0.23	н	н	*11	11	II .	n	
Xylenes (total)	ND	0.47	11	11	Ħ	11	11	п	
Methyl tert-butyl ether	4.2	1.4	#	11		"	"	"	
Surrogate: a,a,a-Trifluorotoluene		107 %	65-1	40	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	70-1	25	n	"	"	n	
02111ASAEFF (MQG0025-02) Vapor	Sampled: 07/02/0	07 07:21	Received: (07/02/07 1	1:30				
Gasoline Range Organics (C4-C12)	ND	10	mg/m³ Air	1	7G03005	07/03/07	07/03/07 14:05	EPA 8015B/8021B	· · · · · · · · · · · · · · · · · · ·
Benzene	ND	0.10	**	**	11	"	п	и	
Toluene	ND	0.10	tt.	0	"	II .	n	II	
Ethylbenzene	ND	0.10	н	11	II .	**	н	#	
Xylenes (total)	ND	0.20	"	"	H	Ħ	II	it.	
Methyl tert-butyl ether	0.87	0.50	11	II	**	11	"	11	
Surrogate: a,a,a-Trifluorotoluene		102 %	65-1-	40	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98 %	70-12	25	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	2.4	ppmv	н	11	++	tt.	u	
Benzene	ND	0.031	"	*	11	**	н	н	
Toluene	ND	0.027	H	II	"	Ш	n	11	
Ethylbenzene	ND	0.023	0	н	п	"	II.	II.	
Xylenes (total)	ND	0.047	"	"	**	н	II.	11	
Methyl tert-butyl ether	0.24	0.14	н	П	**	11	и	н	
Surrogate: a,a,a-Trifluorotoluene		102 %	65-14	10	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98 %	70-12	25	"	"	"	n .	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023 Project Manager: Jay Johnson MQG0025 Reported: 07/17/07 10:46

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
02111ASYSINF (MQG0025-03) Vapor	Sampled: 07/0	2/07 07:19	Received	: 07/02/07	11:30				
Gasoline Range Organics (C4-C12)	180	50	mg/m³ Air	5	7G03005	07/03/07	07/03/07 12:59	EPA 8015B/8021B	
Benzene	ND	0.50	**	#1	11	*	**		
Γoluene	ND	0.50	H	"	II	"	11	н	
Ethylbenzene	ND	0.50	II	II	11	н	**	*	
Xylenes (total)	ND	1.0		**	11	"	H	II .	
Methyl tert-butyl ether	11	2.5	н	11	11	11	li .	11	
Surrogate: a,a,a-Trifluorotoluene		109 %	65-	140	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	70	125	"	"	"	n .	
Gasoline Range Organics (C4-C12)	50	12	ppmv	5	**	n	H	**	
Benzene	ND	0.16		1)	n	**	*	U	
Toluene	ND	0.13	н	Ħ	11	II	ш	"	
Ethylbenzene	ND	0.12	II	п	11	0	"	н	
(ylenes (total)	ND	0.24	n	и	u	11	n	U .	
Methyl tert-butyl ether	2.9	0.69	п	II	**	11	н	u	
Surrogate: a,a,a-Trifluorotoluene		109 %	65-1	140	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	70-1	125	"	"	"	"	
2111AGAC1 (MQG0025-04) Vapor S	Sampled: 07/02/0	7 07:17 R	eceived: 0	7/02/07 11	:30				
Gasoline Range Organics (C4-C12)	ND	10	mg/m³ Air	1	7G03005	07/03/07	07/03/07 12:29	EPA 8015B/8021B	
Benzene	ND	0.10	11	II	н	н	11	II	
Coluene	ND	0.10	"	"	II	11	11	11	
Ethylbenzene	ND	0.10	H	"	11	П	II .	11	
(ylenes (total)	ND	0.20	16	II	**	+1	"	H	
Methyl tert-butyl ether	ND	0.50	"	"	n	"	It	U	
'urrogate: a,a,a-Trifluorotoluene		98 %	65-1	40	"	"	"	"	
urrogate: 4-Bromofluorobenzene		94 %	70-1	25	"	n	"	"	
Gasoline Range Organics (C4-C12)	ND	2.4	ppmv	**	II.	n	II	п	
Benzene	ND	0.031	n n	н	41	n		п	
oluene	ND	0.027	п	II	**	н	ш	п	
thylbenzene	ND	0.023	"	11	II.	u	ш	н	
(ylenes (total)	ND	0.047	n	u	11	II	#	#	
Methyl tert-butyl ether	ND	0.14	11	U	"	#	tt	II	

urrogate: a,a,a-Trifluorotoluene		98 %	65-1	40	"	"	"	"	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023 Project Manager: Jay Johnson MQG0025 Reported: 07/17/07 10:46

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
02111AEFF (MQG0025-05) Vapor	Sampled: 07/02/07	07:15 Re	ceived: 07	/02/07 11:	30		-		
Gasoline Range Organics (C4-C12)	ND	10	mg/m³ Air	1	7G03005	07/03/07	07/03/07 11:58	EPA 8015B/8021B	
Benzene	ND	0.10	n	п	п	"	0	"	
Toluene	ND	0.10	"	**	н	**	11	11	
Ethylbenzene	ND	0.10	В	II.	II .	u	н	31	
Xylenes (total)	ND	0.20	**	n	**	"	н	н	
Methyl tert-butyl ether	ND	0.50	н	п	II	11	II	"	
Surrogate: a,a,a-Trifluorotoluene		100 %	65-1	140	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96 %	70-1	125	"	"	"	n	
Gasoline Range Organics (C4-C12)	ND	2.4	ppmv	11	11	**	#	II .	
Benzene	ND	0.031	Ð	п	11	II.	tt	H	
Toluene	ND	0.027	#	"	н	"	н	TI .	
Ethylbenzene	ND	0.023	ш	U	II.	II	n	#	
Xylenes (total)	ND	0.047	"	**	n	u u	II	H	
Methyl tert-butyl ether	ND	0.14	II.	п	n	"	**	n	
Surrogate: a,a,a-Trifluorotoluene		100 %	65-1	40	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96 %	70-1	25	"	"	"	"	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQG0025 Reported: 07/17/07 10:46

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B - Quality Control TestAmerica - Morgan Hill, CA

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Blank (7G03005-BLK1)				Prepared & Aı	naturad. 07/02	/07	
Gasoline Range Organics (C4-C12)	ND	50	mg/m³ Air	rrepared & Ai	naryzed: 07/03	/0/	
Gasoline Range Organics (C4-C12)	ND	12	_				
Benzene	ND		mg/m³ Air				
Benzene	ND	0.16	-				
Toluene	ND		mg/m³ Air				
Toluene	ND	0.13					
Ethylbenzene	ND		mg/m³ Air				
Ethylbenzene	ND	0.12	_				
Xylenes (total)	ND		mg/m³ Air				
Xylenes (total)	ND	0.24	ppmv				
Methyl tert-butyl ether	ND	2.5	mg/m³ Air				
Methyl tert-butyl ether	ND	0.69	ppmv				
Surrogate: a,a,a-Trifluorotoluene	40.4		mg/m³ Air	40.0	101	65-140	
Surrogate: a,a,a-Trifluorotoluene	6.77		ррти	6.70	101	65-140	
Surrogate: 4-Bromofluorobenzene	37.9		mg/m³ Air	40.0	95	70-125	
Surrogate: 4-Bromofluorobenzene	5.30		ррти	5.59	95	70-125	
Laboratory Control Sample (7G03005-1	BS1)		1	Prepared & An	alyzed: 07/03/	07	
Gasoline Range Organics (C4-C12)	228	50	mg/m³ Air	275	83	70-115	
Gasoline Range Organics (C4-C12)	64.6	12	ppmv	78.0	83	70-115	
Benzene	4.49	0.50	mg/m³ Air	3.30	136	80-150	
Benzene	1.41	0.16	ppmv	1.03	136	80-150	
Coluene	21.5	0.50	mg/m³ Air	24.2	89	75-125	
oluene	5.71	0.13	ppmv	6.43	89	75-125	
Ethylbenzene	4.55	0.50	mg/m³ Air	5.05	90	75-135	
thylbenzene	1.05	0.12	ppmv	1.17	90	75-135	
(ylenes (total)	25.3	1.0	mg/m³ Air	29.0	87	75-135	
(ylenes (total)	5.83	0.24	ppmv	6.68	87	75-135	
Nethyl tert-butyl ether	4.97	2.5	mg/m³ Air	4.60	108	60-140	
Methyl tert-butyl ether	1.38	0.69	ppmv	1.28	108	60-140	
urrogate: a,a,a-Trifluorotoluene	40.2		mg/m³ Air	40.0	101	65-140	
Surrogate: a,a,a-Trifluorotoluene	6.74		ppmv	6.70	101	65-140	
urrogate: 4-Bromofluorobenzene	39.5		mg/m³ Air	40.0	99	70-125	
urrogate: 4-Bromofluorobenzene	5.52		ppmv	5.59	99	70-125	





Stratus Environmental Inc. [Arco] 3330 Cameron Park Dr., Suite 550

Project: ARCO #2111, San Leandro, CA

MQG0025 Reported:

Cameron Park CA, 95682

Project Number: G0C28-0023
Project Manager: Jay Johnson

Reporting

07/17/07 10:46

RPD

%REC

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7G03005 - EPA 5030B [P/T]	/ EPA 8015B/80)21B								
Laboratory Control Sample Dup (7G03	005-BSD1)			Prepared 6	& Analyze	ed: 07/03/	07			
Gasoline Range Organics (C4-C12)	227	50	mg/m³ Air	275		82	70-115	0.3	20	
Gasoline Range Organics (C4-C12)	64.4	12	ppmv	78.0		82	70-115	0.3	20	
Benzene	4.52	0.50	mg/m³ Air	3.30		137	80-150	0.7	25	
Benzene	1.42	0.16	ppmv	1.03		137	80-150	0.7	25	
Toluene	5.80	0.13	H	6.43		90	75-125	2	20	
Toluene	21.8	0.50	mg/m³ Air	24.2		90	75-125	2	20	
Ethylbenzene	4.62	0.50	ii .	5.05		91	75-135	2	25	
Ethylbenzene	1.07	0.12	ppmv	1.17		91	75-135	2	25	
Xylenes (total)	25.7	1.0	mg/m³ Air	29.0		89	75-135	2	20	
Xylenes (total)	5.92	0.24	ppmv	6.68		89	75-135	2	20	
Methyl tert-butyl ether	4.94	2.5	mg/m³ Air	4.60		107	60-140	0.6	25	
Methyl tert-butyl ether	1.37	0.69	ppmv	1.28		107	60-140	0.6	25	
Surrogate: a,a,a-Trifluorotoluene	40.1		mg/m³ Air	40.0		100	65-140	•		
Surrogate: a,a,a-Trifluorotoluene	6.71		ppmv	6.70		100	65-140			
Surrogate: 4-Bromofluorobenzene	38.8		mg/m³ Air	40.0		97	70-125			
Surrogate: 4-Bromofluorobenzene	5.42		ppmv	5.59		97	70-125			



885 Jarvis Drive Morgan Hill, CA 95037 (408) 776-9600 FAX (408) 782-6308 www.testamericainc.com

Stratus Environmental Inc. [Arco]
Project: ARCO #2111, San Leandro, CA
MQG0025
3330 Cameron Park Dr., Suite 550
Project Number: G0C28-0023
Cameron Park CA, 95682
Project Manager: Jay Johnson
07/17/07 10:46

Notes and Definitions

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

Atlan Rich Com	tic
Rich	nfield
Com	pany

A BP affiliated company

Chain of Custody Record

RUSH

Project Name: ARCO Facility No. 2111

BP BU/AR Region/Enfos Segment:

BP > Americas > West > Retail > Alameda

State or Lead Regulatory Agency:

California Regional Water Quality Control Board

Requested Due Date (mm/dd/yy):

24 hours for Effluent & STD for others

Lab	Name: TestAmerica					BP/AR Facility N	lo.:	2111								Cons	ultar	nt/Cont	tracto	r:	Stra	itus En	vironme	ental, Inc.		
Add	ress: 885 Jarvis Drivė					BP/AR Facility A	ddre	ss: 1156]	Davis St	., San	Lear	ndro				Addr	ess:	3	3330	Came	eron P	'ark D	rive, S	uite 550		
Mor	gan Hill, CA 95937					Site Lat/Long:												(Came	eron F	ark, C	CA 956	582			
Lab	PM: Lisa Race					California Global	ID1	No.:	T0600	10170	64		جو•اتا			Cons	ultar	ıt/Cont	tracto	r Proje	ect No.	.:	E2111	-03		
Tele	Fax: 408-782-8156/408-782-63	308				Enfos Project No	.:	G0C28-	0023							Cons	ultar	t/Cont	tracto	r PM:			Jay Joi	ınson		
BP/A	AR PM Contact: Paul Supple					Provision or OOC	C (ci	rcle one)		Pro	vision	l				Tele/	Fax:	((530)	676-	6000 /	/ (530)	676-6	005		
Add	ress: 2010 Crow Canyon Place, St	uite 150				Phase/WBS:		03-O&N	Л							Repo	rt Ty	rpe & (QCL	_evel:			Level	l with ED)F	
	San Ramon, CA					Sub Phase/Task:		03-Anai	ytical							E-ma	il El	DD To:	: 5	shaye	s@st	ratusi:	nc.net	[
Tele	Fax: 925-275-3506/925-275-38	315				Cost Element:		Subcont	ractor C	ost						Invoi	ce to	: Atla	ntic F	Richfie	eld Co.					
Lab	Bottle Order No:			M	latrix		Γ		Pres	ervat	ive		Req	ueste	d Anal	ysis	T	urnaro	ound	Time						
Item No.	Sample Description	Time	Date	Soil/Solid Water/I jouid	Air	Laboratory No.	No. of Containers	Unpreserved	H ₂ SO ₄	HNO ₃	HCI	Methanol	GRO by 8015	BTEX by 8260	MTBE by 8260		24-hours	Standard				Samp		t Lat/Lor	ng an	d
1	02111DPEAINF	0723	7207		х	101	2						х	х	x			х	T	\Box					***************************************	
2	02111ASAEFF	וגלט			х	-02	2						х	х	x			х								
3	02111ASYSINF	9119			х	103	2						х	х	х			х	T			de Addition (victoria)		Halling		
4	02111AGAC1	0717			x	-04	2						х	х	х			х								
5	02111AEFF	0715			x	-05	2			<u> </u>			х	х	х		х									
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	pler's Company: Stratus Enviro	onmental,	Inc.			mille	n	1	99	rX	4		120	2	1175		J	WE	= /	/ TA	}-Mt	}			2/07	117
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	Sustody Seals In Place: Ye	o / Kla	Т	np Blai	ales W-	1X6 \ 1 C :	~	`~ · · · · · · ·	D 1		-0+	r VC	1 ~		I . 1	, ,,				0.000		. ~ -		 / .	-	
	usubuy seals in Flace. 16	23/640)	1 en	ih pigi	ık: 16	S/ANO) COO!	er i	emp on	Keceipi	سسسب،،	ŀ	/C	1 Ir	ib R	lank: Y	es //	10 /	-	MS/	MSD	Samp	ne Sut	mitted	l: Yes (N	10)	

TEST AMERICA SAMPLE RECEIPT LOG

CLIENT NAME: REC. BY (PRINT) WORKORDER:	ARCO (ZIII) TILLIENG MOGOOZS	The state of the s	DATE REC'D AT LAB: TIME REC'D AT LAB: DATE LOGGED IN:	7/2/20	47-160 PM P P P P P P P P P P P P P P P P P P	ni Organia selesti mada	TETER PROPERTY AND THE PARTY A	For Regule DRINKING WASTE W.	
CIRCLE THE APPRO	PRIATE RESPONSE	LAD SAMPLE //	стъент ю	CONTAINER DESCRIPTION	PRESER VATIVE	p14	SAMPLE	DATE	REMARKS: CONDITION (ETC.)
1. Custody Seal(s)	Present / Absent				-			25 (18(1, 1°1°1')	Common percent
	Intact / Broken		Market and the second s	*:					
2. Chain-of-Custody	Préseul / Abseul*		rhanted any or use a similar department and the state of the similar similar of the state of the						
3 Traffic Reports or	_		Annual and the second						
Packing List.	Present / Abgen)								
4. Airbill:	Airbill / Slicker		***************************************					/O-	
	Present / Alpean		Windows believed to the an experience, and administration of a requirement on covery was too two constants, time			•		92	O Promote Salarana () () () () () () () () () (
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6. Sample Labels:	Present / Absent		For the selection and selection and designation of the selection and selection and selection of the selectio						
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received?	(69 / NO.					-			
12. Proper preservatives us									
13. Trip Blank / Temp Blank	Received?								
(circle which, If yes)	Yes/No								
4. Read Temp									
Corrected Temp:									
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or Problem COC	<u> </u>								
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SRI_Revision 6 oplaces Rev 7 (07/19/05) IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.

Fage ___ of ____





17 July, 2007

Jay Johnson Stratus Environmental Inc. [Arco] 3330 Cameron Park Dr., Suite 550 Cameron Park, CA 95682

RE: ARCO #2111, San Leandro, CA Work Order: MQG0023

Enclosed are the results of analyses for samples received by the laboratory on 07/02/07 11:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa Race

Senior Project Manager

CA ELAP Certificate # 1210

The results in this laboratory report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the BPGCLN Technical Specifications, applicable Federal, State, local regulations and certification requirements as well as the methodologies as described in laboratory SOPs reviewed by the BPGCLN. This entire report was reviewed and approved for release.



885 Jarvis Drive Morgan Hill, CA 95037 (408) 776-9600 FAX (408) 782-6308 www.testamericainc.com

Stratus Environmental Inc. [Arco] 3330 Cameron Park Dr., Suite 550 Cameron Park CA, 95682

Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQG0023 Reported: 07/17/07 10:21

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
02111DPEWINF	MQG0023-01	Water	07/02/07 06:50	07/02/07 11:30
02111ASWINF	MQG0023-02	Water	07/02/07 07:05	07/02/07 11:30
02111ASWEFF	MQG0023-03	Water	07/02/07 06:44	07/02/07 11:30
02111WGAC1	MQG0023-04	Water	07/02/07 06:39	07/02/07 11:30
02111WEFF	MQG0023-05	Water	07/02/07 06:37	07/02/07 11:30
02111MW2WINF	MQG0023-06	Water	07/02/07 06:50	07/02/07 11:30
TB21117207	MQG0023-07	Water	07/02/07 07:10	07/02/07 11:30

The carbon range for the TPH-GRO has been changed from C6-C10 to C4-C12. The carbon range for TPH-DRO has been changed from C10-C28 to C10-C36. EPA 8015B has been modified to better meet the requirements of California regulatory agencies. These samples were received with no custody seals.





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQG0023 Reported: 07/17/07 10:21

Purgeable Hydrocarbons by EPA 8015B TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
02111DPEWINF (MQG0023-01) Water	Sampled: 07/	02/07 06:50	Received	: 07/02/0	7 11:30				
Gasoline Range Organics (C4-C12)	370	100	ug/l	2	7G02024	07/02/07	07/03/07	EPA 8015B-VOA	PV
Surrogate: 4-Bromofluorobenzene		100 %	75-12	25	"	"	"	"	
02111ASWINF (MQG0023-02) Water	Sampled: 07/02	2/07 07:05	Received: 0	7/02/07	11:30				
Gasoline Range Organics (C4-C12)	320	100	ug/l	2	7G02024	07/02/07	07/03/07	EPA 8015B-VOA	PV
Surrogate: 4-Bromofluorobenzene		102 %	75-12	25	"	"	"	"	
02111ASWEFF (MQG0023-03) Water	Sampled: 07/0	2/07 06:44	Received: (07/02/07	11:30				
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	7G02024	07/02/07	07/02/07	EPA 8015B-VOA	
Surrogate: 4-Bromofluorobenzene		99 %	75-12	?5	"	"	"	"	
02111WGAC1 (MQG0023-04) Water S	Sampled: 07/02	/07 06:39 R	Received: 0'	7/02/07 1	1:30				
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	7G02024	07/02/07	07/02/07	EPA 8015B-VOA	
Surrogate: 4-Bromofluorobenzene		101 %	75-12	25	"	"	11	"	
02111WEFF (MQG0023-05) Water Sa	mpled: 07/02/0	7 06:37 Red	ceived: 07/0	02/07 11:	:30				
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	7G02024	07/02/07	07/02/07	EPA 8015B-VOA	
Surrogate: 4-Bromofluorobenzene		103 %	75-12	25	"	"	"	"	
02111MW2WINF (MQG0023-06) Water	Sampled: 07	/02/07 06:50	Received	l: 07/02/0	07 11:30				
Gasoline Range Organics (C4-C12)	1100	500	ug/l	10	7G02024	07/02/07	07/03/07	EPA 8015B-VOA	
Surrogate: 4-Bromofluorobenzene		102 %	75-12	?5	"	"	"	u	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQG0023 Reported: 07/17/07 10:21

Volatile Organic Compounds by EPA Method 8260B TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
02111DPEWINF (MQG0023-01) Water	Sampled: 07/	02/07 06:50	Received	1: 07/02/0	7 11:30				
tert-Amyl methyl ether	ND	5.0	ug/l	10	7G09004	07/09/07	07/09/07	EPA 8260B	
Benzene	ND	5.0	"	H	Ð	. "	ш	D	
tert-Butyl alcohol	ND	200	If	"	13	11	#	H	
Di-isopropyl ether	ND	5.0	11	tt	"	"	#	41	
Ethyl tert-butyl ether	ND	5.0	**	Ш	II .	*1	**	н	
Ethylbenzene	ND	5.0	**	II .	n	**	11	H	
Methyl tert-butyl ether	400	5.0	п	"	#	"	Ш	н	
Toluene	ND	5.0	II	n	"	п	**	11	
Xylenes (total)	ND	5.0	**			ii	H	H	
Surrogate: Dibromofluoromethane		105 %	75-1	20	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		88 %	60-1	25	"	"	"	n	
Surrogate: Toluene-d8		100 %	80-1	20	"	n n	"	"	
Surrogate: 4-Bromofluorobenzene		98 %	60-1	35	"	"	"	n	
02111ASWINF (MQG0023-02) Water	Sampled: 07/02	/07 07:05 I	Received:	07/02/07	11:30				
tert-Amyl methyl ether	ND	5.0	ug/l	10	7 G09009	07/09/07	07/09/07	EPA 8260B	
Benzene	ND	5.0	n	"	"	II	**	ш	
tert-Butyl alcohol	ND	200	H	n	"	н	**	11	
Di-isopropyl ether	ND	5.0	Ħ	11	"	11	**	H	
Ethyl tert-butyl ether	ND	5.0	"	It	11	11	ti.	#	
Ethylbenzene	ND	5.0	"	и	П	#1	"	H	
Methyl tert-butyl ether	430	5.0	"	11	П	"	н	11	
Toluene	ND	5.0	#	**	П	"	II .	II.	
Xylenes (total)	ND	5.0			11	1)	11	ft	
Surrogate: Dibromofluoromethane		93 %	75-1	20	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		101 %	60-1	25	"	"	"	"	
Surrogate: Toluene-d8		93 %	80-1	20	"	n	"	11	
Surrogate: 4-Bromofluorobenzene		89 %	60-1	35	"	"	"	"	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQG0023 Reported: 07/17/07 10:21

Volatile Organic Compounds by EPA Method 8260B TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
02111ASWEFF (MQG0023-03) Water	Sampled: 07/02	/07 06:44	Received: 0	7/02/07	11:30				
tert-Amyl methyl ether	ND	0.50	ug/l	1	7G09009	07/09/07	07/09/07	EPA 8260B	
Benzene	ND	0.50	H	"))	**	II .	II .	
tert-Butyl alcohol	84	20	II.	11	"	11	H	ш	
Di-isopropyl ether	ND	0.50	#		n n	п	II	#	
Ethyl tert-butyl ether	ND	0.50	Ħ	"	II .	#	II	H	
Ethylbenzene	ND	0.50	(I	lt .	"	**	**	n	
Methyl tert-butyl ether	35	0.50	11	II.	"	11	"	п	
Toluene	ND	0.50	H	**	H	11	n	П	
Xylenes (total)	ND	0.50	"			11	"	#1	
Surrogate: Dibromofluoromethane		97 %	75-12	0	"	"	n	п	
Surrogate: 1,2-Dichloroethane-d4		104 %	60-12	5	"	"	"	n .	
Surrogate: Toluene-d8		95 %	80-12	0	"	n	"	"	
Surrogate: 4-Bromofluorobenzene		92 %	60-13	5	"	n.	n	"	
02111WGAC1 (MQG0023-04) Water	Sampled: 07/02/0	07 06:39 1	Received: 07	/02/07 1	1:30				
tert-Amyl methyl ether	ND	0.50	ug/l	1	7G09009	07/09/07	07/09/07	EPA 8260B	
Benzene	ND	0.50	11	11	11	H	"	n	
tert-Butyl alcohol	ND	20	11	II	"	IF	**	II	
Di-isopropyl ether	ND	0.50	**	II .	n	Ш	II	#	
Ethyl tert-butyl ether	ND	0.50	"	**	11	ii .	II	"	
Ethylbenzene	ND	0.50	"	"	11	"	11	H	
Methyl tert-butyl ether	ND	0.50	U	"	II	"	**	II .	
Toluene	ND	0.50	II .	u	11	rr ·	**	II .	
Xylenes (total)	ND	0.50	1)	11		"	tt .	н	
Surrogate: Dibromofluoromethane		95 %	75-12	0	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		99 %	60-12.	5	"	"	"	n	
Surrogate: Toluene-d8		100 %	80-12	0	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96 %	60-13.	5	"	"	"	n .	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023 Project Manager: Jay Johnson MQG0023 Reported: 07/17/07 10:21

Volatile Organic Compounds by EPA Method 8260B TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
02111WEFF (MQG0023-05) Water	Sampled: 07/02/07	7 06:37 Rec	eived: 0	7/02/07 11:	:30				
tert-Amyl methyl ether	ND	0.50	ug/l	1	7G02004	07/02/07	07/02/07	EPA 8260B	
Benzene	ND	0.50	**	11	**	"	н	tt	
tert-Butyl alcohol	ND	20	u	H H	"	II	**	II .	
Di-isopropyl ether	ND	0.50	п	**	п	n	"	H	
Ethyl tert-butyl ether	ND	0.50	"	Ħ	#	"	0	II .	
Ethylbenzene	ND	0.50	11	ш	"	"	И	II .	
Methyl tert-butyl ether	ND	0.50	II	н	n	n	н	II .	
Toluene	ND	0.50	н	н	II	11	"	n	
Xylenes (total)	ND	0.50	**	н	н	"	ıı .	н	
Surrogate: Dibromofluoromethane		100 %	75-	120	"	"	n	n	
Surrogate: 1,2-Dichloroethane-d4		107 %	60-	125	"	"	"	"	
Surrogate: Toluene-d8		84 %	80-	120	n	"	"	"	
Surrogate: 4-Bromofluorobenzene		70 %	60-	135	"	"	"	"	
02111MW2WINF (MQG0023-06) W	ater Sampled: 07	/02/07 06:50	Receiv	ed: 07/02/0	7 11:30				
tert-Amyl methyl ether	ND	5.0	ug/l	10	7G09009	07/09/07	07/09/07	EPA 8260B	
Benzene	40	5.0	n	п	"	tt	#	п	
tert-Butyl alcohol	910	200	п	н	H	п	н	и	
Di-isopropyl ether	ND	5.0	H	"	11	**	II .	H	
Ethyl tert-butyl ether	ND	5.0	"	п	"	Ħ	H .	п	
Ethylbenzene	21	5.0	II.	"	u	11	"	U.	
Methyl tert-butyl ether	840	5.0	II.	"	11	*1	Ħ	**	
Toluene	ND	5.0	"	n	ŧI.	и	11	**	
Xylenes (total)	7.9	5.0	**		"	n	11	н	
Surrogate: Dibromofluoromethane		92 %	75-	120	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		104 %	60-	125	"	"	"	"	
Surrogate: Toluene-d8		95 %	80-	120	. " "		и		
Surrogate: 4-Bromofluorobenzene		94 %	60-	135	"	n	"	"	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQG0023 Reported: 07/17/07 10:21

Purgeable Hydrocarbons by EPA 8015B - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7G02024 - EPA 5030B [P/T] /	EPA 8015B-	VOA								
Blank (7G02024-BLK1)				Prepared a	& Analyze	ed: 07/02/	07		-	
Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Surrogate: 4-Bromofluorobenzene	81.1		"	80.0		101	75-125			
Laboratory Control Sample (7G02024-B	S1)			Prepared a	& Analyze	ed: 07/02/	07			
Gasoline Range Organics (C4-C12)	213	50	ug/l	275		78	60-115			
Surrogate: 4-Bromofluorobenzene	83.4		"	80.0		104	75-125			
Matrix Spike (7G02024-MS1)	Source: M	QF0736-07		Prepared a	& Analyze	ed: 07/02/	07			
Gasoline Range Organics (C4-C12)	219	50	ug/l	275	ND	80	60-115			
Surrogate: 4-Bromofluorobenzene	83.2		"	80.0		104	75-125			
Matrix Spike Dup (7G02024-MSD1)	Source: M	QF0736-07		Prepared o	& Analyze	d: 07/02/	07			
Gasoline Range Organics (C4-C12)	218	50	ug/l	275	ND	79	60-115	0.6	20	
Surrogate: 4-Bromofluorobenzene	83.6		"	80.0		104	75-125			





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023 Project Manager: Jay Johnson

MQG0023 Reported: 07/17/07 10:21

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7G02004 - EPA 5030B P/T / E	PA 8260B									
Blank (7G02004-BLK1)				Prepared &	& Analyze	d: 07/02/)7			
tert-Amyl methyl ether	ND	0.50	ug/l					-		
Benzene	ND	0.50	n							
tert-Butyl alcohol	ND	20	"							
Di-isopropyl ether	ND	0.50	H							
Ethyl tert-butyl ether	ND	0.50	11							
Ethylbenzene	ND	0.50	**							
Methyl tert-butyl ether	ND	0.50	n							
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	II							
Surrogate: Dibromofluoromethane	2.49		"	2.50		100	75-120		**************************************	
Surrogate: 1,2-Dichloroethane-d4	2.51		"	2.50		100	60-125			
Surrogate: Toluene-d8	2.33		"	2.50		93	80-120			
Surrogate: 4-Bromofluorobenzene	1.86		"	2.50		74	60-135			
Laboratory Control Sample (7G02004-BS	S1)			Prepared &	d Analyze	d: 07/02/0	7			
tert-Amyl methyl ether	9.89	0.50	ug/l	10.0		99	65-135		***	
Benzene	10.4	0.50	#	10.0		104	75-120			
tert-Butyl alcohol	193	20	#	200		97	60-135			
Di-isopropyl ether	9.96	0.50	11	10.0		100	70-130			
Ethyl tert-butyl ether	10.1	0.50	"	10.0		101	65-130			
Ethylbenzene	11.5	0.50	II .	10.0		115	75-120			
Methyl tert-butyl ether	9.57	0.50	н	10.0		96	50-140			
Toluene	11.0	0.50	II	10.0		110	75-120			
Xylenes (total)	35.1	0.50	**	30.0		117	75-130			
Surrogate: Dibromofluoromethane	2.52		"	2.50		101	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.30		"	2.50		92	60-125			
Surrogate: Toluene-d8	2.48		n	2.50		99	80-120			
Surrogate: 4-Bromofluorobenzene	2.58		"	2.50		103	60-135			





Project: ARCO #2111, San Leandro, CA

Spike

Project Number: G0C28-0023 Project Manager: Jay Johnson MQG0023 Reported: 07/17/07 10:21

RPD

%REC

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Reporting

Analyte	Result	Limit	Units	Lavel	Dogult	%REC	Limite	RPD	KI D	3.7 .
Analyte	Resuit	Limit	Onus	Level	Result	70REC	Limits	KPD	Limit	Notes
Batch 7G02004 - EPA 5030B P/T / E	PA 8260B									
Matrix Spike (7G02004-MS1)	Source: MQ)F0852-01		Prepared	& Analyze	ed: 07/02/	07			
tert-Amyl methyl ether	10.4	0.50	ug/l	10.0	0.740	96	65-135			
Benzene	10.4	0.50	**	10.0	ND	104	75-120			
tert-Butyl alcohol	184	20	п	200	ND	92	60-135			
Di-isopropyl ether	10.3	0.50	н	10.0	ND	103	70-130			
Ethyl tert-butyl ether	10.6	0.50	"	10.0	ND	106	65-130			
Ethylbenzene	11.0	0.50	п	10.0	ND	110	75-120			
Methyl tert-butyl ether	10.2	0.50	п	10.0	ND	102	50-140			
Toluene	10.9	0.50	"	10.0	ND	109	75-120			
Xylenes (total)	34.6	0.50	"	30.0	ND	115	75-130			
Surrogate: Dibromofluoromethane	2.66		"	2.50		106	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.34		"	2.50		94	60-125			
Surrogate: Toluene-d8	2.44		"	2.50		98	80-120			
Surrogate: 4-Bromofluorobenzene	2.65		"	2.50		106	60-135			
Matrix Spike Dup (7G02004-MSD1)	Source: MQ	F0852-01		Prepared a	& Analyze	ed: 07/02/0	07			
tert-Amyl methyl ether	10.6	0.50	ug/l	10.0	0.740	99	65-135	3	25	
Benzene	10.3	0.50	**	10.0	ND	103	75-120	0.8	20	
tert-Butyl alcohol	187	20	п	200	ND	94	60-135	2	25	
Di-isopropyl ether	10.3	0.50	н	10.0	ND	103	70-130	0.5	25	
Ethyl tert-butyl ether	10.8	0.50	u	10.0	ND	108	65-130	2	25	
Ethylbenzene	10.9	0.50	U	10.0	ND	109	75-120	0.2	20	
Methyl tert-butyl ether	10.3	0.50	H	10.0	ND	103	50-140	0.7	25	
Toluene	11.0	0.50	*	10.0	ND	110	75-120	0.4	25	
Xylenes (total)	33.9	0.50	ш	30.0	ND	113	75-130	2	20	
Surrogate: Dibromofluoromethane	2.52		"	2.50		101	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.41		"	2.50		96	60-125			
Surrogate: Toluene-d8	2.45		u	2.50		98	80-120			
Surrogate: 4-Bromofluorobenzene	2.57		"	2.50		103	60-135			





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQG0023 Reported: 07/17/07 10:21

RPD

%REC

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7G09004 - EPA 5030B P/T / EPA	8260B									
Blank (7G09004-BLK1)				Prepared	& Analyze	ed: 07/09/	07			
tert-Amyl methyl ether	ND	0.50	ug/l							****
Benzene	ND	0.50	n							
tert-Butyl alcohol	ND	20	н							
Di-isopropyl ether	ND	0.50	п							
Ethyl tert-butyl ether	ND	0.50	**							
Ethylbenzene	ND .	0.50	н							
Methyl tert-butyl ether	ND	0.50	п							
Toluene	ND	0.50	n							
Xylenes (total)	ND	0.50	н							
Surrogate: Dibromofluoromethane	2.60		"	2.50		104	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.48		"	2.50		99	60-125			
Surrogate: Toluene-d8	2.58		"	2.50		103	80-120			
Surrogate: 4-Bromofluorobenzene	2.40		"	2.50		96	60-135			
Laboratory Control Sample (7G09004-BS1)				Prepared &	& Analyze	d: 07/09/0)7			
ert-Amyl methyl ether	9.35	0.50	ug/l	10.0		94	65-135			
Benzene	9.36	0.50	H	10.0		94	75-120			
ert-Butyl alcohol	200	20	п	200		100	60-135			
Di-isopropyl ether	9.16	0.50	11	10.0		92	70-130			
Ethyl tert-butyl ether	9.86	0.50	п	10.0		99	65-130			
Ethylbenzene	10.7	0.50	n	10.0		107	75-120			
Methyl tert-butyl ether	9.48	0.50	"	10.0		95	50-140			
Гoluene	9.25	0.50	п	10.0		92	75-120			
Xylenes (total)	30.5	0.50	#	30.0		102	75-130			
Surrogate: Dibromofluoromethane	2.39		"	2.50		96	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.21		"	2.50		88	60-125			
Surrogate: Toluene-d8	2.27		"	2.50		91	80-120			
Surrogate: 4-Bromofluorobenzene	2.61		"	2.50		104	60-135			





Project: ARCO #2111, San Leandro, CA

Spike

Source

%REC

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQG0023 Reported: 07/17/07 10:21

RPD

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7G09004 - EPA 5030B P/T / I	EPA 8260B									
Matrix Spike (7G09004-MS1)	Source: M(QF0878-03		Prepared	& Analyze	ed: 07/09/	07			
tert-Amyl methyl ether	9.51	0.50	ug/l	10.0	ND	95	65-135			
Benzene	10.3	0.50	п	10.0	ND	103	75-120			
tert-Butyl alcohol	192	20	#	200	ND	96	60-135			
Di-isopropyl ether	10.0	0.50	II .	10.0	ND	100	70-130			
Ethyl tert-butyl ether	9.76	0.50	#	10.0	ND	98	65-130			
Ethylbenzene	9.94	0.50	н	10.0	ND	99	75-120			
Methyl tert-butyl ether	9.60	0.50	"	10.0	ND	96	50-140			
Toluene	10.4	0.50	II .	10.0	ND	104	75-120			
Xylenes (total)	30.2	0.50	**	30.0	ND	101	75-130			
Surrogate: Dibromofluoromethane	2.51		"	2.50	***************************************	100	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.41		"	2.50		96	60-125			
Surrogate: Toluene-d8	2.63		"	2.50		105	80-120			
Surrogate: 4-Bromofluorobenzene	2.61		n	2.50		104	60-135			
Matrix Spike Dup (7G09004-MSD1)	Source: MQ	F0878-03		Prepared & Analyzed: 07/09/07						
ert-Amyl methyl ether	8.67	0.50	ug/l	10.0	ND	87	65-135	9	25	
Benzene	9.71	0.50	Ħ	10.0	ND	97	75-120	6	20	
ert-Butyl alcohol	191	20	ii .	200	ND	96	60-135	0.6	25	
Di-isopropyl ether	9.14	0.50		10.0	ND	91	70-130	9	25	
Ethyl tert-butyl ether	8.83	0.50	п	10.0	ND	88	65-130	10	25	
Ethylbenzene	10.6	0.50	#	10.0	ND	106	75-120	7	20	
Methyl tert-butyl ether	8.28	0.50	tt	10.0	ND	83	50-140	15	25	
Гоlиепе	9.38	0.50	н	10.0	ND	94	75-120	10	25	
Xylenes (total)	30.4	0.50	"	30.0	ND	101	75-130	0.8	20	
Surrogate: Dibromofluoromethane	2.26		"	2.50		90	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.10		"	2.50		84	60-125			
Eurrogate: Toluene-d8	2.44		"	2.50		98	80-120			
Surrogate: 4-Bromofluorobenzene	2.63		H	2.50		105	60-135			





Project: ARCO #2111, San Leandro, CA

Spike

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQG0023 Reported: 07/17/07 10:21

RPD

%REC

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Limit	Units	5pike	Book	N/DEG	/BREC	nnn	KPD	
Analyte	Resuit	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7G09009 - EPA 5030B P/T	/ EPA 8260B	*****								
Blank (7G09009-BLK1)				Prepared	& Analyze	ed: 07/09/	07			
tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	п							
tert-Butyl alcohol	ND	20	**							
Di-isopropyl ether	ND	0.50	п							
Ethyl tert-butyl ether	ND	0.50	II.							
Ethylbenzene	ND	0.50	w							
Methyl tert-butyl ether	ND	0.50	п							
Toluene	ND	0.50	н							
Xylenes (total)	ND	0.50	н							
Surrogate: Dibromofluoromethane	2.57		"	2.50		103	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.63		н	2.50		105	60-125			
Surrogate: Toluene-d8	2.40		"	2.50		96	80-120			
Surrogate: 4-Bromofluorobenzene	2.17		"	2.50		87	60-135			
Laboratory Control Sample (7G09009	-BS1)			Prepared &	& Analyze	d: 07/09/0)7			
tert-Amyl methyl ether	10.3	0.50	ug/l	10.0		103	65-135			
Benzene	9.38	0.50	U	10.0		94	75-120			
tert-Butyl alcohol	192	20	**	200		96	60-135			
Di-isopropyl ether	10.4	0.50	**	10.0		104	70-130			
Ethyl tert-butyl ether	10.3	0.50	Ħ	10.0		103	65-130			
Ethylbenzene	9.97	0.50	II	10.0		100	75-120			
Methyl tert-butyl ether	10.1	0.50	"	10.0		101	50-140			
Γoluene	9.81	0.50	п	10.0		98	75-120			
Xylenes (total)	29.4	0.50	#	30.0		98	75-130			
Surrogate: Dibromofluoromethane	2.65		"	2.50		106	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.39		"	2.50		96	60-125			
Surrogate: Toluene-d8	2.55		"	2.50		102	80-120			
Surrogate: 4-Bromofluorobenzene	2.47		"	2.50		99	60-135			





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQG0023 Reported: 07/17/07 10:21

%REC

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Límit	Notes
Batch 7G09009 - EPA 5030B P/T / F	EPA 8260B									
Matrix Spike (7G09009-MS1)	Source: MQ)F0880-21		Prepared	& Analyze	ed: 07/09/	07			
tert-Amyl methyl ether	9.27	0.50	ug/l	10.0	ND	93	65-135			
Benzene	9.50	0.50	11	10.0	ND	95	75-120			
tert-Butyl alcohol	187	20	н	200	ND	94	60-135			
Di-isopropyl ether	10.2	0.50	li .	10.0	ND	102	70-130			
Ethyl tert-butyl ether	10.0	0.50	**	10.0	ND	100	65-130			
Ethylbenzene	9.69	0.50	н	10.0	ND	97	75-120			
Methyl tert-butyl ether	9.89	0.50	n n	10.0	ND	99	50-140			
Toluene	9.88	0.50	и	10.0	ND	99	75-120			
Xylenes (total)	29.3	0.50	н	30.0	ND	98	75-130			
Surrogate: Dibromofluoromethane	2.50		"	2.50		100	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.45		"	2.50		98	60-125			
Surrogate: Toluene-d8	2.52		"	2.50		101	80-120			
Surrogate: 4-Bromofluorobenzene	2.49		"	2.50		100	60-135			
Matrix Spike Dup (7G09009-MSD1)	Source: MQ	F0880-21		Prepared & Analyzed: 07/09/07						
tert-Amyl methyl ether	9.67	0.50	ug/l	10.0	ND	97	65-135	4	25	
Benzene	9.11	0.50	II .	10.0	ND	91	75-120	4	20	
ert-Butyl alcohol	191	20	#	200	ND	95	60-135	2	25	
Di-isopropyl ether	10.1	0.50	II.	10.0	ND	101	70-130	0.5	25	
Ethyl tert-butyl ether	10.2	0.50	II.	10.0	ND	102	65-130	2	25	
Ethylbenzene	9.47	0.50	**	10.0	ND	95	75-120	2	20	
Methyl tert-butyl ether	10.6	0.50	tt	10.0	ND	106	50-140	7	25	
Γoluene	9.42	0.50	II.	10.0	ND	94	75-120	5	25	
Xylenes (total)	28.9	0.50	"	30.0	ND	96	75-130	1	20	
Surrogate: Dibromofluoromethane	2.47		"	2.50		99	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.44		"	2.50		98	60-125			
Surrogate: Toluene-d8	2.49		n .	2.50		100	80-120			
Surrogate: 4-Bromofluorobenzene	2.44		"	2.50		98	60-135			



885 Jarvis Drive Morgan Hill, CA 95037 (408) 776-9600 FAX (408) 782-6308 www.testamericainc.com

Stratus Environmental Inc. [Arco]
Project: ARCO #2111, San Leandro, CA
MQG0023
3330 Cameron Park Dr., Suite 550
Project Number: G0C28-0023
Cameron Park CA, 95682
Project Manager: Jay Johnson
07/17/07 10:21

Notes and Definitions

PV Hydrocarbon result partly due to individ, peak(s) in quant, ra	V
---	---

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

Atla	ant	ic	
Atla Ri Co	chi	iel	d
Co	mp	an	У

Chain of Custody Record

Project Name:

RUSH

On-site Time: 0530 Off-site Time: 0800

Sky Conditions:

Meteorological Events:

Wind Speed:

Direction:

A BP affiliated company

ARCO Facility No. 2111 BP BU/AR Region/Enfos Segment:

BP > Americas > West > Retail > Alameda State or Lead Regulatory Agency: California Regional Water Quality Control Board

Requested Due Date (mm/dd/yy):

24 hours for Effluent

& STD for others .ab Name: TestAmerica BP/AR Facility No.: 2111 Consultant/Contractor: Stratus Environmental, Inc. Address: 885 Jarvis Drive BP/AR Facility Address: 1156 Davis St., San Leandro Address: 3330 Cameron Park Drive, Suite 550 Morgan Hill, CA 95937 Site Lat/Long: Cameron Park, CA 95682 Lab PM: Lisa Race California Global ID No.: بو دود T0600101764 Consultant/Contractor Project No.: E2111-03 Tele/Fax: 408-782-8156/408-782-6308 Enfos Project No.: G0C28-0023 Consultant/Contractor PM: Jay Johnson BP/AR PM Contact: Paul Supple Provision or OOC (circle one) Provision (530) 676-6000 / (530) 676-6005 Tele/Fax: 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: Matrix Preservative Turnaround Time Requested Analysis 8260 Sample Point Lat/Long and -oxygenates by Soil/Solid Water/Liquid Time BTEX by 8260 Item Comments GRO by 8015 Sample Description Laboratory No. No. Methanol MQG0023 4-hours Standard HINO Air HCI 02111 DPE WINT 10/050 7207 02111DPWAINF х 01 X x Х 5-oxygenates requested are MTBE, DIPE, ETBE, TAME, and 0705 0045 х 02111ASWINF 02 Х Х х х 02111ASWEFF 1644 х 03 х х х х 02111WGAC1 х 04 х Х X х 02111WEFF 0637 х 20 х Х Х х 02111MW2WINF 005 8 7200 х 06 х х х х 8 TB21117267 720 10 Sampler's Name: / hais **HIII** Relinquished By / Affiliation Date Time Accepted By / Affiliation Time Pate Sampler's Company: Stratus Environmental, Inc. 7207 1175 11780 7.2.07 Shipment Date: Shipment Method: Strutus Shipment Tracking No: cial Instructions: Please cc results to bpedf@broadbentinc.Com

Custody Seals In Place: Yes / No

Temp Blank: Yes //No

Cooler Temp on Receipt: 5-6 °F(C)

Trip Blank: Yes No

MS/MSD Sample Submitted: Yes No

TEST AMERICA SAMPLE RECEIPT LOG

CLIENT NAME: REC. BY (PRINT) WORKORDER: CIRCLE THE APPR	ARCO 2111 THE NG MOGOOZ 3 OPRIATE RESPONSE	and the second s	DATE REC'D AT LAB: TIME REC'D AT LAB: DATE LOGGED IN:	7/2/07		nico per set es tecos	A COMMENTAL STATE		MORY PURPOSES 7 WATER YES INO
		LAD SAMPLE#	CLIEHT IO	CONTAINER DESCRIPTION		pH	SAMPLE	DATE	REMARKS:
1. Custody Seal(s)	Present / Alfsent)	7 (02 40)					MATRIX	SAMPLED	CONDITION (ETC.)
	Inlact / Broken			Finge					
2. Chain-of-Custody	Préseul / Absent		The state of the s	-					
3 Traffic Reports or	C1-		- And the state of						
Packing List.	Present / Abren								
4. Airbill:	Airbill / Slicker							/01	/
	Present / Alrean		and the state of t				\ \	9-1-4	
5. Airbill #			The state of the s				-A-A		THE PARTY OF THE P
6. Sample Labels:	Prosent / Absent		and the second						The service of the se
7. Sample II7s:	Light! / Not Listed		A state a man the playing over some bright and the first some all some a - main statement with Asia be somewh						
	on Chain-of-Custody		entry printeres are department of all the first continuous relating all address are to all also has presently to assess			2			the filter of a separate parties of a second state of the second second
0. Sample Condition:	In(agt / Droken* /				- 73-		5-67		The sale of the sa
	Leaking*		THE RELEASE OF THE PROPERTY OF THE PARTY AND ASSESSMENT OF THE PARTY O				(-)		
9. Does information on						_S\$			7-0
traffic reports and sa	ample labels								
agree?	(88) / Nn.								· i
10. Sample received within	n					·			
hold lime?	(e) / No.								
11. Adequate sample volu	те								
received?	(631 No.		——————————————————————————————————————						
Proper preservatives u	sed? (eg/No*								
IJ. Trip (Blank / Temp Blan	k Received?								
(circle which, I(yes)	(es)/ No+								1
4. Read Temp	5.6°								
Corrected Temp:						-	-		1
Is corrected temp 4 +/-	2"C7 (88)/No"								- Inter-
Ассерівася тапре ілс вянтуйня геді									
*Exception (if any): META	LS / DEF ON ICE								th k
or Problem COC	<u> </u>	-							0
WELLING BEITE WELCHART CONTROL	A PROPERTY OF THE PROPERTY OF	"IF CIRCLE	ED CONTACT PROJECT	A O A O C C C C A A A A A A A A A A A A	n paramagni paraba	HITS-STARE	HOWER WHAT'S	PARTICIPATE PROPERTY OF THE PARTY OF THE PAR	STICTURE STORY

SRI, Revision 6 Replaces Rev 7 (07/19/05) CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.

rage ____ of ____.



September 6, 2007

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 (August 1, 7, and 20, 2007)

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 August 1, 2007.

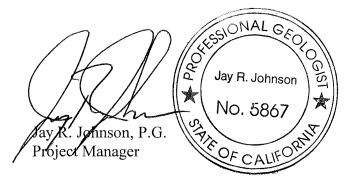
Variations from Scope of Work: The remediation systems were shutdown on August 1, 2007 after collecting samples pending compliance verification. Upon receipt of analytical results and compliance verification, the remediation systems were re-started on August 7, 2007.

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 Staff Engineer



Attachments:

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

CC: Paul Supple, BP/ARCO

1156 Davis Street

San Leandro, California



		Dual Pha	se Extraction	and Air Strippe	er System	· Service State St	- Allegay
Date: Onsite Time: Offsite Time: Equipment M			_	Technician: Weather Cond Ambient Temp		Chur Chur 60	<u>C</u>
	resident til til se statiski kalla California haldald samblassa gepana jos pap		System In	formation	Windows		
System Statu	a I Imam Ambirah		•				High km
System Statu	s Upon Arrival:		Operational		Non-Operat	, Marrie 1	+ Air stry
System Statu	s Upon Depart	week to be the second	Operational	X	Non-Operat	ional 🗵	Turn on
Electric Meter	Reading:	359	19	_			•
Hour Meter R	eading:	143	0.1	_			
Totalizer Rea Air Stripper:	ding Prior to	580	846	- PID Calibratior -	Date: 7	31.07	-
Totalizer Rea Stripper:	ding After Air	5958	320	_			
			Field Meas	urements			
Para	meter	influent (after blower, 2111DPEAINF)	Air Stripper (2111ASAEFF)	System Influent (2111ASYSINF)	Stack Air Flow (2111AEFF)	Comm	ments
Differential Pr	essure, "wc		25				**************************************
Air Velocity, F	PM	4802	2308				
Pipe Diamete	r, inches	3	4	4	3		
Air Flow Rate,	cfm			200			
Applied Vacuu	ım, " we H6	19"Hb	30 HZ	y NA	NA		
Temperature,	deg F	158	131	110			
PID Readings	, ppmv	187	217	84	0	PID for GAC-	1: 82
	Attack (Mark Commenter Sept. 46 Aug. Parts Announce our survey of the Announce	Oth	or Posdingo/	V leasurements			
Well ID	% Open	Applied Vac., "Hg_	Total depth, feet bgs	Stinger Depth, feet bgs			
V-1	50	15	.00.030	1001.093			
V-2	50	12.		· · · · · · · · · · · · · · · · · · ·			
V-3	50	14					

mwg Date: 8/107 Signature:

V-3 MW-1

MW-3

MW-7

100

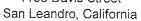
100 00



1156 Davis Street San Leandro, California Groundwater Treatment System

Date: Onsite Time: Offsite Time:	8-100° 0715	7	- - -		an: Conditions: Temperature	CHILL Clur		- -
System Status System Status	•		Operation Operation		Non-operation			
Transfer Pump	·		Operation	ial 🔽	Non-operation	onal Mar	t for	Results
Transfer Pump	Hour Meter Re	eading:	NA	•		ater Charact		1
Effluent Flow T	otalizer Readin	ig: <u>5</u>	803	01	(Quarterly b pH:	y Field Instru	ment)	
No. of Carbon	Vessels:	7	p 1007.15°		Temperature	e:	21.2	
Lead Carbon V (psi):	essel Pressure	3	>		,	and the state of t		
Well ID	Hour Meter	Reading	Totalize	er Reading	Total Depth	Pump Depth		
MW-2			32	て				
		Sam	pling Info	rmation				
Samp	ole ID	Date 8	Time	Sa	mple ID	Date & Ti	me	
02111DPEWIN	F	6107		02111MW	/2WINF	81070	617	
02111ASWINF			0607					
02111ASWEFF			0602	7.4	La fada kan ba			
02111WGAC1			0557	1132	1118107	0.0	20	
02111WEFF			0549					
			A			Control of the Contro		
Lab Para	ımeters	Sampling F	requency	Sampl	le Location	Analytical Me	ethod	
GRO, BTEX	, & 5-Oxys	Mont	hly	INI	F& EFF	EPA Method 8	260B	
Notes: Upa Huru	n Arriva	1 Cu	y bour y bour	P51 :	20 Bri	hecp		
		1						
Signature:	Ph 1h	1		Date:	810	7	PCTOORYCIMMASSAT:	

1156 Davis Street





Dual Phase Extraction and Air Stripper System

Sam	pling Inform	ation (monthly)			
Sample ID Date & Time Sample ID		Sample ID	Date & Time		
8107	0632	02111AGAC1	8107	0625	
1	0631	02111AEFF		06527	
//	0628				
O, BTEX, and MTBE		<u> </u>			
	Date &	Date & Time 8107 0632 0637	8107 0632 02111AGAC1 0638 02111AEFF 0628	Date & Time Sample ID Date 8 10 7 0632 02111AGAC1 81 07 0631 02111AEFF 02111AEFF	

DATE OF THE PROPERTY OF THE PR	
Operation & Maintenance Notes	Control of the Contro

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

Signature:

Date: 8-1-05

1156 Davis Street



San Leandro, California **Dual Phase Extraction and Air Stripper System**

Date: 6-7-07 Onsite Time: 0500 Offsite Time: 0600 Equipment Manufacturer/Model#			-	Technician: Weather Cond Ambient Temp		CHILL Clouds 50	
			System In	formation			
System Statu	s Upon Arrival	:	Operational		Non-Operat	ional Da Car	
System Statu	s Upon Depart	ture:	Operational	M	Non-Operat	ional OTH W	
Electric Meter Reading: 3797			73	อิกเพียงกระสมคอมนั้	• .	For LI	
Hour Meter R	eading:	14131	. [anna .		Re 3 km	
Totalizer Rea Air Stripper:	ding Prior to	5813	84	– PID Calibration –	Date: B	607	
Totalizer Rea Stripper:	ding After Air	5963	00	_			
			Field Meas	urements			
		Influent (after blower, 2111DPEAINF)	Air Stripper (2111ASAEFF)	System	Stack Air Flow (2111AEFF)	Comments	
Differential Pr	essure, "wc		25				
Air Velocity, F	PM						
Pipe Diamete	r, inches	4	4	3	3		
Air Flow Rate,	, cfm	190			1		
Applied Vacuu	ım, "wc	20"146	.30	NA	NA		
Temperature,	deg F	90					
PID Readings		180	1.0	90	8	PID for GAC-1: 🔀	
	· · · · · · · · · · · · · · · · · · ·	Oth	er 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	A						
Signaturo	DV (07	57	

1156 Davis Street

San Leandro, California



Dual Phase Extraction and Air Stripper System

	Sampling Infor	mation (monthly)						
Sample ID Date & Time Sample ID Date & Time								
02111DPEAINF		02111AGAC1						
02111ASAEFF 02111AEFF								
02111ASYSINF								
A								
Analyses Required: GRO,	BTEX, and MTBE							
			CHAI DEATHAIN DAISE WARREN CHE E FRENCH CHE LE CHAIR CHE					
CONTRACTOR CONTRACTOR AND								
Operation & Maintenance Notes								

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

Signature:

1156 Davis Street San Leandro, California Groundwater Treatment System



Date: 9-7.07 Onsite Time: 0500 Offsite Time: 0600		Technician: Weather Conditions: Ambient Temperature			CHILL Clouds 50			
System Status	s Upon Arrival:		Operation	nal 💆	Non-operation	onal LAB R	solts u	nuit
System Status	s At Departure:	X	Operation	nal	Non-operation	onal Restart	•	
Transfer Pum	p:	Z	Operation	ial 🔲	Non-operation	onal		
Transfer Pum	p Hour Meter Re		NA			ater Characteri y Field Instrume	1	
Effluent Flow	Totalizer Readin	g: <u>5</u>	3066 2	2	pH:			
No. of Carbon	Vessels:				Temperature	: <u> </u>		
Lead Carbon \ (psi):	Vessel Pressure		7	_				
Well ID	Hour Meter	Reading	Totalize	er Reading	Total Depth	Pump Depth		
MW-2			32	35				
		# 100 to						
			pling Info					
	iple ID	Date 8	& Time		nple ID	Date & Time	e	
02111DPEWII				02111MW	2WINF			
02111ASWINI 02111ASWEF	······································							
02111WGAC1								
02111WEFF								
	erostromanas (perostromanas proprior pr							
Lab Pa	rameters	Sampling	Frequency	Sampl	e Location	Analytical Meth	od	
GRO, BTE	:X, & 5-Oxys	Mor	nthly	INF	-& EFF	EPA Method 826	60B	
Notes:		7/1	naturakan kanan kana		CHECONOMICOLOGICA STATEMENT AND			
Signature:	My	W		Date:	8-7.	+07	ме хологолом (G	

Page 1 of 1

1156 Davis Street San Leandro, California

Groundwater Treatment System

wid draw

	Date: Onsite Time: Offsite Time:	8 200 0500, 0690	フ	 		n: Conditions: emperature	CHILL Cloubs 59		
Transfer Pump: Transfer Pump Hour Meter Reading: Effluent Flow Totalizer Reading: No. of Carbon Vessels: Lead Carbon Vessel Pressure (psi): Well ID Hour Meter Reading Totalizer Reading Total Depth Pump Depth MW-2 3245 Sampling Information Sample ID Date & Time Sample ID Date & Time 02111DPEWINF 02111ASWINF 02111ASWINF 02111ASWEFF 02111WGAC1 02111WEFF Lab Parameters Sampling Frequency Sample Location Analytical Method GRO, BTEX, & 5-Oxys Monthly INF& EFF EPA Method 8260B	System Status	: Upon Arrival:		Operation	nal 区	Non-operation	onal High tan	k	
Transfer Pump Hour Meter Reading: Effluent Flow Totalizer Reading: No. of Carbon Vessels: Lead Carbon Vessel Pressure (psi): Well ID Hour Meter Reading Totalizer Reading Total Depth Pump Depth MW-2 3245 Sampling Information Sample ID Date & Time Sample ID Date & Time 02111DPEWINF 02111ASWINF 02111ASWINF 02111ASWEFF 02111VGAC1 02111WEFF Lab Parameters Sampling Frequency Sample Location Analytical Method GRO, BTEX, & 5-Oxys Monthly INF& EFF EPA Method 8260B	System Status	At Departure:		Operation	nal	Non-operation	onal		
Effluent Flow Totalizer Reading: 582706 No. of Carbon Vessels: Z Temperature: Temperature: Temperature: Sampling Information Sample ID Date & Time Sample ID Date & Time 02111ASWINF 02111ASWINF 02111ASWIFF 02111WGAC1 02111WEFF Lab Parameters Sampling Frequency Sample Location Analytical Method 8260E	Transfer Pump	o:	区	Operation	nal	Non-operation	onal		
Effluent Flow Totalizer Reading: 382706 No. of Carbon Vessels: Temperature: Lead Carbon Vessel Pressure (psi): Well ID Hour Meter Reading Totalizer Reading Total Depth Pump Depth MW-2 3245 Sampling Information Sample ID Date & Time Sample ID Date & Time O2111DPEWINF O2111ASWINF O2111ASWINF O2111ASWINF O2111ASWEFF O2111WGAC1 O2111WGFF Lab Parameters Sampling Frequency Sample Location Analytical Method GRO, BTEX, & 5-Oxys Monthly INF& EFF EPA Method 82608	Transfer Pump	Hour Meter R	eading:	NA		8			
Lead Carbon Vessel Pressure (psi): Well ID	Effluent Flow T	Totalizer Readir	ng: <u>5</u>	8270	76	I			
Well ID Hour Meter Reading Totalizer Reading Total Depth Pump Depth MW-2 3245	No. of Carbon	Vessels:		-	***************************************	Temperature	e:		
MW-2 Sampling Information Sample ID Date & Time 02111DPEWINF 02111ASWINF 02111ASWEFF 02111WGAC1 02111WEFF Lab Parameters Sampling Frequency Sample Location Sample ID Date & Time Analytical Method Analytical Method Sample Location Analytical Method 8260B		essel Pressure	·5						
Sampling Information Sample ID Date & Time Sample ID Date & Time 02111DPEWINF 02111ASWINF 02111ASWEFF 02111WGAC1 02111WEFF Lab Parameters Sampling Frequency Sample Location Analytical Method GRO, BTEX, & 5-Oxys Monthly INF& EFF EPA Method 8260B	Well ID	Hour Meter	Reading	Totalize	er Reading	Total Depth	Pump Depth		
Sample ID Date & Time Sample ID Date & Time 02111DPEWINF 02111ASWINF 02111ASWEFF 02111WGAC1 02111WEFF Lab Parameters Sampling Frequency Sample Location Analytical Method GRO, BTEX, & 5-Oxys Monthly INF& EFF EPA Method 8260B	MW-2			324	5				
Sample ID Date & Time Sample ID Date & Time 02111DPEWINF 02111ASWINF 02111ASWEFF 02111WGAC1 02111WEFF Lab Parameters Sampling Frequency Sample Location Analytical Method GRO, BTEX, & 5-Oxys Monthly INF& EFF EPA Method 8260B									
Sample ID Date & Time Sample ID Date & Time 02111DPEWINF 02111ASWINF 02111ASWEFF 02111WGAC1 02111WEFF Lab Parameters Sampling Frequency Sample Location Analytical Method GRO, BTEX, & 5-Oxys Monthly INF& EFF EPA Method 8260B	Name of the Control o								
02111DPEWINF 02111ASWINF 02111ASWEFF 02111WGAC1 02111WEFF Lab Parameters Sampling Frequency Sample Location Analytical Method GRO, BTEX, & 5-Oxys Monthly INF& EFF EPA Method 8260B			Sam	npling Info	rmation				
02111ASWINF 02111WGAC1 02111WEFF Lab Parameters Sampling Frequency Sample Location Analytical Method GRO, BTEX, & 5-Oxys Monthly INF& EFF EPA Method 8260B	Samp	ole ID	Date a	& Time	San	nple ID	Date & Time		
02111ASWEFF 02111WGAC1 02111WEFF Lab Parameters Sampling Frequency Sample Location Analytical Method GRO, BTEX, & 5-Oxys Monthly INF& EFF EPA Method 8260B	02111DPEWIN	<u>IF</u>			02111MW2	WINF			
02111WGAC1 02111WEFF Lab Parameters Sampling Frequency Sample Location Analytical Method GRO, BTEX, & 5-Oxys Monthly INF& EFF EPA Method 8260B			ļ					_	
Cab Parameters Sampling Frequency Sample Location Analytical Method GRO, BTEX, & 5-Oxys Monthly INF& EFF EPA Method 8260B		:							
Lab Parameters Sampling Frequency Sample Location Analytical Method GRO, BTEX, & 5-Oxys Monthly INF& EFF EPA Method 8260B	···							_	
GRO, BTEX, & 5-Oxys Monthly INF& EFF EPA Method 8260B	02111WEFF							_	
GRO, BTEX, & 5-Oxys Monthly INF& EFF EPA Method 8260B									
	Lab Para	ameters	Sampling	Frequency	Sample	Location	Analytical Metho	d	
	GRO, BTEX, & 5-Oxys		Monthly		INF& EFF		EPA Method 8260B		
MOTAC:	Votes:								
Signature: Date: 8-20-0	COMMUNICAÇÃO DE CONTRACTOR DE SERVICIO DE	1) f	, []	MARITO TO THE PARTY OF THE PART	mentala siidoonum toerasia aassa maa	8			

Page 1 of 1

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



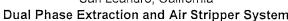
Dual Phase Extraction and Air Stripper System

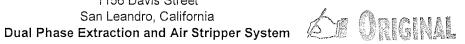
Date: 8200 Onsite Time: 0500 Offsite Time: 0000 Equipment Manufacturer/Mo	del#	Technician: Weather Conditions: Ambient Temperature:				
U Der Wester Bertragen der Bertragen Gester zu Schweiter Mit Weiter der Der gestellte State 1993 der Er der der	System	nformation				
System Status Upon Arrival:	•	Paramo I	Non-Operation	onal High		
System Status Upon Departi	ure: Operationa		Non-Operation	onal		
Electric Meter Reading:	37/77					
Hour Meter Reading:	1438.1					
Totalizer Reading Prior to Air Stripper:	583548	PID Calibratior	n Date: 8	200/		
Totalizer Reading After Air Stripper:	598400		werd will be compare to complying the high believe the compare to			
	Field Mea	asurements				
Parameter	Influent Air Strippe	System	Stack Air	Comments		

Field Measurements							
Parameter		Influent (after blower, 2111DPEAINF)	Air Stripper (2111ASAEFF)	System Influent (2111ASYSINF)	Stack Air Flow (2111AEFF)	Comments	
Differential Pressure, "wc			Bh 25				
Air Velocity, F	PM	3630	2843				
Pipe Diameter	r, inches	43	4	H	3		
Air Flow Rate,	, cfm	190		•			
Applied Vacuu	ım, "we	Z1"HG	2 36 142W	NA	NA		
Temperature, deg F		o speed	128	104			
PID Readings		739	1.0	279	8	PID for GAC-1:	
		239		112			
i Çığıyanı		Oth	er Readings/	Measurements			
Well ID	% Open	Applied Vac., "Hg	Total depth, feet bgs	Stinger Depth, feet bgs			
V-1	50	17					
V-2	50	16					
V-3	50	17					
MW-1	100	15_					
MW-3	100	12					
MW-7	100	1/13					
mu 5	100 /	$Y \sqcup A$	1	1			

Date: 87807 Signature:

1156 Davis Street





Sampling Information (monthly)								
Sample ID Date & Time Sample ID Date								
02111DPEAINF		02111AGAC1						
02111ASAEFF		02111AEFF						
02111ASYSINF								
Analyses Required: GRO, BTE	X, 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
()	\cap I		

Signature:

Date: <u>\$200</u>7

Atlantic Richfield Company Chain of Custody Record ARCO Facility No. 2111 Project Name: BP BU/AR Region/Enfos Segment:

A BP affiliated company

Custody Seals In Place: Yes / No

BP > Americas > West > Retail > Alameda

State or Lead Regulatory Agency: Requested Due Date (mm/dd/yy):

Temp Blank: Yes / No

California Regional Water Quality Control Board 24 hours for Effluent

& STD for others

On-site Time: 0500 Temp: Off-site Time: 19730 Temp: (10 Sky Conditions: Meteorological Events: Direction: Wind Speed:

BP COC Rev. 5 10/11/2006

771		2117	00 010 10.		Consultan	ıt/Contractor:	Stratus Environmental, Inc.
Lab Name: TestAmerica	BP/AR Facility No.		: Ct C I		Address:		eron Park Drive, Suite 550
Address: 885 Jarvis Drive		dress: 1156 D	avis St., San Leandro		rudicos.		Park, CA 95682
Morgan Hill, CA 95937	Site Lat/Long:		TO COOL 0.1 TO L		Consultar	nt/Contractor Pro	
Lab PM: Lisa Race	California Global II		F0600101764			nt/Contractor PM	<i></i>
Tele/Fax: 408-782-8156/ 408-782-6308 Entos Project No.: G0C23-0023				Tele/Fax:		-6000 / (530) 676-6005	
BP/AR PM Contact: Paul Supple	Provision or OOC		Provision		1	ype & QC Level:	
Address: 2010 Crow Canyon Place, Suite 150	Phase/WBS:	03-O&M			E mail El	DD To: shav	es@stratusinc.net
San Ramon, CA	Sub Phase/Task:	03-Analyt				o: Atlantic Richf	
Tele/Fax: 925-275-3506/925-275-3815	Cost Element:	Subcontra		Requested Ana		urnaround Tim	
Lab Bottle Order No: Mat	trix	 	Preservative		7 7		
Item Sample Description Time Soil/Solid Water/Liquid	Laboratory No.	No. of Containers Unpreserved	H ₂ SO ₄ HNO ₃ HCI Methanol	GRO by 8015 BTEX by 8260 5-oxygenates by 8260	24-hours	Standard	Sample Point Lat/Long and Comments
		6	X	x x x		X	5-oxygenates requested are MTBE, DIPE, ETBE, TAME, and
!		1/11		x x x		х	TBA.
$\frac{1}{2}$ 02111ASWINF $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$		0		_ - -	$+-\ -$	X	TIBA.
3 02111ASWEFF \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		6	<u> </u>	x x x			
in read		10		X X X		X	
1,70		(e)	V	x x x	x		
3 02111 WEFF		7		x x x		x	
6 02111MW2WINF . 0017) x				 		+	
7							
8							11/1
10 m (11 cm) (2)					Had
11 11 11 11 11 1							
10		- A-1 P:	/ Affiliation /	Date Time		Accepted B	y / Affiliation Date Tir
Sampler's Name: (h/15 Hill		eninquished By	Affiliation /	1012 810		IE HAM	
Sampler's Company: Stratus Environmental, Inc.	mill	7	JACKET	101-011		G.	``
Shipment Date: 8107					ऻ ─── <u></u>		
Shipment Method: Stafus					1		
Shipment Tracking No:	1. 4. 1 4601 41	no Com					
Special Instructions: Please cc resul	lts to bpedf@broadbentir	iic.Com					
Custo to Scale In Places Veg / XIo	k. Vel / No Cool	er Temp on	Receipt: °F/C	Trip Blank:	Yesy No	MS/MS	D Sample Submitted: Yes / No

Cooler Temp on Receipt:

	1		1
Page	ı	of	1
- 0 -			

BP COC Rev. 5 10/11/2006

Atlai	ntic	
Atlai	hfie	ld
Com	ıpar	ıy

A BP affiliated company

Chain of Custody Record

Project Name:

ARCO Facility No. 2111

BP BU/AR Region/Enfos Segment:

BP > Americas > West > Retail > Alameda

State or Lead Regulatory Agency:

California Regional Water Quality Control Board

Requested Due Date (mm/dd/yy):

24 hours for Effluent

& STD for others

		<u> </u>	
On-site Time:	0500	Temp: 60	
Off-site Time:	0730	Temp: 60	
ky Conditions			
Meteorological	Events:		
Wind Speed		Direction:	

Lab Name: TestAmerica	BP/AR Facility No.:	2111						Consultai				Stratus Environmental,		
Address: 885 Jarvis Drive		P/AR Facility Address: 1156 Davis St., San Leandro										on Park Drive, Suite	550	
Morgan Hill, CA 95937	Site Lat/Long:											rk, CA 95682		
Lab PM: Lisa Race	California Global II	No.:	T0600101	764				Consulta						
Tele/Fax: 408-782-8156/ 408-782-6308	Enfos Project No.:	G0C28-0	0023					Consulta				Jay Johnson		
BP/AR PM Contact: Paul Supple	Provision or OOC ((circle one)	Pr	ovision				Tele/Fax: (530) 676-6000 / (530) 676-6005						
Address: 2010 Crow Canyon Place, Suite 150	Phase/WBS:	03-O&M	ſ					Report T				Level I wit	h EDF	
San Ramon, CA	Sub Phase/Task:	03-Analy	tical									@stratusinc.net		
Tele/Fax: 925-275-3506/925-275-3815	Cost Element:	Subcontr	actor Cost					Invoice to				d Co.		
Lab Bottle Order No: Matrix			Preserva	ative		Requeste	d Analys	sis T	urnar	ound 1	Time	_		İ
Itime Date Description Date Air		No. of Containers Unpreserved	H ₂ SO ₄	HCI	Methanol	GRO by 8015 BTEX by 8260	MTBE by 8260	24-hours	Standard			Sample Point La Comme		nd
1 02111DPEAINF . 032 567 x		2				x x	х		x					
8/20:						x x	х		х					
		Z Z	 	+-+		$\frac{1}{x}$	x		$\frac{1}{x}$		1			
3 02111ASYSINF		╣		-	_	+			++			1		
4 02111AGAC1 · \$\mathbb{\pi} 27 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \						X X	Х		X					
5 02111AEFF . 0022 / x		2				x x	х	х	1_1					
6														
7			 	-		1			+		\neg			
8				_					+					
9					_	4-4-			1					
10		,												
Sampler's Name: Phys Hill	Jiel Jiel	ipquished By	/ Affiliation	1		Date	Time					Affiliation	Date,	Time
Sampler's Company: Stratus Environmental, Inc.	Phulih		Stuter	,		310	1014	J	uit	NG	$\Gamma \setminus I$	14 MH	B/1/0	7 Id
Shipment Date: 8-1-09	4	4											<u> </u>	<u> </u>
Shipment Method: Strates														}
Shipment Tracking No:													<u> </u>	
Special Instructions: Please cc results to	bpedf@broadbentine	.Com												
Custody Scale In Place: Ves / No. Temp Blank: V	os/No.) Coole	r Temp on	Receipt:		7/C	1 Trip B	lank: Y	es //No	<u> </u>	MS/	MSD	Sample Submitted: Y	es / No	



885 Jarvis Drive Morgan Hill, CA 95037 (408) 776-9600 FAX (408) 782-6308 www.testamericainc.com

15 August, 2007

Jay Johnson Stratus Environmental Inc. [Arco] 3330 Cameron Park Dr., Suite 550 Cameron Park, CA 95682

RE: ARCO #2111, San Leandro, CA

Work Order: MQH0022

Enclosed are the results of analyses for samples received by the laboratory on 08/01/07 10:15. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa Race

Senior Project Manager

CA ELAP Certificate # 1210

The results in this laboratory report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the BPGCLN Technical Specifications, applicable Federal, State, local regulations and certification requirements as well as the methodologies as described in laboratory SOPs reviewed by the BPGCLN. This entire report was reviewed and approved for release.





Stratus Environmental Inc. [Arco] Project: ARCO #2111, San Leandro, CA MQH0022
3330 Cameron Park Dr., Suite 550 Project Number: G0C28-0023 Reported:
Cameron Park CA, 95682 Project Manager: Jay Johnson 08/15/07 08:24

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
02111DPEWINF	MQH0022-01	Water	08/01/07 06:12	08/01/07 10:15
02111ASWINF	MQH0022-02	Water	08/01/07 06:07	08/01/07 10:15
02111ASWEFF	MQH0022-03	Water	08/01/07 06:02	08/01/07 10:15
02111WGAC1	MQH0022-04	Water	08/01/07 05:57	08/01/07 10:15
02111WEFF	MQH0022-05	Water	08/01/07 05:49	08/01/07 10:15
02111MW2WINF	MQH0022-06	Water	08/01/07 06:17	08/01/07 10:15
TB21118107	MQH0022-07	Water	08/01/07 06:20	08/01/07 10:15

The carbon range for the TPH-GRO has been changed from C6-C10 to C4-C12. The carbon range for TPH-DRO has been changed from C10-C28 to C10-C36. EPA 8015B has been modified to better meet the requirements of California regulatory agencies. These samples were received with no custody seals.





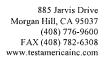
Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQH0022 Reported: 08/15/07 08:24

Purgeable Hydrocarbons by EPA 8015B TestAmerica - Morgan Hill, CA

		Reporting				_			
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
02111DPEWINF (MQH0022-01) Water	Sampled: 08/0	1/07 06:12	Received	: 08/01/0	7 10:15				
Gasoline Range Organics (C4-C12)	470	100	ug/l	2	7H02006	08/02/07	08/02/07	EPA 8015B-VOA	
Surrogate: 4-Bromofluorobenzene		95 %	75-1.	25	"	"	"	"	
02111ASWINF (MQH0022-02) Water	Sampled: 08/01	/07 06:07 J	Received: (08/01/07	10:15				
Gasoline Range Organics (C4-C12)	440	100	ug/l	2	7H02006	08/02/07	08/02/07	EPA 8015B-VOA	
Surrogate: 4-Bromofluorobenzene		95 %	75-1.	25	"	"	"	ri .	
02111ASWEFF (MQH0022-03) Water	Sampled: 08/01	/07 06:02	Received:	08/01/07	10:15				
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	7H02006	08/02/07	08/02/07	EPA 8015B-VOA	
Surrogate: 4-Bromofluorobenzene		92 %	75-12	25	"	"	"	"	
02111WGAC1 (MQH0022-04) Water S	Sampled: 08/01/	07 05:57 R	Received: 0	8/01/07 1	0:15				
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	7H02006	08/02/07	08/02/07	EPA 8015B-VOA	
Surrogate: 4-Bromofluorobenzene		88 %	75-12	25	"	"	"	"	
02111WEFF (MQH0022-05) Water Sa	mpled: 08/01/07	05:49 Rec	ceived: 08/	01/07 10:	:15				
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	7H02006	08/02/07	08/02/07	EPA 8015B-VOA	
Surrogate: 4-Bromofluorobenzene		98 %	75-12	25	"	"	"	"	
02111MW2WINF (MQH0022-06) Water	Sampled: 08/	01/07 06:17	Received	d: 08/01/0	07 10:15				
Gasoline Range Organics (C4-C12)	1500	500	ug/l	10	7H02006	08/02/07	08/02/07	EPA 8015B-VOA	
Surrogate: 4-Bromofluorobenzene		96 %	75-12	25	n	"	"	"	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQH0022 Reported: 08/15/07 08:24

Volatile Organic Compounds by EPA Method 8260B TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
02111DPEWINF (MQH0022-01) Water	Sampled: 08/0	01/07 06:12	Receive	d: 08/01/0	7 10:15				
tert-Amyl methyl ether	ND	5.0	ug/l	10	7H04002	08/04/07	08/04/07	EPA 8260B	
Benzene	5.5	5.0	"	II.	11	"	"	11	
tert-Butyl alcohol	870	200	H	11	"	"	H*	#	
Di-isopropyl ether	ND	5.0	н		н	"	II*	н	
Ethyl tert-butyl ether	ND	5.0	п	**	"	11	11	II	
Ethylbenzene	9.1	5.0	н	"	II		ŧI	II	
Methyl tert-butyl ether	600	5.0	Ħ	"	н	11	**	11	
Toluene	ND	5.0	8	"	Ш	#1	"	н	
Xylenes (total)	17	5.0	"	H	11	"		#	
Surrogate: Dibromofluoromethane		105 %	75-	120	"	"	"	n	
Surrogate: 1,2-Dichloroethane-d4		112 %	60-	125	"	"	n	"	
Surrogate: Toluene-d8		102 %	80-	120	"	n	"	n	
Surrogate: 4-Bromofluorobenzene		104 %	60-	135	"	n	"	n	
02111ASWINF (MQH0022-02) Water	Sampled: 08/01	/07 06:07]	Received:	08/01/07	10:15				
tert-Amyl methyl ether	ND	5.0	ug/l	10	7H01026	08/01/07	08/02/07	EPA 8260B	
Benzene	9.4	5.0	"	n	#1	н	"	n	
tert-Butyl alcohol	590	200	"	0	11	11	II	н	
Di-isopropyl ether	ND	5.0	"	Ħ	"	tt.	II	II	
Ethyl tert-butyl ether	ND	5.0	n	**	11	11	11	II	
Ethylbenzene	ND	5.0	**	#	II .	41	#	D	
Methyl tert-butyl ether	450	5.0	11	11	0	**	"	н	
Toluene	ND	5.0	**	II	#1	*	"	11	
Xylenes (total)	ND	5.0	"	11	н	11	lf	"	
Surrogate: Dibromofluoromethane		100 %	75-1	120	"	"	n	"	
Surrogate: 1,2-Dichloroethane-d4		99 %	60-1	125	n	"	"	tt .	
Surrogate: Toluene-d8		102 %	80-1	120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	60-1	35	"	"	n	"	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQH0022 Reported: 08/15/07 08:24

Volatile Organic Compounds by EPA Method 8260B TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
02111ASWEFF (MQH0022-03) Water	Sampled: 08/01	1/07 06:02	Received:	08/01/07	10:15				
tert-Amyl methyl ether	ND	0.50	ug/l	1	7H02001	08/02/07	08/02/07	EPA 8260B	
Benzene	ND	0.50	II .	н	"	**	II	II .	
tert-Butyl alcohol	28	20	U	**	"	"	11	II .	
Di-isopropyl ether	ND	0.50	В	н	n	"	**	It	
Ethyl tert-butyl ether	ND	0.50	**	"	II	H	"	II	
Ethylbenzene	ND	0.50	"	11	11	II	H	11	
Methyl tert-butyl ether	6.8	0.50	"	11	Ħ	11	Ħ	#	
Toluene	ND	0.50	н	"	"	"	11	#	
Xylenes (total)	ND	0.50		"	"		11	#	
Surrogate: Dibromofluoromethane		92 %	75-12	20	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		108 %	60-12	25	"	"	"	"	
Surrogate: Toluene-d8		94 %	80-12	0	"	"	n	n	
Surrogate: 4-Bromofluorobenzene		111%	60-13	5	"	"	"	"	
02111WGAC1 (MQH0022-04) Water	Sampled: 08/01/	07 05:57 I	Received: 08	3/01/07 1	0:15				
tert-Amyl methyl ether	ND	0.50	ug/l	1	7H04002	08/04/07	08/04/07	EPA 8260B	
Benzene	ND	0.50	"	0	II	11	"	н	
tert-Butyl alcohol	ND	20	"	n	11	II	II.	II.	
Di-isopropyl ether	ND	0.50	II	Ħ	11	If	R	н	
Ethyl tert-butyl ether	ND	0.50	H	н	n	**	U	н	
Ethylbenzene	ND	0.50	Ħ	**	"	11	U	11	
Methyl tert-butyl ether	ND	0.50	н	"	"	"	II	11	
Toluene	ND	0.50	II .	"	"	"	н	"	
Xylenes (total)	ND	0.50		Ħ	11	н		H	
Surrogate: Dibromofluoromethane		105 %	75-12	0	"	"	"	n	
Surrogate: 1,2-Dichloroethane-d4		116%	60-12	5	"	"	"	n	
Surrogate: Toluene-d8		102 %	80-12	0	"	"	"	"	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQH0022 Reported: 08/15/07 08:24

Volatile Organic Compounds by EPA Method 8260B TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
02111WEFF (MQH0022-05) Water	Sampled: 08/01/0	7 05:49 Rec	eived: 08/	01/07 10:	:15				
tert-Amyl methyl ether	ND	0.50	ug/l	1	7H02008	08/02/07	08/02/07	EPA 8260B	
Benzene	ND	0.50	**	"	"	- 11	**	п	
tert-Butyl alcohol	ND	20	"	"	"	11	II.	II	
Di-isopropyl ether	ND	0.50	II	11	H	"	**	11	
Ethyl tert-butyl ether	ND	0.50	11	11	II.	н	"	и	
Ethylbenzene	ND	0.50	19		ti .	11	n	н	
Methyl tert-butyl ether	ND	0.50	"	"	0	H	#	u	
Toluene	ND	0.50	"	11	н	11	#	11	
Xylenes (total)	ND	0.50		11		11	"	11	
Surrogate: Dibromofluoromethane		105 %	75-12	20	"	"	"	n .	
Surrogate: 1,2-Dichloroethane-d4		113 %	60-12	25	"	"	"	"	
Surrogate: Toluene-d8		103 %	80-12	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98 %	60-13	35	"	"	"	"	
02111MW2WINF (MQH0022-06) Wa	iter Sampled: 08	/01/07 06:17	Received	1: 08/01/0	07 10:15				
tert-Amyl methyl ether	6.4	5.0	ug/l	10	7H04002	08/04/07	08/04/07	EPA 8260B	
Benzene	54	5.0	н	Ш	п	Ħ	H	11	
tert-Butyl alcohol	1300	200	ii	11	11	Ħ	II	H	
Di-isopropyl ether	ND	5.0	н	11	11	lt .	11	**	
Ethyl tert-butyl ether	ND	5.0	11	11	**	n	ii .	"	
Ethylbenzene	48	5.0	H	"	**	H	H	II .	
Methyl tert-butyl ether	1100	5.0	11	11	**	11	"	H .	
Toluene	ND	5.0	"	u	**	II	ıı	0	
Xylenes (total)	32	5.0	"	"	#	#F	"	П	
Surrogate: Dibromofluoromethane		106 %	75-12	20	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		115 %	60-12	25	"	"	"	"	
Surrogate: Toluene-d8		102 %	80-12	20	"	"	n	"	
Surrogate: 4-Bromofluorobenzene		100 %	60-13	35	"	"	"	"	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023 Project Manager: Jay Johnson

MQH0022 Reported: 08/15/07 08:24

Purgeable Hydrocarbons by EPA 8015B - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7H02006 - EPA 5030B [P/T] /	EPA 8015B-	VOA								
Blank (7H02006-BLK1)				Prepared	& Analyz	ed: 08/02/	07			
Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Surrogate: 4-Bromofluorobenzene	35.7		"	40.0		89	75-125			
Laboratory Control Sample (7H02006-B	S1)			Prepared	& Analyz	ed: 08/02/	07			
Gasoline Range Organics (C4-C12)	223	50	ug/l	275		81	60-115			
Surrogate: 4-Bromofluorobenzene	38.2		"	40.0		95	75-125			
Matrix Spike (7H02006-MS1)	Source: M	QH0022-03		Prepared	& Analyz	ed: 08/02/	07			
Gasoline Range Organics (C4-C12)	250	50	ug/l	275	ND	91	60-115			
Surrogate: 4-Bromofluorobenzene	39.2		"	40.0		98	75-125			
Matrix Spike Dup (7H02006-MSD1)	Source: M	QH0022-03		Prepared	& Analyz	ed: 08/02/	07			
Gasoline Range Organics (C4-C12)	233	50	ug/l	275	ND	85	60-115	7	20	
Surrogate: 4-Bromofluorobenzene	38.1		n	40.0		95	75-125			





Project: ARCO #2111, San Leandro, CA

Spike

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQH0022 Reported: 08/15/07 08:24

RPD

%REC

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

		reporting		Opine	Source		/ GT CL C		iu D	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7H01026 - EPA 5030B P/T	/ EPA 8260B									
Blank (7H01026-BLK1)				Prepared of	& Analyze	d: 08/01/0	07			•
tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	и							
tert-Butyl alcohol	ND	20	0							
Di-isopropyl ether	ND	0.50	n							
Ethyl tert-butyl ether	ND	0.50	n							
Ethylbenzene	ND	0.50	n							
Methyl tert-butyl ether	ND	0.50	п							
Toluene	ND	0.50	11							
Xylenes (total)	ND	0.50	**							
Surrogate: Dibromofluoromethane	2.66		"	2.50		106	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.81		"	2.50		112	60-125			
Surrogate: Toluene-d8	2.56		"	2.50		102	80-120			
Surrogate: 4-Bromofluorobenzene	2.57		"	2.50		103	60-135			
Laboratory Control Sample (7H01020	6-BS1)			Prepared o	& Analyze	d: 08/01/0)7			
tert-Amyl methyl ether	9.07	0.50	ug/l	10.0		91	65-135			
Benzene	9.66	0.50	11	10.0		97	75-120			
tert-Butyl alcohol	196	20	n	200		98	60-135			
Di-isopropyl ether	10.3	0.50	n	10.0		103	70-130			
Ethyl tert-butyl ether	10.1	0.50	н	10.0		101	65-130			
Ethylbenzene	10.7	0.50	Ħ	10.0		107	75-120			
Methyl tert-butyl ether	9.26	0.50	11	10.0		93	50-140			
Toluene	10.1	0.50	П	10.0		101	75-120			
Xylenes (total)	29.8	0.50	II	30.0		99	75-130			
Surrogate: Dibromofluoromethane	2.45		"	2.50		98	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.58		"	2.50		103	60-125			
Surrogate: Toluene-d8	2.55		"	2.50		102	80-120			
Surrogate: 4-Bromofluorobenzene	2.73		"	2.50		109	60-135			





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023 Project Manager: Jay Johnson

MQH0022 Reported: 08/15/07 08:24

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7H01026 - EPA 5030B P/T / E	PA 8260B									
Matrix Spike (7H01026-MS1)	Source: M	QG0762-02		Prepared	& Analyze	ed: 08/01/	07			
tert-Amyl methyl ether	12.2	0.50	ug/l	10.0	ND	122	65-135			
Benzene	17.0	0.50	н	10.0	6.16	108	75-120			
tert-Butyl alcohol	215	20	31	200	7.09	104	60-135			
Di-isopropyl ether	13.1	0.50	"	10.0	0.670	124	70-130			
Ethyl tert-butyl ether	12.5	0.50	"	10.0	ND	125	65-130			
Ethylbenzene	9.86	0.50	"	10.0	ND	99	75-120			
Methyl tert-butyl ether	12.2	0.50	n	10.0	ND	122	50-140			
Toluene	11.7	0.50	11	10.0	ND	117	75-120			
Xylenes (total)	28.8	0.50	11	30.0	ND	96	75-130			
Surrogate: Dibromofluoromethane	2.64		"	2.50		106	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.67		"	2.50		107	60-125			
Surrogate: Toluene-d8	2.49		"	2.50		100	80-120			
Surrogate: 4-Bromofluorobenzene	2.57		"	2.50		103	60-135			
Matrix Spike Dup (7H01026-MSD1)	Source: M	QG0762-02		Prepared	& Analyze	d: 08/01/	07			
tert-Amyl methyl ether	11.3	0.50	ug/l	10.0	ND	113	65-135	7	25	
Benzene	15.9	0.50	11	10.0	6.16	98	75-120	6	20	
tert-Butyl alcohol	232	20	н	200	7.09	112	60-135	8	25	
Di-isopropyl ether	13.0	0.50	n	10.0	0.670	124	70-130	0.5	25	
Ethyl tert-butyl ether	12.5	0.50	11	10.0	ND	125	65-130	0.2	25	
Ethylbenzene	10.4	0.50	**	10.0	ND	104	75-120	5	20	
Methyl tert-butyl ether	12.7	0.50	**	10.0	ND	127	50-140	4	25	
Toluene	10.4	0.50	**	10.0	ND	104	75-120	11	25	
Xylenes (total)	30.6	0.50	"	30.0	ND	102	75-130	6	20	
Surrogate: Dibromofluoromethane	2.62		"	2.50		105	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.80		"	2.50		112	60-125			
Surrogate: Toluene-d8	2.22		"	2.50		89	80-120			
Surrogate: 4-Bromofluorobenzene	2.63		"	2.50		105	60-135			





Project: ARCO #2111, San Leandro, CA

Spike

Source

%REC

Project Number: G0C28-0023 Project Manager: Jay Johnson MQH0022 Reported: 08/15/07 08:24

RPD

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7H02001 - EPA 5030B P/T	/ EPA 8260B									
Blank (7H02001-BLK1)				Prepared	& Analyz	ed: 08/02/	07			
tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	и							
tert-Butyl alcohol	ND	20	н							
Di-isopropyl ether	ND	0.50	· ·							
Ethyl tert-butyl ether	ND	0.50	**							
Ethylbenzene	ND	0.50	11							
Methyl tert-butyl ether	ND	0.50	**							
Toluene	ND	0.50	**							
Xylenes (total)	ND	0.50	"							
Surrogate: Dibromofluoromethane	2.62		"	2.50		105	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.86		"	2.50		114	60-125			
Surrogate: Toluene-d8	2.47		"	2.50		99	80-120			
Surrogate: 4-Bromofluorobenzene	2.39		"	2.50		96	60-135			
Laboratory Control Sample (7H0200)	1-BS1)			Prepared	& Analyze	ed: 08/02/	07			
tert-Amyl methyl ether	9.24	0.50	ug/l	10.0		92	65-135			
Benzene	10.2	0.50	н	10.0		102	75-120			
tert-Butyl alcohol	196	20	II .	200		98	60-135			
Di-isopropyl ether	9.84	0.50	**	10.0		98	70-130			
Ethyl tert-butyl ether	9.88	0.50	**	10.0		99	65-130			
Ethylbenzene	11.0	0.50	u	10.0		110	75-120			
Methyl tert-butyl ether	9.59	0.50	"	10.0		96	50-140			
Toluene	9.87	0.50	n	10.0		99	75-120			
Xylenes (total)	31.2	0.50	11	30.0		104	75-130			
Surrogate: Dibromofluoromethane	2.40		"	2.50		96	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.41		n	2.50		96	60-125			
Surrogate: Toluene-d8	2.49		"	2.50		100	80-120			
Surrogate: 4-Bromofluorobenzene	2.72		"	2.50		109	60-135			





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQH0022 Reported: 08/15/07 08:24

RPD

%REC

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

1		Reporting		Spike	Source		, or C		IG D	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7H02001 - EPA 5030B P/T / E	PA 8260B									
Matrix Spike (7H02001-MS1)	Result Limit Units EPA 8260B Source: MQH0022-03 9.81 0.50 ug/l 9.51 0.50 " 216 20 " 9.54 0.50 " 9.91 0.50 " 10.4 0.50 " 15.4 0.50 " 10.1 0.50 " 28.5 0.50 " 2.47 " " 2.68 " " 2.49 " " 2.76 " " Source: MQH0022-03 " " 10.2 0.50 ug/l 9.60 0.50 " 234 20 " 10.3 0.50 " 10.6 0.50 "		Prepared	& Analyze						
tert-Amyl methyl ether	9.81	0.50	ug/l	10.0	ND	98	65-135			
Benzene	9.51	0.50	H	10.0	ND	95	75-120			
tert-Butyl alcohol	216	20	**	200	28.2	94	60-135			
Di-isopropyl ether	9.54	0.50	41	10.0	ND	95	70-130			
Ethyl tert-butyl ether	9.91	0.50	21	10.0	ND	99	65-130			
Ethylbenzene	10.4	0.50	"	10.0	ND	104	75-120			
Methyl tert-butyl ether	15.4	0.50	"	10.0	6.76	86	50-140			
Toluene	10.1	0.50	n	10.0	ND	101	75-120			
Xylenes (total)	28.5	0.50	H	30.0	ND	95	75-130			
Surrogate: Dibromofluoromethane	2.47		"	2.50		99	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.68		"	2.50		107	60-125			
Surrogate: Toluene-d8	2.49		"	2.50		100	80-120			
Surrogate: 4-Bromofluorobenzene	2.76		"	2.50		110	60-135			
Matrix Spike Dup (7H02001-MSD1)	Source: M	QH0022-03		" 2.50 110 60-135 Prepared & Analyzed: 08/02/07						
tert-Amyl methyl ether	10.2	0.50	ug/l	10.0	ND	102	65-135	4	25	
Benzene	9.60	0.50	n	10.0	ND	96	75-120	0.9	20	
tert-Butyl alcohol	234	20	n	200	28.2	103	60-135	8	25	
Di-isopropyl ether	10.3	0.50	11	10.0	ND	103	70-130	8	25	
Ethyl tert-butyl ether	10.6	0.50	11	10.0	ND	106	65-130	7	25	
Ethylbenzene	9.33	0.50	п	10.0	ND	93	75-120	11	20	
Methyl tert-butyl ether	16.3	0.50	п	10.0	6.76	95	50-140	5	25	
Toluene	9.75	0.50	п	10.0	ND	98	75-120	4	25	
Xylenes (total)	31.1	0.50	41	30.0	ND	104	75-130	9	20	
Surrogate: Dibromofluoromethane	2.54		"	2.50		102	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.53		"	2.50		101	60-125			
Surrogate: Toluene-d8	2.54		"	2.50		102	80-120			
Surrogate: 4-Bromofluorobenzene	2.67		"	2.50		107	60-135			





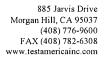
Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023 Project Manager: Jay Johnson

MQH0022 Reported: 08/15/07 08:24

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Batch 7H02008 - EPA 5030B P/T / EPA 8260B Blank (7H02008-BLK1) tert-Amyl methyl ether ND 0.50 Benzene ND 0.50	I ug/l	Prepared &	z Analyze	d: 08/02/0)7		
tert-Amyl methyl ether ND 0.50	ug/l "	Prepared &	Analyze	1: 08/02/0)7		
	u R					 	
Benzene ND 0.50	n						
tert-Butyl alcohol ND 20	"						
Di-isopropyl ether ND 0.50							
Ethyl tert-butyl ether ND 0.50	п						
Ethylbenzene ND 0.50	п						
Methyl tert-butyl ether ND 0.50	ш						
Toluene ND 0.50	#						
Xylenes (total) ND 0.50	#						
Surrogate: Dibromofluoromethane 2.46	"	2.50		98	75-120		
Surrogate: 1,2-Dichloroethane-d4 2.53	"	2.50		101	60-125		
Surrogate: Toluene-d8 2.55	"	2.50		102	80-120		
Surrogate: 4-Bromofluorobenzene 2.47	"	2.50		99	60-135		
Laboratory Control Sample (7H02008-BS1)	I	Prepared &	Analyze	1: 08/02/0	7		
tert-Amyl methyl ether 10.7 0.50	ug/l	10.0		107	65-135		
Benzene 9.89 0.50	"	10.0		99	75-120		
tert-Butyl alcohol 172 20	"	200		86	60-135		
Di-isopropyl ether 10.3 0.50	"	10.0		103	70-130		
Ethyl tert-butyl ether 11.1 0.50	"	10.0		111	65-130		
Ethylbenzene 10.2 0.50	"	10.0		102	75-120		
Methyl tert-butyl ether 11.2 0.50	"	10.0		112	50-140		
Toluene 9.79 0.50	"	10.0		98	75-120		
Xylenes (total) 29.2 0.50	**	30.0		97	75-130		
Surrogate: Dibromofluoromethane 2.43	"	2.50		97	75-120		
Surrogate: 1,2-Dichloroethane-d4 2.56	"	2.50		102	60-125		
Surrogate: Toluene-d8 2.56	"	2.50		102	80-120		
Surrogate: 4-Bromofluorobenzene 2.53	"	2.50		101	60-135		





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023 Project Manager: Jay Johnson

MQH0022 Reported: 08/15/07 08:24

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7H02008 - EPA 5030B P/T / E	PA 8260B									
Matrix Spike (7H02008-MS2)	Source: M	QH0020-041	RE1	Prepared						
tert-Amyl methyl ether	9.98	0.50	ug/l	10.0	ND	100	65-135			
Benzene	10.2	0.50	**	10.0	ND	102	75-120			
tert-Butyl alcohol	176	20	#	200	ND	88	60-135			
Di-isopropyl ether	10.2	0.50	**	10.0	ND	102	70-130			
Ethyl tert-butyl ether	10.2	0.50	**	10.0	ND	102	65-130			
Ethylbenzene	10.1	0.50	**	10.0	ND	101	75-120			
Methyl tert-butyl ether	9.77	0.50	н	10.0	ND	98	50-140			
Toluene	9.93	0.50	11	10.0	ND	99	75-120			
Xylenes (total)	29.1	0.50	11	30.0	ND	97	75-130			
Surrogate: Dibromofluoromethane	2.58		"	2.50		103	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.70		"	2.50		108	60-125			
Surrogate: Toluene-d8	2.67		"	2.50		107	80-120			
Surrogate: 4-Bromofluorobenzene	2.51		"	2.50		100	60-135			
Matrix Spike Dup (7H02008-MSD2)	Source: M	QH0020-041	RE1	Prepared & Analyzed: 08/02/07						
tert-Amyl methyl ether	9.66	0.50	ug/l	10.0	ND	97	65-135	3	25	
Benzene	9.93	0.50	"	10.0	ND	99	75-120	2	20	
tert-Butyl alcohol	175	20	II .	200	ND	87	60-135	1	25	
Di-isopropyl ether	10.0	0.50	II .	10.0	ND	100	70-130	2	25	
Ethyl tert-butyl ether	9.92	0.50		10.0	ND	99	65-130	3	25	
Ethylbenzene	9.87	0.50	н	10.0	ND	99	75-120	2	20	
Methyl tert-butyl ether	9.56	0.50	"	10.0	ND	96	50-140	2	25	
Toluene	9.67	0.50	"	10.0	ND	97	75-120	3	25	
Xylenes (total)	28.9	0.50	#	30.0	ND	96	75-130	0.5	20	
Surrogate: Dibromofluoromethane	2.56		"	2.50		102	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.61		"	2.50		104	60-125			
Surrogate: Toluene-d8	2.62		"	2.50		105	80-120			
Surrogate: 4-Bromofluorobenzene	2.60		"	2.50		104	60-135			





Project: ARCO #2111, San Leandro, CA

Spike

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQH0022 Reported: 08/15/07 08:24

RPD

%REC

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7H04002 - EPA 5030B P/T	/ EPA 8260B									
Blank (7H04002-BLK1)				Prepared	& Analyze	ed: 08/04/0	07			
tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	H							
tert-Butyl alcohol	ND	20	11							
Di-isopropyl ether	ND	0.50	H							
Ethyl tert-butyl ether	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50								
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	11							
Surrogate: Dibromofluoromethane	2.61		"	2.50		104	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.66		"	2.50		106	60-125			
Surrogate: Toluene-d8	2.52		"	2.50		101	80-120			
Surrogate: 4-Bromofluorobenzene	2.46		"	2.50		98	60-135			
Laboratory Control Sample (7H04002	2-BS1)			Prepared	& Analyze	ed: 08/04/0	07			
tert-Amyl methyl ether	10.8	0.50	ug/l	10.0		108	65-135			
Benzene	10.2	0.50	"	10.0		102	75-120			
tert-Butyl alcohol	209	20	"	200		104	60-135			
Di-isopropyl ether	10.6	0.50	"	10.0		106	70-130			
Ethyl tert-butyl ether	10.8	0.50	**	10.0		108	65-130			
Ethylbenzene	10.6	0.50	0	10.0		106	75-120			
Methyl tert-butyl ether	11.0	0.50	п	10.0		110	50-140			
Toluene	10.2	0.50	II	10.0		102	75-120			
Xylenes (total)	31.1	0.50	11	30.0		104	75-130			
Surrogate: Dibromofluoromethane	2.75		"	2.50		110	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.78		"	2.50		111	60-125			
Surrogate: Toluene-d8	2.60		"	2.50		104	80-120			
Surrogate: 4-Bromofluorobenzene	2.58		"	2.50		103	60-135			





Project: ARCO #2111, San Leandro, CA

Spike

Source

Project Number: G0C28-0023 Project Manager: Jay Johnson MQH0022 Reported: 08/15/07 08:24

RPD

%REC

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7H04002 - EPA 5030B P/T / E	EPA 8260B									
Matrix Spike (7H04002-MS1)	Source: MQG1003-15			Prepared	& Analyz	ed: 08/04/				
tert-Amyl methyl ether	10.0	0.50	ug/l	10.0	ND	100	65-135			
Benzene	10.3	0.50	tt	10.0	0.560	98	75-120			
tert-Butyl alcohol	196	20	н	200	ND	98	60-135			
Di-isopropyl ether	9.87	0.50	Ð	10.0	ND	99	70-130			
Ethyl tert-butyl ether	9.78	0.50	н	10.0	ND	98	65-130			
Ethylbenzene	10.3	0.50	"	10.0	ND	103	75-120			
Methyl tert-butyl ether	66.6	0.50	н	10.0	65.9	7	50-140			BE
Toluene	9.95	0.50	II.	10.0	ND	100	75-120			
Xylenes (total)	30.3	0.50	Н	30.0	ND	101	75-130			
Surrogate: Dibromofluoromethane	2.60		"	2.50		104	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.56		"	2.50		102	60-125			
Surrogate: Toluene-d8	2.56		"	2.50		102	80-120			
Surrogate: 4-Bromofluorobenzene	2.62		"	2.50		105	60-135			
Matrix Spike Dup (7H04002-MSD1)	Source: Mo	QG1003-15	5 Prepared & Analyzed: 08/04/07							
tert-Amyl methyl ether	11.5	0.50	ug/l	10.0	ND	115	65-135	14	25	
Benzene	11.0	0.50	u	10.0	0.560	105	75-120	7	20	
tert-Butyl alcohol	214	20	n	200	ND	107	60-135	9	25	
Di-isopropyl ether	11.1	0.50	n	10.0	ND	111	70-130	11	25	
Ethyl tert-butyl ether	11.4	0.50	н	10.0	ND	114	65-130	15	25	
Ethylbenzene	10.9	0.50	п	10.0	ND	109	75-120	5	20	
Methyl tert-butyl ether	78.9	0.50	11	10.0	65.9	130	50-140	17	25	BB
Toluene	10.7	0.50	11	10.0	ND	107	75-120	7	25	
Xylenes (total)	31.9	0.50	11	30.0	ND	106	75-130	5	20	
Surrogate: Dibromofluoromethane	2.64		"	2.50		106	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.70		"	2.50		108	60-125			
Surrogate: Toluene-d8	2,56		**	2.50		102	80-120			
Surrogate: 4-Bromofluorobenzene	2.66		"	2.50		106	60-135			



885 Jarvis Drive Morgan Hill, CA 95037 (408) 776-9600 FAX (408) 782-6308 www.testamericainc.com

MQH0022

Stratus Environmental Inc. [Arco] 3330 Cameron Park Dr., Suite 550 Cameron Park CA, 95682

Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

Reported: 08/15/07 08:24

Notes and Definitions

BB Sample > 4x spike concentration

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

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Ric	hfield
Com	pany

A BP affiliated company

Chain of Custody Record

Project Name: ARCO Facility No. 2111

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

State or Lead Regulatory Agency:

California Regional Water Quality Control Board

Requested Due Date (mm/dd/yy):

24 hours for Effluent & STD for others

RUSH

On-site Time: 0500	Temp: 60	
Off-site Time: Ø 730	Temp: (, O	
Sky Conditions:		
Meteorological Events:		
Wind Speed:	Direction:	-

Lab l	lame: TestAmerica					BP/AR Facility N	o.:	2111									Consultant/Contractor: Stratus Environmental, Inc.								
Addr	ess: 885 Jarvis Drive					BP/AR Facility A	ddre	ss: 1156]	Davis S	t., San	Lea	ndro					Addr	ess:		333	0 Ca	ımer	ron Park Drive, Suite	e 550	
Morg	an Hill, CA 95937					Site Lat/Long:														Can	nero	n Pa	ark, CA 95682		
Lab F	M: Lisa Race					California Global	ID N	Vo.:	T0600	10176	i 4						Cons	ultan	t/Cor	itrac	tor P	rojec	ct No.: E2111-03		
Tele/	Fax: 408-782-8156/408-782-6	308				Enfos Project No.	:	G0C28-	0023								Consultant/Contractor PM: Jay Johnson								
BP/A	R PM Contact: Paul Supple					Provision or OOC	(ci	rcle one)		Prov	risior	1					Tele/Fax: (530) 676-6000 / (530) 676-6005								
Addr	ess: 2010 Crow Canyon Place, S	Suite 150				Phase/WBS:		03-O&N	1								Report Type & QC Level: Level 1 with EDF								
	San Ramon, CA					Sub Phase/Task: 03-Analytical E-m					E-ma	E-mail EDD To: shayes@stratusinc.net													
Tele/I	ax: 925-275-3506/925-275-3	815				Cost Element:		Subconti	actor C	ost							Invoice to: Atlantic Richfield Co.								
Lab l	Bottle Order No:		-,	Ma	trix				Pres	ervat	ive	,	Re	ques	sted A	Analy	sis	Tı	ırnaı	oun	d Ti	me			
Item No.	Sample Description	Time	Date	Soil/Solid Water/Liquid	Air	MQHCO2Q Laboratory No.	No. of Containers	Unpreserved	H ₂ SO ₄	HNO3	HCI	Methanol	GRO by 8015	BTEX by 8260	5-oxygenates by 8260			24-hours	Standard				Sample Point L Comme	_	and
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TEST AMERICA SAMPLÉ RECEIPT LOG

CLIENT NAME: REC. BY (PRINT) WORKORDER:	ARCO JulienG MQUOO2	2	DATE REC'D AT LAB: TIME REC'D AT LAB: DATE LOGGED IN:	1015 1015 8/11			OFFICE SHEET SHEET AS SHEET		CORY PURPOSAR? WATER YES! NO
CIRCLE THE APPRO	OPRIATE RESPONSE	LAD SAMPLE#	СЦЕНТ Ю	CONTAINER DESCRIPTION		pH	SAMPLE	1 :	REMARKS:
1. Custody Seal(s)	Present / Absent			OCOGRAF HOM	AW 11AT		MATRIX	SAMPLED	CONDITION (ETC.)
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3. Sample Labels:	Present / Absent						<u> </u>		and the state of t
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Ray 1 (07/10/05)

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15 August, 2007

Jay Johnson Stratus Environmental Inc. [Arco] 3330 Cameron Park Dr., Suite 550 Cameron Park, CA 95682

RE: ARCO #2111, San Leandro, CA

Work Order: MQH0019

Enclosed are the results of analyses for samples received by the laboratory on 08/01/07 10:15. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa Race

Senior Project Manager

CA ELAP Certificate # 1210

The results in this laboratory report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the BPGCLN Technical Specifications, applicable Federal, State, local regulations and certification requirements as well as the methodologies as described in laboratory SOPs reviewed by the BPGCLN. This entire report was reviewed and approved for release.



885 Jarvis Drive Morgan Hill, CA 95037 (408) 776-9600 FAX (408) 782-6308 www.testamericainc.com

Stratus Environmental Inc. [Arco] Project: ARCO #2111, San Leandro, CA MQH0019
3330 Cameron Park Dr., Suite 550 Project Number: G0C28-0023 Reported:
Cameron Park CA, 95682 Project Manager: Jay Johnson 08/15/07 08:09

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
02111DPEAINF	MQH0019-01	Vapor	08/01/07 06:32	08/01/07 10:15
02111ASAEFF	MQH0019-02	Vapor	08/01/07 06:30	08/01/07 10:15
02111ASYSINF	MQH0019-03	Vapor	08/01/07 06:28	08/01/07 10:15
02111AGAC1	MQH0019-04	Vapor	08/01/07 06:25	08/01/07 10:15
02111AEFF	MQH0019-05	Vapor	08/01/07 06:22	08/01/07 10:15

The carbon range for the TPH-GRO has been changed from C6-C10 to C4-C12. The carbon range for TPH-DRO has been changed from C10-C28 to C10-C36. EPA 8015B has been modified to better meet the requirements of California regulatory agencies. These samples were received with no custody seals.





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQH0019 Reported: 08/15/07 08:09

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
						richaica	Anaryzeu	Method	14016
02111DPEAINF (MQH0019-01) Vapor	Sampled: 08/0	1/07 06:32	Received	1: 08/01/07	7 10:15				
Gasoline Range Organics (C4-C12)	1300	200	mg/m³ Air	20	7H03008	08/03/07	08/03/07 13:02	EPA 8015B/8021B	
Benzene	ND	2.0	н	tt	II.	*1	**	II.	
Toluene	ND	2.0	"	U	11	*	н	11	
Ethylbenzene	2.8	2.0	"	Ш	Ħ	H	"	#1	
Xylenes (total)	6.0	4.0	"	+1	н	H	n	"	
Methyl tert-butyl ether	24	10		**			IF.		
Surrogate: a,a,a-Trifluorotoluene		127 %	65-	140	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93 %	70-	125	"	"	"	"	
Gasoline Range Organics (C4-C12)	360	49	ppmv	20	#1	n .	n	**	
Benzene	ND	0.63	n	"	"	11	н	"	
Toluene	ND	0.53	11	"	"	ŧ	tt.	"	
Ethylbenzene	0.64	0.46	Н	n	н	Ħ	ti .	n	
Xylenes (total)	1.4	0.95	Ħ	H	II	"	**	П	
Methyl tert-butyl ether	6.6	2.8	11	11					
Surrogate: a,a,a-Trifluorotoluene		127 %	65-1	140	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93 %	70-1	125	"	"	"	"	
02111ASAEFF (MQH0019-02) Vapor	Sampled: 08/01	/07 06:30	Received:	08/01/07	10:15				
Gasoline Range Organics (C4-C12)	11	10	mg/m³ Air	1	7H01028	08/01/07	08/01/07 18:30	EPA 8015B/8021B	
Benzene	0.25	0.10	н	17	11	**	"	П	
Toluene	ND	0.10	Ħ	11	II	"	**	#	
Ethylbenzene	0.21	0.10	**	ŧ)	п	"	"	#	
Xylenes (total)	0.22	0.20	**	Ħ	II .	n	"	41	
Methyl tert-butyl ether	11	0.50	"		#		11		
Surrogate: a,a,a-Trifluorotoluene		97 %	65-1	140	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98 %	70-1	125	"	"	"	"	
Gasoline Range Organics (C4-C12)	3.1	2.4	ppmv	н	Ħ	**	н	П	
Benzene	0.079	0.031		n	II	"	н	H	
Toluene	ND	0.027	н	II	0	"	n		
Ethylbenzene	0.048	0.023	"	u	**	н	n	n .	
Xylenes (total)	0.051	0.047	"	"	"	D .	11	n	
Methyl tert-butyl ether	3.1	0.14	11	U	11	B	11	lt .	
Surrogate: a,a,a-Trifluorotoluene		97 %	65-1	140	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98 %	70-1	125	"	"	"	"	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023 Project Manager: Jay Johnson MQH0019 Reported: 08/15/07 08:09

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
02111ASYSINF (MQH0019-03) Vapor	Sampled: 08/0	1/07 06:28	Received	08/01/07	10:15				
Gasoline Range Organics (C4-C12)	660	100	mg/m³ Air	10	7H01028	08/01/07	08/01/07 20:24	EPA 8015B/8021B	
Benzene	ND	1.0	n	II.	H	11	"	"	
Toluene	ND	1.0	It	¥F	#	n n	11	н	
Ethylbenzene	1.2	1.0	11	**	"	H	I)	II .	
Xylenes (total)	2.2	2.0	11	"	"	11	11	11	
Methyl tert-butyl ether	11	5.0			n		H	N	
Surrogate: a,a,a-Trifluorotoluene		100 %	65-1	40	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	70-1	25	"	"	"	п	
Gasoline Range Organics (C4-C12)	190	24	ppmv	10	н	11	n	If	
Benzene	ND	0.31	H	н	н	**	0	II .	
Toluene	ND	0.27	н	н	"	"	IF	11	
Ethylbenzene	0.28	0.23	H	н	n	n	41	н	
Xylenes (total)	0.51	0.47	**	н	H	"	#1	н	
Methyl tert-butyl ether	3.0	1.4	Ħ	11	11	lt .	#	11	
Surrogate: a,a,a-Trifluorotoluene		100 %	65-1	40	u u	n	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	70-1	25	"	"	"	rr .	
02111AGAC1 (MQH0019-04) Vapor	Sampled: 08/01/	07 06:25 1	Received: 0	8/01/07 1	0:15				
Gasoline Range Organics (C4-C12)	ND		mg/m³ Air	1	7H01028	08/01/07	08/01/07 17:06	EPA 8015B/8021B	
Benzene	ND	0.10	н	н	"	"	11	**	
Toluene	ND	0.10	#	H	II.	H	н	**	
Ethylbenzene	ND	0.10	II	H	II	П	"	n	
Xylenes (total)	ND	0.20	H	11*	**	11	"	0	
Methyl tert-butyl ether	ND	0.50	II .		#			11	
Surrogate: a,a,a-Trifluorotoluene		105 %	65-1	40	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95 %	70-1	25	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	2.4	ppmv	n	И	41	н	D	
Benzene	ND	0.031	11	11	#1	łJ	"	II .	
Toluene	ND	0.027	U	#1	**	**	"	II.	
Ethylbenzene	ND	0.023	11	H	"	"	It	11	
Xylenes (total)	ND	0.047	1)	"	"	"	11	11	
Methyl tert-butyl ether	ND	0.14	11	"	11	11	11	11	~~~
Surrogate: a,a,a-Trifluorotoluene		105 %	65-1	40	n	"	"	"	
Surrogate: 4-Bromofluorobenzene		95 %	70-1	25	"	"	"	"	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQH0019 Reported: 08/15/07 08:09

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B TestAmerica - Morgan Hill, CA

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
02111AEFF (MQH0019-05) Vapor	Sampled: 08/01/07	06:22 Re	ceived: 08/	01/07 10:	15				
Gasoline Range Organics (C4-C12)	ND	10	mg/m³ Air	1	7H01028	08/01/07	08/01/07 16:35	EPA 8015B/8021B	
Benzene	ND	0.10	11	п	"	11	11	II.	
Toluene	ND	0.10	H	#	11	11	n	11	
Ethylbenzene	ND	0.10	#	и	п	"	11	H	
Xylenes (total)	ND	0.20	"	н	11	#	H	n	
Methyl tert-butyl ether	ND	0.50	11	u	11	11	н	"	
Surrogate: a,a,a-Trifluorotoluene		108 %	65-1	40	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99 %	70-1	25	"	"	"	n	
Gasoline Range Organics (C4-C12)	ND	2.4	ppmv	11	n	D	11	11	
Benzene	ND	0.031	Н	"	ıı	#1	11	п	
Toluene	ND	0.027	41	н	II	H	II .	н	
Ethylbenzene	ND	0.023	**	"	II	**	11	н	
Xylenes (total)	ND	0.047	"	"	11	"	**	н	
Methyl tert-butyl ether	ND	0.14	"	11	и	Ħ	н	н	
Surrogate: a,a,a-Trifluorotoluene		108 %	65-1	40	"	"	"	n	
Surrogate: 4-Bromofluorobenzene		99 %	70-1	25	"	"	"	"	





Analyte

Project: ARCO #2111, San Leandro, CA

Spike

Level

Source

Result

%REC

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQH0019 Reported: 08/15/07 08:09

RPD

Limit

Notes

%REC

Limits

RPD

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B - Quality Control TestAmerica - Morgan Hill, CA

Units

Reporting

Limit

Result

1.39

5.00

6.47

38.6

5.60

40.1

0.69

ppmv

ppmv

mg/m³ Air

ppmv

mg/m3 Air

2.5 mg/m3 Air

1.28

4.60

6.70

40.0

5.59

40.0

Blank (7H01028-BLK1)			I	Prepared & Ai	nalyzed: 08/01/	/07
Gasoline Range Organics (C4-C12)	ND	12	ppmv			
Gasoline Range Organics (C4-C12)	ND	50	mg/m³ Air			
Benzene	ND	0.16	ppmv			
Benzene	ND	0.50	mg/m³ Air			
Toluene	ND	0.13	ppmv			
Toluene	ND	0.50	mg/m³ Air			
Ethylbenzene	ND	0.12	ppmv			
Ethylbenzene	ND	0.50	mg/m³ Air			
Xylenes (total)	ND	0.24	ppmv			
Xylenes (total)	ND	1.0	mg/m³ Air			
Methyl tert-butyl ether	ND	0.69	ppmv			
Methyl tert-butyl ether	ND	2.5	mg/m³ Air			
Surrogate: a,a,a-Trifluorotoluene	6.59		ppmv	6.70	98	65-140
Surrogate: a,a,a-Trifluorotoluene	39.4		mg/m³ Air	40.0	98	65-140
Surrogate: 4-Bromofluorobenzene	5.27		ppmv	5.59	94	70-125
Surrogate: 4-Bromofluorobenzene	37.7		mg/m³ Air	40.0	94	70-125
Laboratory Control Sample (7H01028-BS1)			F	repared & Ar	nalyzed: 08/01/	07
Gasoline Range Organics (C4-C12)	70.6	12	ppmv	78.0	90	70-115
Gasoline Range Organics (C4-C12)	249	50	mg/m³ Air	275	90	70-115
Benzene	1.31	0.16	ppmv	1.03	127	80-150
Benzene	4.18	0.50	mg/m³ Air	3.30	127	80-150
Toluene	5.75	0.13	ppmv	6.43	89	75-125
Гoluene	21.6	0.50	mg/m³ Air	24.2	89	75-125
Ethylbenzene	1.01	0.12	ppmv	1.17	87	75-135
Ethylbenzene	4.37	0.50	mg/m³ Air	5.05	87	75-135
Xylenes (total)	5.67	0.24	ppmv	6.68	85	75-135
Xylenes (total)	24.6	1.0	mg/m³ Air	29.0	85	75-135

Methyl tert-butyl ether

Methyl tert-butyl ether

Surrogate: a,a,a-Trifluorotoluene

Surrogate: a,a,a-Trifluorotoluene

Surrogate: 4-Bromofluorobenzene

Surrogate: 4-Bromofluorobenzene

60-140

60-140

65-140

65-140

70-125

70-125

109

109

97

97

100

100





Project: ARCO #2111, San Leandro, CA

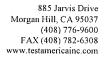
Project Number: G0C28-0023
Project Manager: Jay Johnson

MQH0019 Reported: 08/15/07 08:09

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7H01028 - EPA 5030B [P/T	/ EPA 8015B/	8021B								
Laboratory Control Sample Dup (7H0	1028-BSD1)			Prepared a	& Analyze	ed: 08/01/	07			.
Gasoline Range Organics (C4-C12)	71.1	12	ppmv	78.0		91	70-115	0.8	20	
Gasoline Range Organics (C4-C12)	251	50	mg/m³ Air	275		91	70-115	0.8	20	
Benzene	1.30	0.16	ppmv	1.03		126	80-150	0.4	25	
Benzene	4.16	0.50	mg/m³ Air	3.30		126	80-150	0.4	25	
Гoluene	5.73	0.13	ppmv	6.43		89	75-125	0.4	20	
Toluene	21.5	0.50	mg/m³ Air	24.2		89	75-125	0.4	20	
Ethylbenzene	1.01	0.12	ppmv	1.17		87	75-135	0.09	25	
Ethylbenzene	4.37	0.50	mg/m³ Air	5.05		87	75-135	0.09	25	
Xylenes (total)	5.67	0.24	ppmv	6.68		85	75-135	0.05	20	
Xylenes (total)	24.6	1.0	mg/m³ Air	29.0		85	75-135	0.05	20	
Methyl tert-butyl ether	1.40	0.69	ppmv	1.28		109	60-140	0.6	25	
Methyl tert-butyl ether	5.03	2.5	mg/m³ Air	4.60		109	60-140	0.6	25	
Surrogate: a,a,a-Trifluorotoluene	6.52		ppmv	6.70		97	65-140			
Surrogate: a,a,a-Trifluorotoluene	38.9		mg/m³ Air	40.0		97	65-140			
Surrogate: 4-Bromofluorobenzene	5.59		ppmv	5.59		100	70-125			
Surrogate: 4-Bromofluorobenzene	40.0		mg/m³ Air	40.0		100	70-125			
Batch 7H03008 - EPA 5030В [Р/Г]	/ EPA 8015B/8	3021B								
Blank (7H03008-BLK1)				Prepared &	& Analyze	d: 08/03/0)7			
Gasoline Range Organics (C4-C12)	ND	12	ppmv							
Gasoline Range Organics (C4-C12)	ND	50	mg/m³ Air							
Benzene	ND	0.50	Ш							
Benzene	ND	0.16	ppmv							
Toluene	ND	0.50	mg/m³ Air							
Toluene	ND	0.13	ppmv							
Ethylbenzene	ND	0.12	H							
Ethylbenzene	ND	0.50	mg/m³ Air							
Kylenes (total)	ND	0.24	ppmv							
Kylenes (total)	ND	1.0	mg/m³ Air							
Methyl tert-butyl ether	ND	0.69	ppmv							
Methyl tert-butyl ether	ND	2.5	mg/m³ Air							
urrogate: a,a,a-Trifluorotoluene	38.9		"	40.0		97	65-140			
Surrogate: a,a,a-Trifluorotoluene	6.52		ppmv	6.70		97	65-140			
Surrogate: 4-Bromofluorobenzene	35.8		mg/m³ Air	40.0		90	70-125			
Surrogate: 4-Bromofluorobenzene	5.01		ppmv	5.59		90	70-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.



MQH0019

Reported:

08/15/07 08:09

RPD

%REC



Stratus Environmental Inc. [Arco] 3330 Cameron Park Dr., Suite 550 Cameron Park CA, 95682

Project: ARCO #2111, San Leandro, CA

Spike

Project Number: G0C28-0023
Project Manager: Jay Johnson

Source

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B - Quality Control TestAmerica - Morgan Hill, CA

Reporting

A 1.		Reporting		Spike	Source		70KEC		KrD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Not
Batch 7H03008 - EPA 5030B [P/T]	/ EPA 8015B/8	021B								
Laboratory Control Sample (7H03008	-BS1)			Prepared	& Analyze	:d: 08/03/	07			
Gasoline Range Organics (C4-C12)	244	50	mg/m³ Air	275		89	70-115			**
Gasoline Range Organics (C4-C12)	69.4	12	ppmv	78.0		89	70-115			
Benzene	4.40	0.50	mg/m³ Air	3.30		133	80-150			
Benzene	1.38	0.16	ppmv	1.03		133	80-150			
Гoluene	22.6	0.50	mg/m³ Air	24.2		93	75-125			
Toluene	6.01	0.13	ppmv	6.43		93	75-125			
Ethylbenzene	4.58	0.50	mg/m³ Air	5.05		91	75-135			
Ethylbenzene	1.06	0.12	ppmv	1.17		91	75-135			
Xylenes (total)	25.8	1.0	mg/m³ Air	29.0		89	75-135			
Xylenes (total)	5.94	0.24	ppmv	6.68		89	75-135			
Methyl tert-butyl ether	5.20	2.5	mg/m³ Air	4.60		113	60-140			
Methyl tert-butyl ether	1.45	0.69	ppmv	1.28		113	60-140			
Surrogate: a,a,a-Trifluorotoluene	38.4		mg/m³ Air	40.0		96	65-140			
Surrogate: a,a,a-Trifluorotoluene	6.44		ррти	6.70		96	65-140			
Surrogate: 4-Bromofluorobenzene	37.3		mg/m³ Air	40.0		93	70-125			
Surrogate: 4-Bromofluorobenzene	5.22		ppmv	5.59		93	70-125			
Laboratory Control Sample Dup (7H0	3008-BSD1)]	Prepared &	& Analyze	d: 08/03/0	07			
Gasoline Range Organics (C4-C12)	237	50	mg/m³ Air	275		86	70-115	3	20	
Gasoline Range Organics (C4-C12)	67.3	12	ppmv	78.0		86	70-115	3	20	
Benzene	4.30	0.50	mg/m³ Air	3.30		130	80-150	2	25	
Benzene	1.35	0.16	ppmv	1.03		130	80-150	2	25	
Toluene	22.5	0.50	mg/m³ Air	24.2		93	75-125	0.7	20	
Toluene	5.97	0.13	ppmv	6.43		93	75-125	0.7	20	
Ethylbenzene	4.53	0.50	mg/m³ Air	5.05		90	75-135	1	25	
Ethylbenzene	1.04	0.12	ppmv	1.17		90	75-135	1	25	
Kylenes (total)	25.5	1.0	mg/m³ Air	29.0		88	75-135	1	20	
Kylenes (total)	5.89	0.24	ppmv	6.68		88	75-135	1	20	
Methyl tert-butyl ether	5.13	2.5	mg/m³ Air	4.60		112	60-140	1	25	
Methyl tert-butyl ether	1.43	0.69	ppmv	1.28		112	60-140	1	25	
Surrogate: a,a,a-Trifluorotoluene	37.5		mg/m³ Air	40.0		94	65-140		****	
Surrogate: a,a,a-Trifluorotoluene	6.28		ppmv	6.70		94	65-140			
Surrogate: 4-Bromofluorobenzene	37.0		mg/m³ Air	40.0		93	70-125			
Surrogate: 4-Bromofluorobenzene	5.17		ppmv	5.59		93	70-125			



885 Jarvis Drive Morgan Hill, CA 95037 (408) 776-9600 FAX (408) 782-6308 www.testamericainc.com

Stratus Environmental Inc. [Arco]
Project: ARCO #2111, San Leandro, CA
MQH0019
3330 Cameron Park Dr., Suite 550
Project Number: G0C28-0023
Cameron Park CA, 95682
Project Manager: Jay Johnson
08/15/07 08:09

Notes and Definitions

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

Atlantic Richfield		,			
Dichfiold	Chain of Cust	ody Record		(RUSH)	On-site Time
	Project Name:	ARCO Facility N	o. 2111		Off-site Time
Sompany	BP BU/AR Region/E	Infos Segment:	BP > Ameri	cas > West > Retail > Alameda	Sky Conditions
	State on Load Domele		Q-1:6: p	1 1 XII-1 O 1:4 - O 4 - 1 D 1	h

BP BU/AR Region/Enfos Segment: State or Lead Regulatory Agency:

A BP affiliated company

California Regional Water Quality Control Board Requested Due Date (mm/dd/yy): 24 hours for Effluent

& STD for others

		·	
On-site Time	: 0500	Temp: 60	
Off-site Time	0730	Temp: 1, 0	
Sky Conditions	:		
Meteorological	Events:		
Wind Speed:		Direction:	

	BP/AR Facility No).:	2111							Co	nsulta	nt/Con	tracto	r:	Stratus Environm	ental, Inc.	
	BP/AR Facility Ad	ldress: 1	156 Dav	vis St., S	an Lea	ndro				Ad	dress:		3330	Came	eron Park Drive, S	uite 550	
	Site Lat/Long:	····								_ _			Came	eron P	ark, CA 95682		,
	California Global I	D No.:	T	060010	1764				·····	Co	nsulta	nt/Con	tracto	r Proje	ect No.: E2111	-03	
	Enfos Project No.:	G0	C28-002	23						Co	nsultai	nt/Con	tracto	r PM:	Jay Jo	hnson	
	Provision or OOC	(circle	one)	P	rovisio	n				Tei	e/Fax:		(530)	676-	6000 / (530) 676-6	5005	
	Phase/WBS:	03-	0&M							Re	oort T	ype &	QCL	evel:	Level	l with EDF	
	Sub Phase/Task:										······································	***************************************					
	Cost Element:	Sul															
Matrix				Preser	ative		Re	ques	ted An	alysis	T	urnar	ound	Time	_		
Water/Liquid Air	MQHOO19 Laboratory No.	No. of Containers	Unpreserved	H ₂ SO ₄	HCI	Methanol	GRO by 8015	BTEX by 8260	MTBE by 8260		24-hours	Standard			11 -	-	and
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results to bpe	edf@broadbentine	c.Com															
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	x x x x x x x x x x x x x x x x x x x	BP/AR Facility Ad Site Lat/Long: California Global I Enfos Project No.: Provision or OOC Phase/WBS: Sub Phase/Task: Cost Element: Matrix X X O1 X O2 X O3 X O4 X O75 X O75 X O75 X DH X O75 Esults to bpedf@broadbentine	BP/AR Facility Address: 1 Site Lat/Long: California Global ID No.: Enfos Project No.: G0 Provision or OOC (circle Phase/WBS: 03- Sub Phase/Task: 03- Cost Element: Sub Matrix MCLICOLS Laboratory No. Z X O1 X O2 X O3 X O4 X O5 X X O5 X X O5 X X X X X X X X X X X X X	BP/AR Facility Address: 1156 Dar Site Lat/Long: California Global ID No.: T Enfos Project No.: G0C28-00: Provision or OOC (circle one) Phase/WBS: 03-O&M Sub Phase/Task: 03-Analytic Cost Element: Subcontract Matrix MCLCO19 Laboratory No. 2 x 01 2 x 03 2 x 03 2 x 07 3 x 07 3 x 07 5 x 07 7 x 07	BP/AR Facility Address: 1156 Davis St., S Site Lat/Long: California Global ID No.: T0600101 Enfos Project No.: G0C28-0023 Provision or OOC (circle one) P Phase/WBS: 03-O&M Sub Phase/Task: 03-Analytical Cost Element: Subcontractor Cost Matrix Preserv Laboratory No. Cost Element: Subcontractor Cost X 00 Z Z	BP/AR Facility Address: 1156 Davis St., San Lea Site Lat/Long: California Global ID No.: T0600101764 Enfos Project No.: G0C28-0023 Provision or OOC (circle one) Provisio Phase/WBS: 03-O&M Sub Phase/Task: 03-Analytical Cost Element: Subcontractor Cost Matrix MGHCOOP Laboratory No. 2	BP/AR Facility Address: 1156 Davis St., San Leandro Site Lat/Long: California Global ID No.: T0600101764 Enfos Project No.: G0C28-0023 Provision or OOC (circle one) Provision Phase/WBS: 03-O&M Sub Phase/Task: 03-Analytical Cost Element: Subcontractor Cost Matrix MCACOLO Laboratory No. Value of St. IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	BP/AR Facility Address: 1156 Davis St., San Leandro Site Lat/Long: California Global ID No.: T0600101764 Enfos Project No.: G0C28-0023 Provision or OOC (circle one) Provision Phase/WBS: 03-O&M Sub Phase/Task: 03-Analytical Cost Element: Subcontractor Cost Matrix Matrix Preservative Re A OO 2 2	BP/AR Facility Address: 1156 Davis St., San Leandro Site Lat/Long: California Global ID No.: T0600101764 Enfos Project No.: G0C28-0023 Provision or OOC (circle one) Provision Phase/WBS: 03-O&M Sub Phase/Task: 03-Analytical Cost Element: Subcontractor Cost Matrix Preservative Request A	BP/AR Facility Address: 1156 Davis St., San Leandro Site Lat/Long: California Global ID No.: T0600101764 Enfos Project No.: G0C28-0023 Provision or OOC (circle one) Provision Phase/WBS: 03-O&M Sub Phase/Task: 03-Analytical Cost Element: Subcontractor Cost Matrix MCALCO19 Laboratory No. Vo. Vo. Vo. Vo. Vo. Vo. Vo. Vo. Vo. V	BP/AR Facility Address: 1156 Davis St., San Leandro Site Lat/Long: California Global ID No.: T0600101764 Enfos Project No.: G0C28-0023 Provision or OOC (circle one) Provision Phase/WBS: 03-O&M Sub Phase/Task: 03-Analytical Cost Element: Subcontractor Cost Matrix Preservative Requested Analysis A DO Z D D D D D D D D D D D D D D D D D	BP/AR Facility Address: 1156 Davis St., San Leandro Site Lat/Long: California Global ID No.: T0600101764 Enfos Project No.: G0C28-0023 Provision or OOC (circle one) Provision Phase/WBS: 03-O&M Sub Phase/Task: 03-Analytical Cost Element: Subcontractor Cost Matrix MCUCOLO Laboratory No. 05	BP/AR Facility Address: 1156 Davis St., San Leandro Site Lat/Long: California Global ID No.: T0600101764 Enfos Project No.: GOC28-0023 Provision or OOC (circle one) Provision Phase/WBS: 03-O&M Sub Phase/Task: 03-Analytical Cost Element: Subcontractor Cost Matrix Preservative Requested Analysis Turnar Page Page Page Page Page Page Page Page	BP/AR Facility Address: 1156 Davis St., San Leandro Site Lat/Long: California Global ID No.: T0600101764 Enfos Project No.: GOC28-0023 Consultant/Contractor TeleFax: (530) Report Type & QCL Sub Phase/Task: 03-Analytical Sub Cost Element: Subcontractor Cost Invoice to: Atlantic I Preservative Requested Analysis Turnaround NCLCOS III David Analysis Analysis III David Analysis III David Analysis III David An	BP/AR Facility Address: 1156 Davis St., San Leandro Site Lat/Long. Catherina Global ID No.: T0600101764 Consultant/Contractor Proj. Enfos Project No.: G0C28-0023 Consultant/Contractor Proj. Provision of OOC (circle one) Provision Phase/WBS: 03-0&M Sub Phase/Task: 03-Analytical Cost Element: Subcontractor Cost Matrix Preservative Preservative Requested Analysis Turnaround Time Preservative Requested Analysis Turnaround Time Preservative Requested Analysis Turnaround Time Preservative Requested Analysis Turnaround Time Add St. Ed. St. St. St. St. St. St. St. St. St. St	BP/AR Facility Address: 1156 Davis St., San Leandro Address: 3330 Cameron Park Drive, S Site LavLong: Cameron Park, CA 95682 Cameron Park, CA 95062 Cameron Park, CA 95062 Cameron Par	BP/AR Facility Address: 1156 Davis St., San Leandro Site Lat/Long: California Global ID No.: T0600101764 Enfos Project No.: G0C28-0023 Enfos Project No.: G0C28-0023 Consultant/Contractor PN: Jay Johnson Provision OOC (circle one) Provision Phase/Pass: 03-0&M Report Type & QC Level: Level I with EDF Sub-Phase/Pass: 03-Analytical Cost Element: Subcontractor Cost Matrix MCCLCC Q Laboratory No. Day

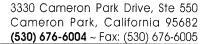
TEST AMERICA SAMPLÉ RECEIPT LOG

CLIENT NAME:	ARCO	**************************************	DATE REC'D AT LAB:	8/1/07		viola per a pala praego	A TO THE PROPERTY AS THE PARTY	For Regula	Mory Purposes?
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2. Chain-of-Custody	Présèll / Absent			-	[
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Packing List.	Present / Absent								
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	Present / Abrent		The state of the s					·\-\-\	
5. Airbill #							e/-}		
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received?	(e) / No.								
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FROE Of 1





October 5, 2007

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 (September 5, 11, and 17, 2007)

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 September 5, 2007.

Variations from Scope of Work: The remediation systems were found non-functioning on September 5, 2007 due to high-water level alarm on the oil-water separator. The remediation systems were re-started momentarily on September 5, 2007 and shutdown after sampling, pending receipt of analytical results. Upon receipt of analytical results and compliance verification, the remediation systems were re-started on September 11, 2007.

The remediation systems were again found non-functioning on September 17, 2007 due to highwater level alarm on the oil-water separator. Stratus attempted to re-start the remediation systems after conducting maintenance on the float levels of the oil-water separator but the systems was shutdown again. Stratus will further troubleshoot and re-start the remediation systems during the October 2007.

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 Staff Engineer

Attachments:

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

CC: Paul Supple, BP/ARCO

1156 Davis Street San Leandro, California



San Leandro, California Dual Phase Extraction and Air Stripper System

Date: Onsite Time Offsite Time Equipment		Model#		Technician: Weather Con Ambient Tem	Chile Chile 50						
Commission of the Commission o			System I	nformation		4.04					
System Stat	tus Upon Arriva	al:	Operationa		Non-Opera	ational X History					
System Stat	us Upon Depa	rture:	Operationa		Non-Opera	itional LABRA					
Electric Met	er Reading:	356	46	hJ		LAB 162					
Hour Meter	Reading:	1460	7.4								
Totalizer Re Air Stripper:	ading Prior to	59136		— PID Calibration —	n Date:	7507					
Totalizer Rea	ading After Air	6058	80	_							
230000			Field Meas	surements							
Para	ameter	Influent (after blower, 2111DPEAINF)	Air Stripper	System	Stack Air Flow (2111AEFF)	Comments					
Differential P	ressure, "wc		25		(
Air Velocity, F	-PM	4050	2760								
^D ipe Diamete	er, inches	3	Ш	Ц	3						
Air Flow Rate	e, cfm	190		•							
Applied Vacu	um, "wc	20"HG	034	NA	NA						
remperature,	deg F	160	130	177	<u> </u>						
PID Readings		422	3.5	225	<u> </u>	PID for GAC-1: 82					
			7								
			er Readings/	Measurements							
Well ID	% Open	Applied Vac., "Hg	Total depth, feet bgs	Stinger Depth, feet bgs							
V-1	30	15		J							
V-2	30	16									
	30	15									
V-3		11/									
V-3 MW-1	100	10			i						
· · · · · · · · · · · · · · · · · · ·	100	10									
MW-1		16									

1156 Davis Street San Leandro, California



Dual Phase Extraction and Air Stripper System

	San	npling Inform	nation (monthly)		
Sample ID		& Time	Sample ID	Date & Time	3
02111DPEAINF	9907	Olelle	02111AGAC1	793 MI = 70	
02111ASAEFF		0627	02111AEFF		022
02111ASYSINF		0625	OZITIAEFF	1 00	620
Analyses Required: GR	O, BTEX, and MTB				
Analyses Required: GR	O, BTEX, and MTBI				
Analyses Required: GR			ntenance Notes		
Analyses Required: GR			ntenance Notes		
Analyses Required: GR			ntenance 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
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Signature:

Date: 950 /

1156 Davis Street

San Leandro, California Groundwater Treatment System



Date: 9 Onsite Time: 0	507 500	Wea	nnician: ther Conditions: ient Temperature	CHIU Clen 90	
System Status Upor System Status At De Transfer Pump:	-	Operational Operational Operational	Non-operati		the Callmen
Transfer Pump Hour	 نغ	589944	Effluent W	/ater Characte	
No. of Carbon Vessel Lead Carbon Vessel (psi):		<u>Z</u>	Temperature	e:	21.4
Well ID H	our Meter Reading	Totalizer Readi	ng Total Depth	Pump Depth	
MW-2		3423			
Sample ID		pling Information Time	n Sample ID	Date & Tim	ne
02111DPEWINF			MW2WINF	054	CY
02111ASWINF		0602			
02111ASWEFF 02111WGAC1		0556			
02111WEFF TBZ111950		0548			
Lab Parameters	Sampling F	requency Sa	ample Location	Analytical Meth	od
GRO, BTEX, & 5-0x	rys Mont	hly	INF& EFF	EPA Method 826	
Notes: Run Mh Flatect L	/Z while	ousite.		MERCHANIS SECRETARIA (MERCHANIS CANADA) (MERCHANIS	

Atlantic Richfield Company

Custody Seals In Place: Yes / No

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Page of

Chain	of	Custody	Record
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Project Name:

ARCO Facility No. 2111

BP BU/AR Region/Enfos Segment:

Temp Blank: Yes / No.

BP > Americas > West > Retail > Alameda

State or Lead Regulatory Agency:

California Regional Water Quality Control Board

Requested Due Date (mm/dd/yy):

24 hours for Effluent

	Tugo 01
On-site Time: 0500	Temp: 50
Off-site Time: 0700	Temp: 5 (
Sky Conditions:	:
Meteorological Events:	
Wind Speed:	Direction:

MS/MSD Sample Submitted: Yes / No.

California Global ID No.: T0600101764 Consultant/Contractor Project No.: E2111-05		& STD for others							
Steel Authors Au	Lab Name: TestAmerica	BP/AR Facility No.: 2111	Consultant/Contractor: Stratus Environmental, Inc.						
California Global ID No.: T0600101764 Consultant/Contractor Project No.: E2111-03	Address: 885 Jarvis Drive	BP/AR Facility Address: 1156 Davis St., San Leandro	Address: 3330 Cameron Park Drive, Suite 550						
Enior Project No. Gold State Gold Stat	Morgan Hill, CA 95937	Site Lat/Long:							
Provision or OOC Circle cne Provision	Lab PM: Lisa Race	Consultant/Contractor Project No.: E2111-03							
Address: 2010 Crew 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 Invoice to: Address Richfield Co.		Enfos Project No.: G0C28-0023	Consultant/Contractor PM: Jay Johnson						
San Ramon, CA Sub Phase/Task: 03-Analytical E-mail EDD To: shaves@stratusinc.net		Provision or OOC (circle one) Provision	Tele/Fax: (530) 676-6000 / (530) 676-6005						
Cost Element: Subcontractor Cost Invoice to: Adaptic Richfield Co.			Report Type & QC Level: Level 1 with EDF						
Requested Analysis Turnaround Time Sample Description									
Comments									
Sample Description E E E E E E E E E	Lab Bottle Order No: Matrix		sis Turnaround Time						
2 02111ASWINF	Item No. Sample Description Time Date Date Air Air		Comments						
2 02111ASWINF 3 02111ASWEFF 4 02111WGAC1 5 02111WEFF 556	1 02111DP EWNF 0607 9507 x	i V x x x							
3 02111ASWEFF			N X I I I I I I I I I I I I I I I I I I						
4 02111WGAC1 0572	3 02111ASWEFF 055C x								
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6 02111MW2WINF			X						
8 9 TB2419507 Chris Hill Accepted By / Affiliation Date Time			x						
9 TB24(9507 OHO X I I Hold Inc. Status Environmental, Inc.									
ampler's Name: Chris Hill Beginquished By / Affiliation Date Time Accepted By / Affiliation Date Time Accepted By / Affiliation Date Time Accepted By / Affiliation Date Time	8								
ampler's Name: Chris Hill Beginquished By / Affiliation Date Time Accepted By / Affiliation Date Time ampler's Company: Stratus Environmental, Inc.	9 732419507 0610 X		44711						
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The state of the s	Shipment Date: 990 l		150 (13)						
	Shipment Method:								
	Shipment Tracking No:								
necial Instructions: Please cc results to bpedf@broadbentinc.Com	Special Instructions: Please cc results to bpe	edf@broadbentinc.Com							

Cooler Temp on Receipt:

°F/C

Trip Blank: Yes / No.



Atlantic Richfield Company

A BP affiliated company

Chain of Custody Record Project Name:

ARCO Facility No. 2111

BP BU/AR Region/Enfos Segment:

BP > Americas > West > Retail > Alameda

State or Lead Regulatory Agency:

California Regional Water Quality Control Board

Requested Due Date (mm/dd/yy):

24 hours for Effluent & STD for others

RUSH

On-site Time: 0500 Temp: 50 Off-site Time: 0700 Temp: 57 Sky Conditions: Meteorological Events: Wind Speed:

Direction:

Lab	Name: TestAmerica					BP/AR Facility N	10':	211	1							Cons	cultar	t/Con	tractor		Stro	tua Env			
Add	ess: 885 Jarvis Drive												Consultant/Contractor: Stratus Environmental, Inc. Address: 3330 Cameron Park Drive, Suite 550												
Mor	gan Hill, CA 95937					Site Lat/Long:				,		idio				1/3.00	1033.					CA 956		te 330	
Lab	PM: Lisa Race					California Global	IDi	No ·	T0600	1017	64					Con	culton				ct No.				
Tele	Fax: 408-782-8156/ 408-782-630	08		*****		Enfos Project No		G0C28		71017									tractor		CL NO.		E2111-0		
BP/A	R PM Contact: Paul Supple		***************************************			Provision or OOC			0020	Pro	visior		·····					***************************************					Jay John		
	ess: 2010 Crow Canyon Place, Su	ite 150				Phase/WBS:	, (61	03-0&1	. A	110	V15101	1				⊣ }	/Fax:		***********		5000 /		676-60		·····
	San Ramon, CA					Sub Phase/Task:		03-Oæ1											QC Le					with EDF	
Tele	Fax: 925-275-3506/925-275-381	15			·	Cost Element:		Subcont	· T	`oct					···			D To				ratusin	ic.net		
Lab	Bottle Order No:			M	atrix) Cost Element.	1	Juocom		ervat	ivo		D		d Anal		,		ntic R		ld Co.				
Item No.	Sample Description	Time	Date	Soil/Solid Water/Liquid	Air	Laboratory No.	No. of Containers	Unpreserved	H ₂ SO ₄	HNO ₃	HCI	Methanol	GRO by 8015	эу 8260	MTBE by 8260	ysis	24-hours	Standard	ound 1	Ime		Sample	e Point I	Lat/Long nents	and
1	02111DPEAINF	dell	9507		x		2			Ť		1			x	f	1	X X	+	+	╫─				
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7	02111ASYSINF	0427	1		х		2		 				$\frac{x}{x}$		x	-	\vdash	-			 				
4	02111AGAC1	0422	/		x		2			-			$\frac{1}{x}$			-	\vdash	X			-				
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1156 Davis Street San Leandro, California

Groundwater Treatment System

	G		ter Treatmen		1	_
Date: 9	1207		Technicia		CHU Cloude	
Offsite Time: 10	160		Ambient 7	Temperature	_55	
System Status Upon	Arrival:	Operation	onal 🔯	Non-operati	ional Restar Y	<i>!</i>
System Status At De	eparture:	Operation	onal	Non-operati	onal	
Transfer Pump:	囚	Operatio	onal	Non-operati	onal	
Transfer Pump Hour	Meter Reading:			Effluent W	/ater Characteris	stics
Effluent Flow Totalize	er Reading:	5899	50	(Quarterly b pH:	y Field Instrumer	nt)
No. of Carbon Vesse	ls: Z	الجين		Temperature	<i></i>	
Lead Carbon Vessel (psi):	Pressure	2		. omporature		-
Well ID He	our Meter Reading	Totaliz	er Reading	Total Depth	Pump Depth	
MW-2						
	Sam	pling Info	rmation			
Sample ID	Date 8	& Time	Sam	iple ID	Date & Time	
02111DPEWINF			02111MW2	WINF		Marie Control of the
02111ASWINF						7
02111ASWEFF						
02111WGAC1						
02111WEFF						_
Lab Parameters	Sampling F	requency	Sample	Location	Analytical Method	
GRO, BTEX, & 5-Oxys Monthly		thly	INF& EFF		EPA Method 8260B	
Notes:						
	//_ /					
///					Ć]
Signature:	bM		Date:	9110	7	

Page 1 of 1

1156 Davis Street San Leandro, California

Dual Phase Extraction and Air Stripper System

	MGMA
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Date: 9-12-09 Onsite Time: 0900 Offsite Time: 1000 Equipment Manufacturer/Model#				Technician: Weather Con Ambient Tem		CHILL Clouds 55
		A	System In	formation		- /
System Stat	System Status Upon Arrival:				Non-Opera	tional Distri
System Stat	us Upon Depa	rture:	Operational	区	Non-Opera	tional
Electric Mete	er Reading:	Nm				<u> </u>
Hour Meter F	Reading:	1460	7			
Totalizer Rea Air Stripper:	ading Prior to	5914	23	– PID Calibratior –	n Date:	
Totalizer Rea Stripper:	ading After Air	605	970	-		
			Field Meas	urements		
Para	ameter	Influent (after blower, 2111DPEAINF)	Air C4	System Influent (2111ASYSINF)	Stack Air Flow (2111AEFF)	Comments
Differential P	ressure, "wc					
Air Velocity, F	PM					
Pipe Diamete	r, inches					
Air Flow Rate	, cfm					
Applied Vacu	um, "wc			NA	NA	
Temperature,	deg F					
PID Readings	, ppmv					PID for GAC-1:
		Oth	er Readings/N	Measurements		
Well ID	% Open	Applied Vac., "Hg		Stinger Depth, feet bgs		
V-1			-			
V-2						
V-3						
MW-1					1	
MW-3						
MW-7		1				
		// 	/			

1156 Davis Street San Leandro, California



Dual Phase Extraction and Air Stripper System

Sample ID	Date & Time	Sample ID	Date & Time
02111DPEAINF		02111AGAC1	T Date & Time
02111ASAEFF		02111AEFF	
02111ASYSINF		OLI (I / YLL)	
Analyses Required: GRO, B	TEX and MTRE		

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: Child Date: 9110 >

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



Groundwater Treatment System

Date: Onsite Time: Offsite Time:	9170	7			n: Conditions: emperature	CHIL	(14
System Status System Status Transfer Pump	At Departure		Operation Operation	onal 💢	Non-operat Non-operat		Level
Transfer Pump		-	9144		Effluent V	/ater Charact	
No. of Carbon V Lead Carbon V (psi):		= <u>7</u>	7	_	Temperature	2 ;	
Well ID	Hour Meter	Reading	Totaliz	er Reading	Total Depth	Pump Depth	
MW-2							
Sampl	e ID	Sam Date &	pling Info		-1-15		
02111DPEWINF 02111ASWINF 02111ASWEFF				02111MW2	ple ID WINF	Date & Tir	ne
02111WGAC1 02111WEFF							
Lab Paran	neters	Sampling Fr	equency	Sample L	ocation	Analytical Met	hod
GRO, BTEX, 8	& 5-Oxys	Month	ıly	INF&	EFF	EPA Method 82	60B
otes:		7 //	1				

1156 Davis Street San Leandro, California

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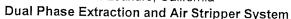
		Dual Ph	nase Extractio	n and Air Strip	per System	I Unional
Date: Onsite Tim Offsite Tim Equipment				Technician: Weather Cor Ambient Tem		CHICL Clouds 50
		alar na ny tierany ny faranana araka ny aorana amin'ny farana araka ny farana araka ny farana araka ny farana	System li	nformation		
System Sta	itus Üpon Arriva	al:	Operationa		Non-Opera	ational Kity High I tust
l	tus Upon Depa ter Reading:	rture: 457	Operational		Non-Opera	
Hour Meter	Reading:	1460	400		,,,	
Totalizer Re Air Stripper:	eading Prior to	592	632	PID Calibratio	n Date:	17.07
Totalizer Re Stripper:	ading After Air	607	140	_		
			Field Meas	urements		
Par	ameter	Influent (after blower 2111DPEAINF)	Air Stripper	System	Stack Air Flow (2111AEFF)	Comments
Differential P	ressure, "wc		25			
Air Velocity,	FPM		2206			
Pipe Diamete	er, inches	333	4	4	ス	
Air Flow Rate	e, cfm	200		200		
Applied Vacu	ium, "wc		1 35	NA	NA	
Temperature	, deg F		120	80		
PID Readings	s, ppmv	300	4	156	8	PID for GAC-1:
		Ofh	er Readinge/	Measurements		
Well ID	% Open	Applied Vac., "Hg	Total depth, feet bgs	Stinger Depth, feet bgs		
V-1			<u> </u>	3-		
V-2						

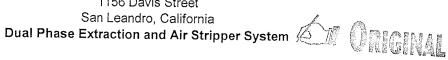
Signature:

V-3 MW-1 K-WM MW-7

Date: 91757

1156 Davis Street





Date & Time	Date & Time	
	02111AGAC1	
/ LMTDE		
K, and MTBE		
	(, and MTBE	02111AGAC1 02111AEFF

Operation & Maintenance Notes
Perlane Flont santch oil/unter seperate System cyclus Twice Than High Level - Flout sulfir working - Not sive it Problem in PLC - Neal To have Compitor Programmer cone oct

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
МТВЕ	Monthly	02111DPEAINF, 02111ASAINF, 02111ASYSINF, 02111AGAC1, & 02111AEFF	EPA Method 8260B

Date: 9170 >





20 September, 2007

Jay Johnson Stratus Environmental Inc. [Arco] 3330 Cameron Park Dr., Suite 550 Cameron Park, CA 95682

RE: ARCO #2111, San Leandro, CA Work Order: MQI0086

Enclosed are the results of analyses for samples received by the laboratory on 09/05/07 20:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa Race

Senior Project Manager

CA ELAP Certificate # 1210

The results in this laboratory report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the BPGCLN Technical Specifications, applicable Federal, State, local regulations and certification requirements as well as the methodologies as described in laboratory SOPs reviewed by the BPGCLN. This entire report was reviewed and approved for release.





Project: ARCO #2111, San Leandro, CA

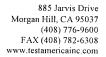
Project Number: G0C28-0023
Project Manager: Jay Johnson

MQI0086 Reported: 09/20/07 13:40

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
02111DPEWINF	MQI0086-01	Water	09/05/07 06:07	09/05/07 20:10
02111ASWINF	MQI0086-02	Water	09/05/07 06:02	09/05/07 20:10
02111ASWEFF	MQI0086-03	Water	09/05/07 05:56	09/05/07 20:10
02111WGAC1	MQI0086-04	Water	09/05/07 05:52	09/05/07 20:10
02111WEFF	MQI0086-05	Water	09/05/07 05:48	09/05/07 20:10
02111MW2WINF	MQI0086-06	Water	09/05/07 05:44	09/05/07 20:10
TB21119507	MQI0086-07	Water	09/05/07 06:10	09/05/07 20:10

The carbon range for the TPH-GRO has been changed from C6-C10 to C4-C12. The carbon range for TPH-DRO has been changed from C10-C28 to C10-C36. EPA 8015B has been modified to better meet the requirements of California regulatory agencies. These samples were received with no custody seals.





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023 Project Manager: Jay Johnson MQI0086 Reported: 09/20/07 13:40

Purgeable Hydrocarbons by EPA 8015B TestAmerica - Morgan Hill, CA

	_	Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
02111DPEWINF (MQI0086-01) Water	Sampled: 09/0:	5/07 06:07	Received:	09/05/07	20:10				
Gasoline Range Organics (C4-C12)	410	100	ug/l	2	7106013	09/06/07	09/06/07	EPA 8015B-VOA	
Surrogate: 4-Bromofluorobenzene		96 %	75-1.	25	"	"	"	"	
02111ASWINF (MQI0086-02) Water	Sampled: 09/05/	07 06:02 F	Received: 0	9/05/07 2	0:10				
Gasoline Range Organics (C4-C12)	410	100	ug/l	2	7106013	09/06/07	09/06/07	EPA 8015B-VOA	
Surrogate: 4-Bromofluorobenzene		98 %	75-1.	25	"	"	"	"	
02111ASWEFF (MQI0086-03) Water	Sampled: 09/05/	07 05:56 H	Received: 0	9/05/07 2	20:10				
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	7106013	09/06/07	09/06/07	EPA 8015B-VOA	
Surrogate: 4-Bromofluorobenzene		93 %	75-1.	25	"	11	"	"	
02111WGAC1 (MQI0086-04) Water S	ampled: 09/05/0	7 05:52 R	eceived: 09	/05/07 20):10				
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	7106013	09/06/07	09/06/07	EPA 8015B-VOA	
Surrogate: 4-Bromofluorobenzene		92 %	75-12	25	"	11	"	11	
02111WEFF (MQI0086-05) Water Sar	npled: 09/05/07	05:48 Rec	eived: 09/0	5/07 20:1	0				
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	7106013	09/06/07	09/06/07	EPA 8015B-VOA	
Surrogate: 4-Bromofluorobenzene		93 %	75-12	25	"	"	"	"	
02111MW2WINF (MQI0086-06) Water	Sampled: 09/0	5/07 05:44	Received	: 09/05/07	7 20:10				
Gasoline Range Organics (C4-C12)	1400	500	ug/l	10	7106013	09/06/07	09/06/07	EPA 8015B-VOA	
Surrogate: 4-Bromofluorobenzene		98 %	75-12	25	"	"	11	"	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023 Project Manager: Jay Johnson MQI0086 Reported: 09/20/07 13:40

Volatile Organic Compounds by EPA Method 8260B TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
02111DPEWINF (MQI0086-01) Water	Sampled: 09/0	5/07 06:07	Received	: 09/05/07	20:10	-			
tert-Amyl methyl ether	ND	5.0	ug/l	10	7112029	09/12/07	09/13/07	EPA 8260B	
Benzene	5.6	5.0	#	**	11	11	"	**	
tert-Butyl alcohol	830	200	н	Ħ	"	**	н	n	
Di-isopropyl ether	ND	5.0	II	0	n	ıı .	#	n	
Ethyl tert-butyl ether	ND	5.0	**	11	II .	II	"	"	
Ethylbenzene	10	5.0	Ħ	н	"	11	н	11	
Methyl tert-butyl ether	580	5.0	11	п	n .	n	н	II	
Toluene	ND	5.0	#	Н	II .	11	**	41	
Xylenes (total)	28	5.0		"	#		n	**	
Surrogate: Dibromofluoromethane		102 %	75-	120	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		103 %	60-	125	"	"	"	n .	
Surrogate: Toluene-d8		100 %	80-	120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94 %	60-	135	"	"	"	n .	
02111ASWINF (MQI0086-02) Water	Sampled: 09/05/	07 06:02 F	Received: (09/05/07 2	0:10				
tert-Amyl methyl ether	ND	5.0	ug/l	10	7112029	09/12/07	09/13/07	EPA 8260B	
Benzene	9.5	5.0	"	"	u	*	II.	ıı	
tert-Butyl alcohol	960	200	"	n	"	#	II	и	
Di-isopropyl ether	ND	5.0	**	Ü	u	0	"	**	
Ethyl tert-butyl ether	ND	5.0	11	4	#	"	H	"	
Ethylbenzene	6.3	5.0	II	H	**	H	II	U	
Methyl tert-butyl ether	570	5.0	Н	II	11	11	H	н	
Toluene	ND	5.0	**	**	11	"	n	и	
Xylenes (total)	9.9	5.0	П	n	"	11	II	II .	
Surrogate: Dibromofluoromethane		96 %	75-1	20	"	11	"	"	
Surrogate: 1,2-Dichloroethane-d4		94 %	60-1	25	"	"	"	"	
Surrogate: Toluene-d8		99 %	80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93 %	60-1	35	"	"	"	"	





Project: ARCO #2111, San Leandro, CA

MQI0086 Reported: 09/20/07 13:40

Project Number: G0C28-0023
Project Manager: Jay Johnson

Volatile Organic Compounds by EPA Method 8260B TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
02111ASWEFF (MQI0086-03) Water	Sampled: 09/05	5/07 05:56 1	Received: 0	9/05/07 2	20:10				
tert-Amyl methyl ether	ND	0.50	ug/l	1	7113029	09/13/07	09/14/07	EPA 8260B	
Benzene	ND	0.50	11	11	"	"	11	11	
tert-Butyl alcohol	830	20	H	**	11	11	n	N	
Di-isopropyl ether	ND	0.50	H		п	ш	H	n .	
Ethyl tert-butyl ether	ND	0.50	n	11	"	Ħ	11	п	
Ethylbenzene	ND	0.50	н	U	u.	. "	#	#	
Methyl tert-butyl ether	37	0.50	n .	н	11	"	**	Ħ	
Toluene	ND	0.50	H	"	11	n	H	O C	
Xylenes (total)	ND	0.50	11	н	**	11	H	п	
Surrogate: Dibromofluoromethane		104 %	75-12	20	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		120 %	60-12	25	"	n	"	n	
Surrogate: Toluene-d8		99 %	80-12	20	"	n .	"	"	
Surrogate: 4-Bromofluorobenzene		98 %	60-13	35	"	"	"	"	
02111WGAC1 (MQI0086-04) Water	Sampled: 09/05/6	07 05:52 R	eceived: 09	/05/07 20	:10				
tert-Amyl methyl ether	ND	0.50	ug/l	1	7113029	09/13/07	09/14/07	EPA 8260B	
Benzene	ND	0.50	U	**	n	II	tt.	II	
tert-Butyl alcohol	ND	20	"	п	"	н	11	н	
Di-isopropyl ether	ND	0.50	11	и	10	n	"	u	
Ethyl tert-butyl ether	ND	0.50	II.	n	н	0	II .	ft	
Ethylbenzene	ND	0.50	"	II .	n	#1	**	**	
Methyl tert-butyl ether	ND	0.50	11	11	п	#	lt .	"	
Toluene	ND	0.50	H	"	n	II	н	II .	
Xylenes (total)	ND	0.50	"	11		11	#	"	
Surrogate: Dibromofluoromethane		104 %	75-12	20	"	"	n	"	
Surrogate: 1,2-Dichloroethane-d4		120 %	60-12	25	"	"	n	"	
Surrogate: Toluene-d8		91 %	80-12	20	"	"	n	"	
Surrogate: 4-Bromofluorobenzene		90 %	60-13	15	"	"	"	"	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQI0086 Reported: 09/20/07 13:40

Volatile Organic Compounds by EPA Method 8260B TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
02111WEFF (MQI0086-05) Water Sa	mpled: 09/05/07	05:48 Rec	eived: 09	/05/07 20:1	.0				
tert-Amyl methyl ether	ND	0.50	ug/l	1	7106030	09/06/07	09/07/07	EPA 8260B	
Benzene	ND	0.50	н	n	11	n	11	"	
tert-Butyl alcohol	ND	20	**	н	H	11	н	n	
Di-isopropyl ether	ND	0.50	"	II	II .	- 11	II	н	
Ethyl tert-butyl ether	ND	0.50	0	#	11	"	H	H	
Ethylbenzene	ND	0.50	н	n	"	11	"	**	
Methyl tert-butyl ether	ND	0.50	"	n	H	D	II .	"	
Toluene	ND	0.50	11	II	II		II	н	
Xylenes (total)	ND	0.50	11	"	#	н	11	н	
Surrogate: Dibromofluoromethane		96 %	75-	120	"	"	11	"	
Surrogate: 1,2-Dichloroethane-d4		104 %	60-	125	"	"	"	"	
Surrogate: Toluene-d8		95 %	80-	120	"	"	n .	n	
Surrogate: 4-Bromofluorobenzene		91 %	60-	135	"	"	ıı .	n	
02111MW2WINF (MQ10086-06) Water	Sampled: 09/0	5/07 05:44	Receive	d: 09/05/0°	7 20:10				
tert-Amyl methyl ether	7.0	5.0	ug/l	10	7113029	09/13/07	09/14/07	EPA 8260B	
Benzene	54	5.0	44	"	11	н	#	"	
tert-Butyl alcohol	2000	200	"	ti	11	11	H	**	
Di-isopropyl ether	ND	5.0	11	U	11	11	U	rr .	
Ethyl tert-butyl ether	ND	5.0	II	Ħ	11	н	п	II .	
Ethylbenzene	27	5.0	11	#	11	H	H	II.	
Methyl tert-butyl ether	1200	5.0	"	"	"	н	n	11	
Toluene	ND	5.0	"	Ħ	11	II.	n	и	
Xylenes (total)	12	5.0	"	tt .	H	11	!	H.	
Surrogate: Dibromofluoromethane		104 %	75-	120	"	"	n .	"	
Surrogate: 1,2-Dichloroethane-d4		114 %	60	125	"	"	"	"	
Surrogate: Toluene-d8		95 %	80-	120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95 %	60-	135	"	"	"	"	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQ10086 Reported: 09/20/07 13:40

Purgeable Hydrocarbons by EPA 8015B - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7I06013 - EPA 5030B [P/T] / EI			2-1110						2	
Blank (7I06013-BLK1)				Prepared	& Analyze	ed: 09/06/	07			
Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Surrogate: 4-Bromofluorobenzene	36.7		"	40.0		92	75-125			
Laboratory Control Sample (7106013-BS1)			Prepared	& Analyze	ed: 09/06/	07			
Gasoline Range Organics (C4-C12)	222	50	ug/l	275		81	60-115			
Surrogate: 4-Bromofluorobenzene	39.8		"	40.0		99	75-125			
Matrix Spike (7106013-MS1)	Source: M	Q10086-03		Prepared 6						
Gasoline Range Organics (C4-C12)	235	50	ug/l	275	27.8	76	60-115			
Surrogate: 4-Bromofluorobenzene	39.7		"	40.0		99	75-125			
Matrix Spike Dup (7I06013-MSD1)	Source: MQI0086-03				Prepared & Analyzed: 09/06/07					
Gasoline Range Organics (C4-C12)	236	50	ug/l	275	27.8	76	60-115	0.1	20	
Surrogate: 4-Bromofluorobenzene	39.5		"	40.0		99	75-125			





Project: ARCO #2111, San Leandro, CA

Spike

Source

Project Number: G0C28-0023 Project Manager: Jay Johnson

MQI0086 Reported: 09/20/07 13:40

RPD

%REC

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Reporting

2.43

Analyse Result Limit Units Level Result WaREC Limits RPD Limit Notes N			Reporting		орис	Donec		/orce		IG D	
Prepared: 09/06/07 Analyzed: 09/07/07	Analyte	Result	Limit	Units		Result	%REC	Limits	RPD	Limit	Notes
Retrict Amyl methyl ether ND 0.50 ug/l	Batch 7106030 - EPA 5030B P/T / E	PA 8260B				-					
Benzene ND 0.50 "	Blank (7106030-BLK1)				Prepared:	09/06/07	Analyzed	: 09/07/07			
Serize ND 0.50	tert-Amyl methyl ether	ND	0.50	ug/l							
Surrogate: 1-Dichoropsyle ether ND D.50 "	Benzene	ND	0.50	11							
Ethyl tert-butyl ether ND 0.50 " Ethylbenzene ND 0.50 " Methyl tert-butyl ether ND 0.50 " Toluene ND 0.50 " Sylenes (total) ND 0.50 " Surrogate: Dibromofluoromethane 2.32 " 2.50 93 75-120 Surrogate: 1,2-Dichloroethane-d4 2.27 " 2.50 91 60-125 Surrogate: 4-Bromofluorobenzene 2.27 " 2.50 91 60-135 Laboratory Control Sample (7106030-BS1) Prepared: 09/06/07 Analyzed: 09/07/07 tert-Amyl methyl ether 8.67 0.50 ug/l 10.0 87 65-135 Benzene 7.62 0.50 " 10.0 87 65-135 Benzene 7.62 0.50 " 10.0 87 65-135 Di-isopropyl ether 8.43 0.50 " 10.0 84 70-130 Ethyl tert-butyl ether 8.96 0.50 " 10.0 90 65-130 Ethyl tert-butyl ether 8.46 0.50 " 10.0 93 75-120 Methyl tert-butyl ether 8.46 0.50 " 10.0 93 75-120 Methyl tert-butyl ether 8.46 0.50 " 10.0 93 75-120 Methyl tert-butyl ether 8.46 0.50 " 10.0 93 75-120 Methyl tert-butyl ether 8.46 0.50 " 10.0 92 75-120 Methyl tert-butyl ether 8.46 0.50 " 10.0 92 75-120 Mylenes (total) 27.2 0.50 " 30.0 91 75-130 Surrogate: Dibromofluoromethane 2.25 " 2.50 90 75-120 Surrogate: 1,2-Dichloroethane-d4 2.23 " 2.50 89 60-125	tert-Butyl alcohol	ND	20	"							
Methyl tert-butyl ether ND 0.50 "	Di-isopropyl ether	ND	0.50	"							
Methyl tert-butyl ether ND 0.50 " Toluene ND 0.50 " Surrogate: Dibromofluoromethane 2.32 " 2.50 93 75-120 Surrogate: 1,2-Dichloroethane-d4 2.27 " 2.50 91 60-125 Surrogate: 4-Bromofluorobenzene 2.27 " 2.50 91 60-135 Surrogate: 4-Bromofluorobenzene 2.27 " 10.0 87 65-135 Surrogate: 4-Bromofluorobenzene 2.05 " 10.0 87 65-135 Surrogate: 4-Bromofluorobenzene 2.05 " 10.0 87 65-135 Surrogate: 4-Bromofluorobenzene 2.05 " 10.0 84 70-130 Surrogate: 4-Bromofluorobenzene 8.43 0.50 " 10.0 84 70-130 Surrogate: 4-Bromofluorobenzene 8.96 0.50 " 10.0 90 65-130 Surrogate: 4-Bromofluorobenzene 8.46 0.50 " 10.0 93 75-120 Surrogate: 4-Bromofluoromethane 8.46 0.50 " 10.0 92 75-120 Surrogate: 5-Bromofluoromethane 2.25 " 2.50 90 75-120 Surrogate: 1,2-Dichloroethane-44 2.23 " 2.50 89 60-125 Surrogate: 1	Ethyl tert-butyl ether	ND	0.50	n							
Toluene ND 0.50 " Xylenes (total) ND 0.50 " Surrogate: Dibromofluoromethane 2.32 " 2.50 93 75-120 Surrogate: 1,2-Dichloroethane-d4 2.27 " 2.50 91 60-125 Surrogate: 4-Bromofluorobenzene 2.27 " 2.50 91 60-125 Surrogate: 4-Bromofluorobenzene 2.27 " 2.50 91 60-135 Laboratory Control Sample (7106030-BS1) Prepared: 09/06/07 Analyzed: 09/07/07 tert-Amyl methyl ether 8.67 0.50 ug/l 10.0 87 65-135 Benzene 7.62 0.50 " 10.0 76 75-120 tert-Butyl alcohol 196 20 " 200 98 60-135 Di-isopropyl ether 8.43 0.50 " 10.0 84 70-130 Ethyl tert-butyl ether 8.96 0.50 " 10.0 90 65-130 Ethyl tert-butyl ether 8.96 0.50 " 10.0 93 75-120 Methyl tert-butyl ether 8.46 0.50 " 10.0 93 75-120 Methyl tert-butyl ether 8.46 0.50 " 10.0 92 75-120 Methyl tert-butyl ether 9.25 0.50 " 10.0 92 75-120 Kylenes (total) 27.2 0.50 " 30.0 91 75-130 Surrogate: Dibromofluoromethane 2.25 " 2.50 90 75-120 Surrogate: 1,2-Dichloroethane-d4 2.23 " 2.50 89 60-125	Ethylbenzene	ND	0.50	п							
ND 0.50 "	Methyl tert-butyl ether	ND	0.50	ti .							
Surrogate: Dibromoffluoromethane 2.32 " 2.50 93 75-120	Toluene	ND	0.50	ti .							
Surrogate: 1,2-Dichloroethane-d4 2.27 " 2.50 91 60-125	Xylenes (total)	ND	0.50	H							
Surrogate: Toluene-d8 Surrogate: Toluene-d8 Surrogate: 4-Bromofluorobenzene 2.27 " 2.50 96 80-120 Surrogate: 4-Bromofluorobenzene 2.27 " 2.50 91 60-135 Laboratory Control Sample (7I06030-BS1) Prepared: 09/06/07 Analyzed: 09/07/07 Lert-Amyl methyl ether 8.67 0.50 ug/l 10.0 87 65-135 Benzene 7.62 0.50 " 10.0 76 75-120 ert-Butyl alcohol 196 20 " 200 98 60-135 Di-isopropyl ether 8.43 0.50 " 10.0 84 70-130 Ethyl tert-butyl ether 8.96 0.50 " 10.0 90 65-130 Ethyl tert-butyl ether 9.32 0.50 " 10.0 93 75-120 Methyl tert-butyl ether 8.46 0.50 " 10.0 92 75-120 Surrogate: Dibromofluoromethane 2.25 " 2.50 90 75-120 Surrogate: Dibromofluoromethane 2.25 " 2.50 89 60-125	Surrogate: Dibromofluoromethane	2.32		"	2.50		93	75-120			
Surrogate: 4-Bromofluorobenzene 2.27 " 2.50 91 60-135	Surrogate: 1,2-Dichloroethane-d4	2.27		"	2.50		91	60-125			
Laboratory Control Sample (7106030-BS1) Prepared: 09/06/07 Analyzed: 09/07/07 tert-Amyl methyl ether 8.67 0.50 ug/l 10.0 87 65-135 Benzene 7.62 0.50 " 10.0 76 75-120 tert-Butyl alcohol 196 20 " 200 98 60-135 Di-isopropyl ether 8.43 0.50 " 10.0 84 70-130 Ethyl tert-butyl ether 8.96 0.50 " 10.0 90 65-130 Ethylbenzene 9.32 0.50 " 10.0 93 75-120 Methyl tert-butyl ether 8.46 0.50 " 10.0 85 50-140 Toluene 9.25 0.50 " 10.0 92 75-120 Xylenes (total) 27.2 0.50 " 30.0 91 75-130 Surrogate: Dibromofluoromethane 2.25 " 2.50 90 75-120 Surrogate: 1,2-Dichloroethane-d4 2.23 " 2.50 89 60-125	Surrogate: Toluene-d8	2.41		"	2.50		96	80-120			
Series S	Surrogate: 4-Bromofluorobenzene	2.27		"	2.50		91	60-135			
Benzene 7.62 0.50 " 10.0 76 75-120 tert-Butyl alcohol 196 20 " 200 98 60-135 Di-isopropyl ether 8.43 0.50 " 10.0 84 70-130 Ethyl tert-butyl ether 8.96 0.50 " 10.0 90 65-130 Ethyl tert-butyl ether 9.32 0.50 " 10.0 93 75-120 Methyl tert-butyl ether 8.46 0.50 " 10.0 85 50-140 Toluene 9.25 0.50 " 10.0 92 75-120 Xylenes (total) 27.2 0.50 " 30.0 91 75-130 Surrogate: Dibromofluoromethane 2.25 " 2.50 90 75-120 Surrogate: 1,2-Dichloroethane-d4 2.23 " 2.50 89 60-125	Laboratory Control Sample (7106030-B	S1)			Prepared:	09/06/07	Analyzed	: 09/07/07			
10.0 10.0	tert-Amyl methyl ether	8.67	0.50	ug/l	10.0		87	65-135			
Di-isopropyl ether 8.43 0.50 " 10.0 84 70-130 Ethyl tert-butyl ether 8.96 0.50 " 10.0 90 65-130 Ethylbenzene 9.32 0.50 " 10.0 93 75-120 Methyl tert-butyl ether 8.46 0.50 " 10.0 85 50-140 Toluene 9.25 0.50 " 10.0 92 75-120 Xylenes (total) 27.2 0.50 " 30.0 91 75-130 Surrogate: Dibromofluoromethane 2.25 " 2.50 90 75-120 Surrogate: 1,2-Dichloroethane-d4 2.23 " 2.50 89 60-125	Benzene	7.62	0.50	"	10.0		76	75-120			
Ethyl tert-butyl ether 8.96 0.50 " 10.0 90 65-130 Ethylbenzene 9.32 0.50 " 10.0 93 75-120 Methyl tert-butyl ether 8.46 0.50 " 10.0 85 50-140 Foluene 9.25 0.50 " 10.0 92 75-120 Xylenes (total) 27.2 0.50 " 30.0 91 75-130 Surrogate: Dibromofluoromethane 2.25 " 2.50 90 75-120 Surrogate: 1,2-Dichloroethane-d4 2.23 " 2.50 89 60-125	tert-Butyl alcohol	196	20	n	200		98	60-135			
Ethylbenzene 9.32 0.50 " 10.0 93 75-120 Methyl tert-butyl ether 8.46 0.50 " 10.0 85 50-140 Foluene 9.25 0.50 " 10.0 92 75-120 Xylenes (total) 27.2 0.50 " 30.0 91 75-130 Surrogate: Dibromofluoromethane 2.25 " 2.50 90 75-120 Surrogate: 1,2-Dichloroethane-d4 2.23 " 2.50 89 60-125	Di-isopropyl ether	8.43	0.50	п	10.0		84	70-130			
Methyl tert-butyl ether 8.46 0.50 " 10.0 85 50-140 Foluene 9.25 0.50 " 10.0 92 75-120 Xylenes (total) 27.2 0.50 " 30.0 91 75-130 Surrogate: Dibromofluoromethane 2.25 " 2.50 90 75-120 Surrogate: 1,2-Dichloroethane-d4 2.23 " 2.50 89 60-125	Ethyl tert-butyl ether	8.96	0.50	"	10.0		90	65-130			
Foluene 9.25 0.50 " 10.0 92 75-120 Xylenes (total) 27.2 0.50 " 30.0 91 75-130 Surrogate: Dibromofluoromethane 2.25 " 2.50 90 75-120 Surrogate: 1,2-Dichloroethane-d4 2.23 " 2.50 89 60-125	Ethylbenzene	9.32	0.50	"	10.0		93	75-120			
Xylenes (total) 27.2 0.50 " 30.0 91 75-130 Surrogate: Dibromofluoromethane 2.25 " 2.50 90 75-120 Surrogate: 1,2-Dichloroethane-d4 2.23 " 2.50 89 60-125	Methyl tert-butyl ether	8.46	0.50	U	10.0		85	50-140			
Surrogate: I,2-Dichloroethane-d4 2.23 " 2.50 90 75-120 89 60-125	Гoluene	9.25	0.50	H	10.0		92	75-120			
Surrogate: 1,2-Dichloroethane-d4 2.23 " 2.50 89 60-125	Xylenes (total)	27.2	0.50	н	30.0		91	75-130			
narrogate. 1,2-Diction of emant-u4 2.25 2.50 07 00-125	Surrogate: Dibromofluoromethane	2.25		"	2.50		90	75-120			
Surrogate: Toluene-d8 2.40 " 2.50 96 80-120	Surrogate: 1,2-Dichloroethane-d4	2.23		"	2.50		89	60-125			
	Surrogate: Toluene-d8	2.40		"	2.50		96	80-120			

2.50

Surrogate: 4-Bromofluorobenzene

60-135





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQ10086 Reported: 09/20/07 13:40

RPD

%REC

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7I06030 - EPA 5030B P/T / E	PA 8260B									
Matrix Spike (7106030-MS1)	Source: MQ	Q10084-04		Prepared:	09/06/07	Analyzed	1: 09/07/07			
tert-Amyl methyl ether	10.4	0.50	ug/l	10.0	ND	104	65-135			
Benzene	9.23	0.50	0	10.0	ND	92	75-120			
tert-Butyl alcohol	194	20	n	200	5.63	94	60-135			
Di-isopropyl ether	9.86	0.50	н	10.0	ND	99	70-130			
Ethyl tert-butyl ether	10.4	0.50	II .	10.0	ND	104	65-130			
Ethylbenzene	8.79	0.50	п	10.0	ND	88	75-120			
Methyl tert-butyl ether	11.2	0.50	**	10.0	ND	112	50-140			
Toluene	10.2	0.50	**	10.0	ND	102	75-120			
Xylenes (total)	26.8	0.50	u	30.0	ND	89	75-130			
Surrogate: Dibromofluoromethane	2.61		"	2.50		104	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.62		n	2.50		105	60-125			
Surrogate: Toluene-d8	2.53		"	2.50		101	80-120			
Surrogate: 4-Bromofluorobenzene	2.12		"	2.50		85	60-135			
Matrix Spike Dup (7106030-MSD1)	Source: MQ	210084-04		Prepared:						
tert-Amyl methyl ether	9.33	0.50	ug/l	10.0	ND	93	65-135	11	25	
Benzene	8.39	0.50	II.	10.0	ND	84	75-120	10	20	
ert-Butyl alcohol	203	20	11	200	5.63	98	60-135	4	25	
Di-isopropyl ether	9.29	0.50	11	10.0	ND	93	70-130	6	25	
Ethyl tert-butyl ether	8.90	0.50	**	10.0	ND	89	65-130	16	25	
Ethylbenzene	8.37	0.50	н	10.0	ND	84	75-120	5	20	
Methyl tert-butyl ether	9.54	0.50	H	10.0	ND	95	50-140	16	25	
Toluene	9.30	0.50	IF.	10.0	ND	93	75-120	9	25	
Xylenes (total)	26.0	0.50	It	30.0	ND	87	75-130	3	20	
Surrogate: Dibromofluoromethane	2.31		11	2.50		92	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.32		"	2.50		93	60-125			
Surrogate: Toluene-d8	2.27		"	2.50		91	80-120			
Surrogate: 4-Bromofluorobenzene	2.20		"	2.50		88	60-135			
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Project: ARCO #2111, San Leandro, CA

Spike

Source

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQI0086 Reported: 09/20/07 13:40

RPD

%REC

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Reporting

2.50

		reporting		орис	Douree		70100		10.0	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7112029 - EPA 5030B P/T / EPA 8	8260B		4-4-4-4						***************************************	
Blank (7112029-BLK1)				Prepared	& Analyze	ed: 09/12/	07			
tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	н							
tert-Butyl alcohol	ND	20	**							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	n							
Ethylbenzene	ND	0.50	II .							
Methyl tert-butyl ether	ND	0.50	II							
Toluene	ND	0.50	81							
Xylenes (total)	ND	0.50	11							
Surrogate: Dibromofluoromethane	2.47		"	2.50		99	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.41		"	2.50		96	60-125			
Surrogate: Toluene-d8	2.49		"	2.50		100	80-120			
Surrogate: 4-Bromofluorobenzene	2.40		"	2.50		96	60-135			
Laboratory Control Sample (7I12029-BS1)				Prepared	& Analyze	ed: 09/12/0	07			
tert-Amyl methyl ether	9.56	0.50	ug/l	10.0		96	65-135			
Benzene	8.95	0.50	0	10.0		90	75-120			
tert-Butyl alcohol	162	20	41	200		81	60-135			
Di-isopropyl ether	8.47	0.50	H	10.0		85	70-130			
Ethyl tert-butyl ether	9.28	0.50	"	10.0		93	65-130			
Ethylbenzene	9.96	0.50	#	10.0		100	75-120			
Methyl tert-butyl ether	9.41	0.50	#	10.0		94	50-140			
Toluene	9.62	0.50	"	10.0		96	75-120			
Xylenes (total)	30.0	0.50	н	30.0		100	75-130			
Surrogate: Dibromofluoromethane	2.52		"	2.50		101	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.39		"	2.50		96	60-125			
Surrogate: Toluene-d8	2.55		"	2.50		102	80-120			

2.50

Surrogate: 4-Bromofluorobenzene

60-135

100





Project: ARCO #2111, San Leandro, CA

Spike

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQI0086 Reported: 09/20/07 13:40

RPD

%REC

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7I12029 - EPA 5030B P/T / E	PA 8260B									
Matrix Spike (7I12029-MS1)	Source: MQ	QI0133-01		Prepared	& Analyz	ed: 09/12/	07			
tert-Amyl methyl ether	13.7	0.50	ug/l	10.0	ND	137	65-135			LM
Benzene	11.8	0.50	н	10.0	ND	118	75-120			
tert-Butyl alcohol	217	20	п	200	ND	109	60-135			
Di-isopropyl ether	11.7	0.50	и	10.0	ND	117	70-130			
Ethyl tert-butyl ether	12.7	0.50	н	10.0	ND	127	65-130			
Ethylbenzene	13.2	0.50	11	10.0	ND	132	75-120			LM
Methyl tert-butyl ether	12.7	0.50	11	10.0	ND	127	50-140			
Toluene	12.9	0.50	0	10.0	ND	129	75-120			LM
Xylenes (total)	39.4	0.50	**	30.0	ND	131	75-130			LM
Surrogate: Dibromofluoromethane	2.59		"	2.50		104	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.49		"	2.50		100	60-125			
Surrogate: Toluene-d8	2.58		"	2.50		103	80-120			
Surrogate: 4-Bromofluorobenzene	2.76		"	2.50		110	60-135			
Matrix Spike Dup (7I12029-MSD1)	Source: MQ	210133-01		Prepared	& Analyz	ed: 09/12/	07			
tert-Amyl methyl ether	13.3	0.50	ug/l	10.0	ND	133	65-135	3	25	
Benzene	11.1	0.50	п	10.0	ND	111	75-120	6	20	
tert-Butyl alcohol	200	20	п	200	ND	100	60-135	8	25	
Di-isopropyl ether	11.0	0.50	II	10.0	ND	110	70-130	7	25	
Ethyl tert-butyl ether	12.1	0.50	п	10.0	ND	121	65-130	5	25	
Ethylbenzene	12.2	0.50	н	10.0	ND	122	75-120	7	20	LM
Methyl tert-butyl ether	12.4	0.50	n	10.0	ND	124	50-140	2	25	
Toluene	11.9	0.50	**	10.0	ND	119	75-120	8	25	
Xylenes (total)	36.3	0.50	**	30.0	ND	121	75-130	8	20	
Surrogate: Dibromofluoromethane	2.58		"	2.50		103	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.51		"	2.50		100	60-125			
Surrogate: Toluene-d8	2.59		"	2.50		104	80-120			
Surrogate: 4-Bromofluorobenzene	2.90		"	2.50		116	60-135			





Project: ARCO #2111, San Leandro, CA

Spike

Project Number: G0C28-0023 Project Manager: Jay Johnson

MQI0086 Reported: 09/20/07 13:40

RPD

%REC

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Reporting

2.45

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7113029 - EPA 5030B P/T / EPA 8	3260B									
Blank (7I13029-BLK1)				Prepared	& Analyze	ed: 09/13/0	07			
tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	ti .							
tert-Butyl alcohol	ND	20	#							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Surrogate: Dibromofluoromethane	2.64		"	2.50		106	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.85		"	2.50		114	60-125			
Surrogate: Toluene-d8	2.41		"	2.50		96	80-120			
Surrogate: 4-Bromofluorobenzene	2.34		"	2.50		94	60-135			
Laboratory Control Sample (7I13029-BS1)				Prepared	& Analyze	ed: 09/13/0	07			
tert-Amyl methyl ether	10.1	0.50	ug/l	10.0		101	65-135			
Benzene	8.85	0.50	**	10.0		88	75-120			
tert-Butyl alcohol	187	20	**	200		93	60-135			
Di-isopropyl ether	9.19	0.50	"	10.0		92	70-130			
Ethyl tert-butyl ether	10.0	0.50	н	10.0		100	65-130			
Ethylbenzene	9.57	0.50	H	10.0		96	75-120			
Methyl tert-butyl ether	9.68	0.50	#1	10.0		97	50-140			
Toluene	9.58	0.50	"	10.0		96	75-120			
Xylenes (total)	28.3	0.50	н	30.0		94	75-130			
Surrogate: Dibromofluoromethane	2.62		"	2.50		105	75-120		***	
Surrogate: 1,2-Dichloroethane-d4	2.83		"	2.50		113	60-125			
Surrogate: Toluene-d8	2.48		"	2.50		99	80-120			

2.50

Surrogate: 4-Bromofluorobenzene

60-135

98





Project: ARCO #2111, San Leandro, CA

Spike

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQI0086 Reported: 09/20/07 13:40

RPD

%REC

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7113029 - EPA 5030B P/T / E	PA 8260B									
Matrix Spike (7I13029-MS1)	Source: MQ	Q10042-03		Prepared	& Analyze	ed: 09/13/	07			
tert-Amyl methyl ether	10.5	0.50	ug/l	10.0	ND	105	65-135			
Benzene	9.97	0.50	11	10.0	1.06	89	75-120			
tert-Butyl alcohol	198	20	n	200	ND	99	60-135			
Di-isopropyl ether	9.53	0.50	н	10.0	ND	95	70-130			
Ethyl tert-butyl ether	10.2	0.50	11	10.0	ND	102	65-130			
Ethylbenzene	10.1	0.50	11	10.0	0.370	98	75-120			
Methyl tert-butyl ether	46.3	0.50	"	10.0	41.7	46	50-140			BE
Toluene	10.2	0.50	**	10.0	ND	102	75-120			
Xylenes (total)	29.5	0.50	"	30.0	ND	98	75-130			
Surrogate: Dibromofluoromethane	2.58		"	2.50		103	75-120		,	
Surrogate: 1,2-Dichloroethane-d4	2.74		"	2.50		110	60-125			
Surrogate: Toluene-d8	2.45		"	2.50		98	80-120			
Surrogate: 4-Bromofluorobenzene	2.54		"	2.50		102	60-135			
Matrix Spike Dup (7I13029-MSD1)	Source: MQ	210042-03		Prepared	& Analyze	ed: 09/13/	07			
tert-Amyl methyl ether	11.1	0.50	ug/l	10.0	ND	111	65-135	5	25	
Benzene	9.88	0.50	#	10.0	1.06	88	75-120	0.9	20	
tert-Butyl alcohol	198	20	н	200	ND	99	60-135	0.3	25	
Di-isopropyl ether	9.94	0.50	и	10.0	ND	99	70-130	4	25	
Ethyl tert-butyl ether	10.9	0.50	"	10.0	ND	109	65-130	7	25	
Ethylbenzene	10.1	0.50	"	10.0	0.370	98	75-120	0.2	20	
Methyl tert-butyl ether	49.6	0.50	u	10.0	41.7	79	50-140	7	25	
Toluene	9.94	0.50	"	10.0	ND	99	75-120	3	25	
Xylenes (total)	29.1	0.50	"	30.0	ND	97	75-130	1	20	
Surrogate: Dibromofluoromethane	2.77		"	2.50		111	75-120			
Surrogate: 1,2-Dichloroethane-d4	2.95		"	2.50		118	60-125			
Surrogate: Toluene-d8	2.49		"	2.50		100	80-120			
Surrogate: 4-Bromofluorobenzene	2.56		"	2.50		102	60-135			



885 Jarvis Drive Morgan Hill, CA 95037 (408) 776-9600 FAX (408) 782-6308 www.testamericainc.com

Stratus Environmental Inc. [Arco]
Project: ARCO #2111, San Leandro, CA
MQI0086
3330 Cameron Park Dr., Suite 550
Project Number: G0C28-0023
Cameron Park CA, 95682
Project Manager: Jay Johnson
09/20/07 13:40

Notes and Definitions

LM MS and/or MSD above acceptance limits. See Blank Spike(LCS).

BB Sample > 4x spike concentration

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

	f		1
Page_	L	of	,

Atlantic Richfield Company

A BP affiliated company

Chain of Custody Record

RUSH

Project Name:

ARCO Facility No. 2111

BP BU/AR Region/Enfos Segment:

BP > Americas > West > Retail > Alameda

State or Lead Regulatory Agency:

California Regional Water Quality Control Board

Requested Due Date (mm/dd/yy):

24 hours for Effluent & STD for others

On-site Time: 0500 Temp: 50
Off-site Time: 0700 Temp: 51
Sky Conditions:
Meteorological Events:
Wind Speed: Direction:

nb Name: TestAmerica	<u> </u>		SID for others	16 1 16	Cr			
	BP/AR Facility No.			Consultant/Contractor:				
ddress: 885 Jarvis Drive	**************************************	dress: 1156 Davis St., San Le	andro	Address: 3330 Cameron Park Drive, Suite 550				
organ Hill, CA 95937	Site Lat/Long:			Cameron Park, CA 95682				
b PM: Lisa Race	California Global II	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Consultant/Contractor Proje				
le/Fax: 408-782-8156/ 408-782-6308	Enfos Project No.:	G0C28-0023		Consultant/Contractor PM:	Jay Johnson			
P/AR PM Contact: Paul Supple	Provision or OOC	(circle one) Provision	on	Tele/Fax: (530) 676-0	5000 / (530) 676-6005			
Idress: 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: shaye				
lc/Fax: 925-275-3506/925-275-3815	Cost Element:	Subcontractor Cost		Invoice to: Atlantic Richfie	ld Co.			
b Bottle Order No:	latrix	Preservative	Requested Ana	lysis Turnaround Time				
Date Date Date Name Soil/Solid	Laboratory No.	No. of Containers Unpreserved H2SO4 HNO3	Methanol GRO by 8015 BTEX by 8260 5-oxygenates by 8260	24-hours Standard	Sample Point Lat/Long and Comments			
02111DP EWI NF 0607 9507 x			xxx	x	5-oxygenates requested are			
			xxx	x	MTBE, DIPE, ETBE, TAME, an			
		6 X	X X X	 	TBA.			
				X				
02111WGAC1 #552 / ×			X X X	X				
02111WEFF 6548 ×	05	e v	x x x	x				
02111MW2WINF 8544 ×	06	18 X	x x x	x				
132419507 0610 X	07 1				Hold			
					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
npler's Name: Chris Hill	L Bety	hquished By / Affiliation-	Date Time	Accepted By / /	Affiliation Date Tim			
npler's Company: Stratus Environmental, Inc.	mille	el Hater	75071353	My that	7-507 13			
pment Date: 990 l	100	A Lla A	9-5-7 1540	19 1	95-7156			
pment Method:	1/	Jun V	4-5-012010		98 200			
pment Tracking No:								
cial Instructions: Please cc resu	Its to bpedf@broadbentinc.	.Com						
	_ <u>a</u>		***************************************					
Custody Seals In Place: Yes / No Temp Blan	ik: Yos/No Cooler	Temp on Receipt: °	F/C Trip Blank:	Os/No MS/MSD S	Sample Submitted: Yes / No			

0

TEST AMERICA SAMPLE RECEIPT LOG

CLIENT NAME: REC. BY (PRINT) WORKORDER:	Apw DV Majas6		DATE REC'D AT LAB: TIME REC'D AT LAB: DATE LOGGED IN:	9/05/	UR			_	MATER YES / NO
CIRCLE THE APPRO	OPRIATE RESPONSE	LAB SAMPLE#	CLIENT ID	CONTAINER DESCRIPTION		рН	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s)	Present / Absent								
•	Intact / Broken*								
2. Chain-of-Custody	Present / Absent*		·						
3, Traffic Reports or									
Packing Ust:	Present / Absent		,					·	
4. Airbill:	Airbill / Slicker		le.	·					
	Present / Absent								
5. Airbill #:									
6. Sample Labels:	Present / Absent								
7. Sample IDs:	· Listed / Not Listed								
	on-Chain-of-Custody								
8. Sample Condition:	(ntact) Broken* /			•					
	Leaking*			Secol					
9. Does information on	J ,			9/6/06					
traffic reports and s	*			DV					
agree?	(Yes / No*								
D. Sample received within									
hold time?	Yesy No*			_/_					
I. Adequate sample volu				/					
received?	Yes / No*	.365							
2. Proper preservatives u	sed? (res / No*		/_						
3. Trip Blank Temp Blan									
(circle which, if yes)	YesVMg						•		
l. Read Témp:	3.80						<u> </u>		-
Corrected Temp: Is corrected temp 4 +/-	-2°C? Yes / No**						- in		
cceptance range for samples req		/		<u>-</u>					
cceptance range for samples req Exception (if any): META	· · · · · · · · · · · · · · · · · · ·	-/-							STATE OF THE PARTY
or Problem COC	FO L DIST, ON ICE	/				_			
					1	- 1	1	1	

*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.

evision 8 Rev 7 (07/19/05)



11 September, 2007

Jay Johnson Stratus Environmental Inc. [Arco] 3330 Cameron Park Dr., Suite 550 Cameron Park, CA 95682

RE: ARCO #2111, San Leandro, CA Work Order: MQI0081

Enclosed are the results of analyses for samples received by the laboratory on 09/05/07 20:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa Race

Senior Project Manager

CA ELAP Certificate # 1210

The results in this laboratory report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the BPGCLN Technical Specifications, applicable Federal, State, local regulations and certification requirements as well as the methodologies as described in laboratory SOPs reviewed by the BPGCLN. This entire report was reviewed and approved for release.





Stratus Environmental Inc. [Arco] Project: ARCO #2111, San Leandro, CA MQ10081
3330 Cameron Park Dr., Suite 550 Project Number: G0C28-0023 Reported:
Cameron Park CA, 95682 Project Manager: Jay Johnson 09/11/07 12:12

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
02111DPEAINF	MQI0081-01	Vapor	09/05/07 06:16	09/05/07 20:10
02111ASAEFF	MQI0081-02	Vapor	09/05/07 06:27	09/05/07 20:10
02111ASYSINF	MQI0081-03	Vapor	09/05/07 06:25	09/05/07 20:10
02111AGAC1	MQI0081-04	Vapor	09/05/07 06:22	09/05/07 20:10
02111AEFF	MQI0081-05	Vapor	09/05/07 06:20	09/05/07 20:10

The carbon range for the TPH-GRO has been changed from C6-C10 to C4-C12. The carbon range for TPH-DRO has been changed from C10-C28 to C10-C36. EPA 8015B has been modified to better meet the requirements of California regulatory agencies. These samples were received with no custody seals.





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023 Project Manager: Jay Johnson MQI0081 Reported: 09/11/07 12:12

Total Purgeable Hydrocarbons by GC/MS (CA LUFT) TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
02111DPEAINF (MQI0081-01) Vapor	Sampled: 09/0	5/07 06:16	Received:	09/05/07	20:10				
Gasoline Range Organics (C4-C12)	2600	50	mg/m³ Air	1	7106004	09/06/07	09/06/07 15:25	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		111 %	60-1	25	"	"	"	n	
Gasoline Range Organics (C4-C12)	740	14	ppmv	"		11	"	н	
Surrogate: 1,2-Dichloroethane-d4		111 %	60-1.	25	"	"	"	"	
02111ASAEFF (MQI0081-02) Vapor	Sampled: 09/05	/07 06:27	Received: 0	9/05/07 20	0:10				
Gasoline Range Organics (C4-C12)	ND	50	mg/m³ Air	1	7106004	09/06/07	09/06/07 15:55	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		103 %	60-1.	25	"	11	"	n	
Gasoline Range Organics (C4-C12)	ND	14	ppmv	11	"	11	41	п	
Surrogate: 1,2-Dichloroethane-d4		103 %	60-1.	25	"	"	"	"	
02111ASYSINF (MQI0081-03) Vapor	Sampled: 09/0	5/07 06:25	Received: (9/05/07 2	20:10				
Gasoline Range Organics (C4-C12)	1200	50	mg/m³ Air	1	7106004	09/06/07	09/06/07 17:59	LUFT GCMS	·
Surrogate: 1,2-Dichloroethane-d4		105 %	60-1.	25	"	"	"	"	
Gasoline Range Organics (C4-C12)	350	14	ppmv	11	11	H	P	"	
Surrogate: 1,2-Dichloroethane-d4		105 %	60-1.	25	"	"	"	n	
02111AGAC1 (MQI0081-04) Vapor	Sampled: 09/05/	07 06:22 R	eceived: 09	05/07 20	:10				
Gasoline Range Organics (C4-C12)	ND	50	mg/m³ Air	1	7106004	09/06/07	09/06/07 18:29	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		114 %	60-1.	25	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	14	ppmv	н	н	"	H	II .	
Surrogate: 1,2-Dichloroethane-d4		114 %	60-1.	25	"	"	"	"	
02111AEFF (MQ10081-05) Vapor Sa	mpled: 09/05/07	06:20 Rec	eived: 09/05	5/07 20:10	0				
Gasoline Range Organics (C4-C12)	ND	50	mg/m³ Air	1	7105028	09/05/07	09/06/07 01:09	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		108 %	60-1.	25	u u	"	"	"	
Gasoline Range Organics (C4-C12)	ND	14	ppmv	11	11	H	n	H	
Surrogate: 1,2-Dichloroethane-d4		108 %	60-12	25	"	"	"	#	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQ10081 Reported: 09/11/07 12:12

Purgeable Hydrocarbons and Volatile Organic Compounds by EPA method 8260B TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
02111DPEAINF (MQI0081-01) Vapor	Sampled: 09/05.	/07 06:16	Received:	09/05/07	20:10				
Methyl tert-butyl ether	20	0.50	mg/m³ Air	1	7106004	09/06/07	09/06/07 15:25	EPA 8260B	
Benzene	1.4	0.50	II	н	Ħ	и	u	"	
Toluene	ND	0.50	II	н	n	U	"	#	
Ethylbenzene	3.2	0.50	Ш	н	"	11	"	#	
Xylenes (total)	7.9	0.50	11	н	H	n			
Surrogate: 1,2-Dichloroethane-d4		111 %	60-1	25	"	"	"	n	
Methyl tert-butyl ether	5.6	0.14	ppmv	H	n	"	11	"	
Benzene	0.45	0.16	ш	11	n	n.	11	н	
Toluene	ND	0.13	11	н	n	"	11	n	
Ethylbenzene	0.73	0.12	Ħ	n	11	,,	H	**	
Xylenes (total)	1.8	0.12	H	H	"				
Surrogate: 1,2-Dichloroethane-d4		111 %	60-1	25	"	"	"	"	
02111ASAEFF (MQI0081-02) Vapor	Sampled: 09/05/0	7 06:27 I	Received: 0	9/05/07 20	0:10				
Methyl tert-butyl ether	5.1	0.50	mg/m³ Air	1	7106004	09/06/07	09/06/07 15:55	EPA 8260B	
Benzene	ND	0.50	ij	II	П	IF	n	n	
Toluene	ND	0.50	"	41	II	н	II	11	
Ethylbenzene	ND	0.50	11	Ħ	п	11	11	II .	
Xylenes (total)	ND	0.50	11	11	#1	0	11	It .	
Surrogate: 1,2-Dichloroethane-d4		103 %	60-1	25	"	"	"	"	
Methyl tert-butyl ether	1.4	0.14	ppmv	n	"	#	**	ш	
Benzene	ND	0.16	П	"		н	H	ıı	
Toluene	ND	0.13	II.	11	n	**	#	n	
Ethylbenzene	ND	0.12	41	н	H	н	#	"	
Xylenes (total)	ND	0.12	11	11	11	H	"	**	
Surrogate: 1,2-Dichloroethane-d4		103 %	60-1	25	"	"	"	n	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQI0081 Reported: 09/11/07 12:12

Purgeable Hydrocarbons and Volatile Organic Compounds by EPA method 8260B TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
02111ASYSINF (MQI0081-03) Vapor	Sampled: 09/05/	/07 06:25	Received:	09/05/07 2	20:10				
Methyl tert-butyl ether	14	0.50	mg/m³ Air	1	7106004	09/06/07	09/06/07 17:59	EPA 8260B	
Benzene	0.79	0.50	H	**	**	n	H	U	
Toluene	ND	0.50	n	**	11	"	"	ff.	
Ethylbenzene	1.5	0.50	H	**	**	"	"	11	
Xylenes (total)	3.8	0.50	11	"	"	"		11	
Surrogate: 1,2-Dichloroethane-d4		105 %	60-1	25	"	n .	"	"	
Methyl tert-butyl ether	3.9	0.14	ppmv	н	"	n	н	n	
Benzene	0.25	0.16	"	ti .	H	II	H	н	
Toluene	ND	0.13	**	п	"	II .	II.	11	
Ethylbenzene	0.36	0.12	n	11	It	ŧi.	Ü	u	
Xylenes (total)	0.88	0.12	II	91	н	11	11	u .	
Surrogate: 1,2-Dichloroethane-d4		105 %	60-1	25	n	n	"	u	
02111AGAC1 (MQI0081-04) Vapor	Sampled: 09/05/0	7 06:22 R	eceived: 09	/05/07 20:	:10				
Methyl tert-butyl ether	ND	0.50	mg/m³ Air	1	7106004	09/06/07	09/06/07 18:29	EPA 8260B	
Benzene	ND	0.50	"	ü	*	D	16	II	
Toluene	ND	0.50	"	n	11	II	ti .	ti .	
Ethylbenzene	ND	0.50	n	II	n	п	n .	II	
Xylenes (total)	ND	0.50	n	ii	II .	11	11	11	
Surrogate: 1,2-Dichloroethane-d4		114 %	60-1	25	"	"	"	"	
Methyl tert-butyl ether	ND	0.14	ppmv	**	ш	##	II .	**	
Benzene	ND	0.16		#	11		ш	#	
Toluene	ND	0.13	Н	"	1)	"	II .	"	
Ethylbenzene	ND	0.12	U	**	II .	**	и	**	
Xylenes (total)	ND	0.12	11	u	0	*	**	"	
Surrogate: 1,2-Dichloroethane-d4		114%	60-1	25	"	"	"	"	,





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023 Project Manager: Jay Johnson MQI0081 Reported: 09/11/07 12:12

Purgeable Hydrocarbons and Volatile Organic Compounds by EPA method 8260B TestAmerica - Morgan Hill, CA

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
02111AEFF (MQI0081-05) Vapor	Sampled: 09/05/07 0	6:20 Rec	eived: 09/0	5/07 20:1	0				
Methyl tert-butyl ether	ND	0.50	mg/m³ Air	1	7105028	09/05/07	09/06/07 01:09	EPA 8260B	
Benzene	ND	0.50	н	H	**	R	#	н	
Toluene	ND	0.50	u	II	"	11	"	n	
Ethylbenzene	ND	0.50	11	н	H	н	u u	n	
Xylenes (total)	ND	0.50	H	11	11	11	lt .	II	
Surrogate: 1,2-Dichloroethane-d4		108 %	60-1	25	"	"	"	"	
Methyl tert-butyl ether	ND	0.14	ppmv	"	п	**	11	"	
Benzene	ND	0.16	н	n	н	**	11	"	
Toluene	ND	0.13	"	II	и	II	#	ŧi	
Ethylbenzene	ND	0.12	"	11	"	11	"	tt	
Xylenes (total)	ND	0.12	"	11	"	11	"	П	
Surrogate: 1,2-Dichloroethane-d4		108 %	60-1	25	n	"	"	"	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQI0081 Reported: 09/11/07 12:12

Total Purgeable Hydrocarbons by GC/MS (CA LUFT) - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7105028 - EPA 5030B P/T /	LUFT GCMS									
Blank (7105028-BLK1)				Prepared	& Analyzo	ed: 09/05/	07			
Gasoline Range Organics (C4-C12)	ND	14	ppmv							
Gasoline Range Organics (C4-C12)	ND	50	mg/m³ Air							
Surrogate: 1,2-Dichloroethane-d4	0.625		ppmv	0.594		105	60-125			
Surrogate: 1,2-Dichloroethane-d4	2.63		mg/m³ Air	2.50		105	60-125			
Laboratory Control Sample (7105028-	·BS2)			Prepared o	& Analyze	ed: 09/05/)7			
Gasoline Range Organics (C4-C12)	402	50	mg/m³ Air	500		80	65-120			
Gasoline Range Organics (C4-C12)	114	14	ppmv	142		80	65-120			
Surrogate: 1,2-Dichloroethane-d4	2.60		mg/m³ Air	2.50		104	60-125			
Surrogate: 1,2-Dichloroethane-d4	0.617		ppmv	0.594		104	60-125			
Laboratory Control Sample Dup (710:	5028-BSD2)			Prepared of	& Analyze	ed: 09/05/0	07			
Gasoline Range Organics (C4-C12)	395	50	mg/m³ Air	500		79	65-120	2	20	
Gasoline Range Organics (C4-C12)	112	14	ppmv	142		79	65-120	2	20	
Surrogate: 1,2-Dichloroethane-d4	2.55		mg/m³ Air	2.50		102	60-125			
Surrogate: 1,2-Dichloroethane-d4	0.606		ppmv	0.594		102	60-125			
Batch 7106004 - EPA 5030B P/T /	LUFT GCMS									
Blank (7I06004-BLK1)				Prepared o	& Analyze	ed: 09/06/0)7			
Gasoline Range Organics (C4-C12)	ND	50	mg/m³ Air							
Gasoline Range Organics (C4-C12)	ND	14	ppmv							
Surrogate: 1,2-Dichloroethane-d4	2.34		mg/m³ Air	2.50		94	60-125			
Surrogate: 1,2-Dichloroethane-d4	0.556		ppmv	0.594		94	60-125			
Laboratory Control Sample (7106004-	BS2)			Prepared 6	& Analyze	ed: 09/06/0)7			
Gasoline Range Organics (C4-C12)	460	50	mg/m³ Air	500		92	65-120			
Gasoline Range Organics (C4-C12)	131	14	ppmv	142		92	65-120			
Surrogate: 1,2-Dichloroethane-d4	2.44		mg/m³ Air	2,50		98	60-125			
Surrogate: 1,2-Dichloroethane-d4	0.579		ppmv	0.594		98	60-125			





Surrogate: 1,2-Dichloroethane-d4

Surrogate: 1,2-Dichloroethane-d4

Project: ARCO #2111, San Leandro, CA

Spike

2.50

0.594

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQI0081 Reported: 09/11/07 12:12

RPD

%REC

60-125

60-125

96

96

Total Purgeable Hydrocarbons by GC/MS (CA LUFT) - Quality Control TestAmerica - Morgan Hill, CA

Reporting

2.40

0.570

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7106004 - EPA 5030B P/T / 1	LUFT GCMS									
Laboratory Control Sample Dup (7106	6004-BSD2)			Prepared	& Analyze	ed: 09/06/0	07			
Gasoline Range Organics (C4-C12)	442	50	mg/m³ Air	500		88	65-120	4	20	
Gasoline Range Organics (C4-C12)	126	14	ppmv	142		88	65-120	4	20	

mg/m³ Air

ppmv





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023 Project Manager: Jay Johnson

MQI0081 Reported: 09/11/07 12:12

Purgeable Hydrocarbons and Volatile Organic Compounds by EPA method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7105028 - EPA 5030B P/T / EPA	8260B									
Blank (7105028-BLK1)				Prepared a	& Analyze	d: 09/05/0	07			
Methyl tert-butyl ether	ND	0.14	ppmv							
Methyl tert-butyl ether	ND	0.50	mg/m³ Air							
Benzene	ND	0.50	H							
Benzene	ND	0.16	ppmv							
Toluene	ND	0.13	н							
Toluene	ND	0.50	mg/m³ Air							
Ethylbenzene	ND	0.12	ppmv							
Ethylbenzene	ND	0.50	mg/m³ Air							
Xylenes (total)	ND	0.12	ppmv							
Xylenes (total)	ND	0.50	mg/m³ Air							
Surrogate: 1,2-Dichloroethane-d4	2.63		"	2.50		105	60-125			
Surrogate: 1,2-Dichloroethane-d4	0.625		ppmv	0.594		105	60-125			
Laboratory Control Sample (7105028-BS1)				Prepared a	& Analyze	d: 09/05/0	07			
Methyl tert-butyl ether	2.62	0.14	ppmv	2.78		94	50-140			
Methyl tert-butyl ether	9.41	0.50	mg/m³ Air	10.0		94	50-140			
Benzene	2.69	0.16	ppmv	3.14		86	75-120			
Benzene	8.58	0.50	mg/m³ Air	10.0		86	75-120			
Toluene	2.29	0.13	ppmv	2.66		86	75-120			
Toluene	8.61	0.50	mg/m³ Air	10.0		86	75-120			
Ethylbenzene	2.02	0.12	ppmv	2.31		88	75-120			
Ethylbenzene	8.77	0.50	mg/m³ Air	10.0		88	75-120			
Xylenes (total)	6.36	0.12	ppmv	6.92		92	75-130			
Xylenes (total)	27.6	0.50	mg/m³ Air	30.0		92	75-130			
Surrogate: 1,2-Dichloroethane-d4	0.620		ppmv	0.594		104	60-125			
Surrogate: 1,2-Dichloroethane-d4	2.61		mg/m³ Air	2.50		104	60-125			
Laboratory Control Sample Dup (7105028-B	SD1)			Prepared &	& Analyze	d: 09/05/0)7			
Methyl tert-butyl ether	3.00	0.14	ppmv	2.78		108	50-140	14	25	
Methyl tert-butyl ether	10.8	0.50	mg/m³ Air	10.0		108	50-140	14	25	
Benzene	3.15	0.16	ppmv	3.14		100	75-120	16	20	
Benzene	10.0	0.50	mg/m³ Air	10.0		100	75-120	16	20	
Toluene	2.74	0.13	ppmv	2.66		103	75-120	18	25	
Toluene	10.3	0.50	mg/m³ Air	10.0		103	75-120	18	25	
Ethylbenzene	2.48	0.12	ppmv	2.31		107	75-120	20	20	
Ethylbenzene	10.7	0.50	mg/m³ Air	10.0		107	75-120	20	20	

TestAmerica - Morgan Hill, CA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.



885 Jarvis Drive Morgan Hill, CA 95037 (408) 776-9600 FAX (408) 782-6308 www.testamericainc.com

Stratus Environmental Inc. [Arco] 3330 Cameron Park Dr., Suite 550 Cameron Park CA, 95682

Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQI0081 Reported: 09/11/07 12:12

Purgeable Hydrocarbons and Volatile Organic Compounds by EPA method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7105028 - EPA 5030B P/T / I	EPA 8260B	4.00								
Laboratory Control Sample Dup (7105	028-BSD1)			Prepared o	& Analyze	d: 09/05/	07			
Xylenes (total)	7.72	0.12	ppmv	6.92		111	75-130	19	20	
Xylenes (total)	33.4	0.50	mg/m³ Air	30.0		111	75-130	19	20	
Surrogate: 1,2-Dichloroethane-d4	0.603		ppmv	0.594		102	60-125			
Surrogate: 1,2-Dichloroethane-d4	2.54		mg/m³ Air	2.50		102	60-125			
Batch 7I06004 - EPA 5030B P/T / I	EPA 8260B									
Blank (7I06004-BLK1)				Prepared of	& Analyze	d: 09/06/	07			
Methyl tert-butyl ether	ND	0.14	ppmv							
Methyl tert-butyl ether	ND	0.50	mg/m³ Air							
Benzene	ND	0.16	ppmv							
Benzene	ND	0.50	mg/m³ Air							
Toluene	ND	0.13	ppmv							
Toluene	ND	0.50	mg/m³ Air							
Ethylbenzene	ND	0.12	ppmv							
Ethylbenzene	ND	0.50	mg/m³ Air							
Xylenes (total)	ND	0.50	н							
Xylenes (total)	ND	0.12	ppmv							
Surrogate: 1,2-Dichloroethane-d4	0.556		"	0.594		94	60-125			
Surrogate: 1,2-Dichloroethane-d4	2.34		mg/m³ Air	2.50		94	60-125			
Laboratory Control Sample (7106004-1	BS1)			Prepared & Analyzed: 09/06/07						
Methyl tert-butyl ether	2.74	0.14	ppmv	2.78		99	50-140			
Methyl tert-butyl ether	9.87	0.50	mg/m³ Air	10.0		99	50-140			
Benzene	9.93	0.50	11	10.0		99	75-120			
Benzene	3.11	0.16	ppmv	3.14		99	75-120			
Toluene	10.7	0.50	mg/m³ Air	10.0		107	75-120			
Toluene	2.85	0.13	ppmv	2.66		107	75-120			
Ethylbenzene	11.4	0.50	mg/m³ Air	10.0		114	75-120			
Ethylbenzene	2.62	0.12	ppmv	2.31		114	75-120			
Xylenes (total)	8.00	0.12	n	6.92		116	75-130			
Xylenes (total)	34.7	0.50	mg/m³ Air	30.0		116	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.55		и	2.50		102	60-125			
Surrogate: 1,2-Dichloroethane-d4	0.606		ppmv	0.594		102	60-125			





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MQI0081 Reported: 09/11/07 12:12

RPD

%REC

Purgeable Hydrocarbons and Volatile Organic Compounds by EPA method 8260B - Quality Control TestAmerica - Morgan Hill, CA

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7106004 - EPA 5030B P/T /	EPA 8260B									
Laboratory Control Sample Dup (710	6004-BSD1)]	Prepared	& Analyze	ed: 09/06/	07			
Methyl tert-butyl ether	2.62	0.14	ppmv	2.78		94	50-140	5	25	
Methyl tert-butyl ether	9.42	0.50	mg/m³ Air	10.0		94	50-140	5	25	
Benzene	9.83	0.50	11	10.0		98	75-120	1	20	
Benzene	3.08	0.16	ppmv	3.14		98	75-120	1	20	
Toluene	10.4	0.50	mg/m³ Air	10.0		104	75-120	4	25	
Toluene	2.75	0.13	ppmv	2.66		104	75-120	4	25	
Ethylbenzene	11.2	0.50	mg/m³ Air	10.0		112	75-120	1	20	
Ethylbenzene	2.59	0.12	ppmv	2.31		112	75-120	l	20	
Xylenes (total)	7.92	0.12	II	6.92		114	75-130	1	20	
Xylenes (total)	34.3	0.50	mg/m³ Air	30.0		114	75-130	1	20	
Surrogate: 1,2-Dichloroethane-d4	2.39		11	2.50		96	60-125			
Surrogate: 1,2-Dichloroethane-d4	0.568		ppmv	0.594		96	60-125			



885 Jarvis Drive Morgan Hill, CA 95037 (408) 776-9600 FAX (408) 782-6308 www.testamericainc.com

Stratus Environmental Inc. [Arco]
Project: ARCO #2111, San Leandro, CA
MQI0081
3330 Cameron Park Dr., Suite 550
Project Number: G0C28-0023
Cameron Park CA, 95682
Project Manager: Jay Johnson
09/11/07 12:12

Notes and Definitions

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

Lisa Race

From: Kiran Nagaraju [knagaraju@stratusinc.net] Thursday, September 06, 2007 11:48 AM Sent:

To:

Lisa Race; shayes@stratusinc.net

Subject: RE: COC for ARCO#2111 air samples taken 9/5 - MQI0081

Lisa,

GRO by GC/MS should be OK for these air samples.

Thanks. Kiran Nagaraju Staff Engineer Stratus Environmental, Inc. Ph: (530) 676 6007

Fax: (530) 676 6005

From: Sandy Hayes [mailto:shayes@stratusinc.net] Sent: Thursday, September 06, 2007 10:34 AM

To: Kiran Nagaraju

Subject: FW: COC for ARCO#2111 air samples taken 9/5 - MQI0081

Kiran.

Can you answer Lisa's question?

Thanks.

Sandy Hayes Stratus Environmental, Inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682 shayes@stratusinc.net Phone: 530.313.9964

Fax: 530.676.6005

----Original Message----

From: Lisa Race [mailto:lisa.race@testamericainc.com]

Sent: Thursday, September 06, 2007 9:12 AM

To: Sandy Hayes

Subject: COC for ARCO#2111 air samples taken 9/5 - MQI0081

Sandy,

This is the COC that I spoke about in the voice message I left you. In order to meet the hold times and TATs we will need to switch the GRO to GC/MS rather than GC. If these need to be run by GC than we can do that but most likely they will be out of hold. Please let me know if running by GC/MS is OK...

See attached. Feel free to contact me with any questions. Please note new e-mail address: Lisa.Race@Testamericainc.com

LISA RACE Senior Project Manager

TestAmerica
The leader in environmental testing

885 Jarvis Drive Morgan Hill, CA 95037 Tel 408.782.8156 | Fax 408.782.6308 www.testamericainc.com www.stl-inc.com

Confidentiality Notice: The information contained in this message is intended only for the use of the addressee, and may be confidential and/or privileged. If the reader of this message is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately.

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	R	ar	nf	ie	ld
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A BP affiliated company

Chain of Custody Record

BP BU/AR Region/Enfos Segment:

Project Name: ARCO Facility No. 2111

BP > Americas > West > Retail > Alameda

RUSH

State or Lead Regulatory Agency: California Regional Water Quality Control Board

Requested Due Date (mm/dd/yy): 24 hours for Effluent & STD for others

 On-site
 Time:
 0500
 Temp:
 50

 Off-site
 Time:
 0700
 Temp:
 57

 Sky Conditions:
 Temp:
 57
 Temp:
 57

Wind Speed: Direction:

Meteorological Events:

Lab Name: TestAmerica BP/AR Facility No.: 2111 Consultant/Contractor: Stratus Environmental, Inc. Address: 885 Jarvis Drive Address: 3330 Cameron Park Drive, Suite 550 BP/AR Facility Address: 1156 Davis St., San Leandro Morgan Hill, CA 95937 Cameron Park, CA 95682 Site Lat/Long: Lab PM: Lisa Race California Global ID No.: T0600101764 Consultant/Contractor Project No.: E2111-03 Tele/Fax: 408-782-8156/ 408-782-6308 Enfos Project No.: G0C28-0023 Consultant/Contractor PM: Jay Johnson (530) 676-6000 / (530) 676-6005 BP/AR PM Contact: Paul Supple Provision or OOC (circle one) Provision Tele/Fax: Address: 2010 Crow Canyon Place, Suite 150 Phase/WBS: 03-O&M Report Type & QC Level: Level 1 with EDF E-mail EDD To: shayes@stratusinc.net San Ramon, CA Sub Phase/Task: 03-Analytical Tele/Fax: 925-275-3506/925-275-3815 Subcontractor Cost Invoice to: Atlantic Richfield Co. Cost Element: Lab Bottle Order No: Matrix Preservative Requested Analysis **Turnaround Time** Sample Point Lat/Long and ATBE by 8260 **STEX by 8260** GRO by 8015 Water/Liquid Time Comments Item Soil/Solid Sample Description Laboratory No. Methanol No. Standard HNO, HC Air MOIWAI 0616 9507 $\mathbf{x} \mid \mathbf{x}$ 02111DPEAINF х Х х ULZZ х 02 х Х Х х 2 02111ASAEFF 0625 х х x Х х 02111ASYSINF MUZZ 04 х х х х 02111AGAC1 DIEZO 15 X 02111AEFF 6 8 9 Sampler's Name Thous HILL Relinquished By / Affination Date Time Accepted By / Affiliation Date Time Sampler's Company: Stratus Environmental, Inc. Shipment Date: 48-500 9501 15,408 9/05/07/ 2010 Shipment Method: TAMH 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: --Trip Blank: Yes /(No MS/MSD Sample Submitted: Yes (No)

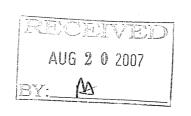
TEST AMERICA SAMPLE RECEIPT LOG

CLIENT NAME: REC. BY (PRINT) WORKORDER:	Ario A·M. MOIOSI		DATE REC'D AT LAB: TIME REC'D AT LAB: DATE LOGGED IN:	LAB: 2010 IN: 9/05/07				For Regulatory Purposes? DRINKING WATER YES IND WASTE WATER YES IND	
CIRCLE THE APPR	OPRIATE RESPONSE	LAB SAMPLE#	CLIENT ID	CONTAINER DESCRIPTION	PRESER VATIVE	рН	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s)	Present / Absent								
•	Intact / Broken*		, C. W.						
2. Chain-of-Custody	Present / Absent*								
3. Traffic Reports or									
Packing List:	Present / Albsent			-					
4. Airbill:	Airbill / Sticker		'						
•	Present / Alpsent .								
5. Airbill #:				•					
6. Sample Labels:	Present / Absent								
7. Sample IDs:	- Listed / Not Listed								
*	on Chain-of-Custody								
8. Sample Condition:	Intagt / Broken* /				المامم	/			
	Leaking*			,	C N	\angle			
9. Does information or	chain-of-custody,		······································	لاپ					
traffic reports and s					X				
agree?	Yes / No*			0/10/10					
Sample received with				V(\/					
hold time?	(res)/ No*								
1. Adequate sample volu	ıme 🔨								
received?	Yes)/ No*	./5/2							
2. Proper preservatives									
13. Trip Blank / Temp Bla									
(circle which, if yes)	Yes (No*								
4. Read Temp:									
Corrected Temp:							- 47"		
Is corrected temp 4 +	<u> </u>								
Acceptance range for samples re		/-							
Exception (if any): MET	ALS / DEF ON ICE	_/_							
or Problem COC	Airbags [SESSONICE CONTRACTOR	Saucense Section	40.00	and the same of	One on Dallie Control of the Con-	
Revision A	•	*IF CIRC	LED, CONTACT PROJEC	T MANAGER A	ND ATTA	CH R	ECORD C	F RESOLU	TION.

APPENDIX D

STRATUS REMEDIATION SYSTEM MONTHLY DISCHARGE REPORTS (INCLUDES BRIEF STATEMENTS SUMMARIZING OPERATIONS AND SEWER DISCHARGE SUMMARY TABLES)







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

TRANSMITTAL

		Date August 3, 2007	
		Project	E2111-03
To:			
Ms. Tiffany	Treece		
City of San	Leandro		
Civic Cente	er, 835 E. 14 th Street		
San Leandr	o, CA 94577		
Re: Permit	# SD-036, ARCO Service Station No. 2	111, 1156	Davis Street, San Leandro
<u>Item</u>	<u>Description</u>		
1	Monthly Discharge Report for July 20	07	
2	Table 1- Sewer Discharge Summary I	Report	
Comments:			

Dear Ms. Treece:

Please find attached for your review the Monthly Discharge Report for July 2007, for the remediation system at ARCO Service Station No. 2111, located at 1156 Davis Street, San Leandro, California. A total of approximately 115,872 gallons of treated groundwater were discharged to the sanitary sewer between June 26, 2007 and July 17, 2007.

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: <u>June 26, 2007</u> to <u>July 17, 2007</u>. 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 <u>Kiran Nagaraju</u> at (530) 676 6007.

Number of days discharged: 21

Total monthly discharge: 115,872 U. S. Gallons

Signature of Certifying Official:

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

Title: Project Manager

Date: August 3, 2007

<u>Include a brief statement summarizing the month's operations:</u>

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 are treated using the air stripper and two 2,000-pound carbon vessels in series prior to the discharge to the sewer. The GETS was found non-functioning on July 10, 2007, due to high-water level alarm on the oil-water separator. The GETS was re-started on July 10, 2007, after replacing the particulate filters on the system. The GETS was again found non-functioning on July 17, 2007 due to high-water level alarm on the air stripper. The GETS was restarted on July 17, 2007, after resetting the air stripper.

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

F T			
Report Month (month/year)	Date	Effluent Totalizer Reading (gallons)	Monthy Discharge (gallons)
	1/29/07 8:00	System Start-up	
	1/29/07 8:00	3,000	
January-07	1/29/07 ¹ 12:00	5,000	5,560
	01/30/07	6,200	·
	01/31/07	8,560	
	01.51/0/	5,500	
	2/1/07 5:15	16,860	
February-07	2/2/07 5:00	25,480	114,230
1 cordary or	2/5/07 5:00	33,400	114,230
	2/20/07 6:30	122,790	
	3/5/07 ² 5:00	130,565	
March-07	3/8/07 ³ 4:50	132,951	10,472
1.141011 07	3/14/07 ⁴ 7:00	NM	10,472
	3/29/07 ⁵ 10:00	133,262	
	4/2/07 ⁶ 5:30	170,596	
April-07	4/10/07 ⁷ 5:00	NM	66,881
- 3 P - 31	4/23/07 ⁸ 7:00	172,210	50,001
	4/26/07 6:00	200,143	
	5/1/20079 4:50	220,892	
May-07	5/15/2007 ¹⁰ 5:00	225,297	210,103
	5/29/07 8:30	410,246	
	6/4/2007 ¹¹ 5:00	429,450	
June-07	6/12/2007 ¹² 5:00	430,092	19,976
;	6/26/2007 ¹³ 4:30	430,222	
	7/2/07 5:30	480,377	
July-07	7/10/2007 ¹⁴ 5:45	523,553	115,872
,	7/17/2007 ¹⁵ 5:00	546,094	110,072
		,	

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 Discharg (gallons)						
Notes:	Votes:								
NM = Not measured									
¹ Submersible pump at w troubleshooting the leve		own. This pump will be lfunction.	re-started after						
² System observed non-f	unctioning upon arriv	al. Re-started by re-setti	ing power supply.						
³ System shutdown to ve			,						
4 System shutdown due t	o float malfunction.								
System re-started after:	replacing the floats.								
System shutdown due to high-level in oil-water separator. System restarted after replacing capacitor on the transfer pump.									
⁷ System shutdown due t replacement of transfer p	o transfer pump malf pump.	function. System could n	ot be restarted pending						
⁸ System restarted after re	eplacing transfer pum	ıp.							
System observed non-fu System re-started, but sh results.	unctioning upon arriv utdown after samplin	al due to DPE liquid rin g pending receipt and ve	g pump malfunction. crification of analytical						
¹⁰ System re-started upon liquid ring pump.	compliance verificat	ion and after conducting	maintenance on the						
¹¹ System observed non-f stripper. System re-starte analytical results.	System observed non-functioning upon arrival due to high water level alarm on air tripper. System re-started, but shutdown after sampling pending receipt and verification of								
¹² System re-started mom for profiling and change	² System re-started momentarily upon compliance verification and to collect carbon sample or profiling and change-out.								
13 System re-started upon	receipt of analytical	results for carbon profile	>.						
14 System observed non-f	System observed non-functioning upon arrival due to high-level in oil-water separator.								
System observed non-functioning upon arrival due to high water level alarm on air									

stripper. System re-started after re-setting air stripper.



TRANSMITTAL

	Date	September 5, 2007
	Project _	E2111-03
To:		
Ms. Tiffany Treece		
City of San Leandro		
Civic Center, 835 E. 14 th Street		
San Leandro, CA 94577		
		

Re: Permit # SD-036, ARCO Service Station No. 2111, 1156 Davis Street, San Leandro

<u>Item</u>	<u>Description</u>
1	Monthly Discharge Report for August 2007
2	Table 1– Sewer Discharge Summary Report

Comments:

Dear Ms. Treece:

Please find attached for your review the *Monthly Discharge Report* for August 2007, for the remediation system at ARCO Service Station No. 2111, located at 1156 Davis Street, San Leandro, California. A total of approximately 36,612 gallons of treated groundwater were discharged to the sanitary sewer between July 17, 2007 and August 20, 2007.

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: <u>July 17, 2007</u> to <u>August 20, 2007</u>. 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 <u>Kiran Nagaraju</u> at (530) 676 6007.

Number of days discharged: 34

Total monthly discharge: 36,612 V. S. Gallons

Signature of Certifying Official:

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

Title: Project Manager

Date: September 4, 2007

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 are treated using the air stripper and two 2,000-pound carbon vessels in series prior to the discharge to the sewer. The GETS was found non-functioning on August 1, 2007, due to high-water level alarm on the oil-water separator. The GETS was re-started on August 1, 2007 by re-setting the transfer pump. The remediation systems were manually shutdown on August 1, 2007, after sample collecting pending compliance verification. Upon receipt of analytical results and compliance verification, the remediation systems were re-started on August 8, 2007. The GETS was again found non-functioning on August 20, 2007 due to highwater level alarm on the air stripper. The GETS was re-started the same day after resetting the air stripper.

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	System Start-up 3,000 5,000	5,560
	01/30/07 01/31/07	6,200 8,560	
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	,	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

Notes:

NM = Not measured

- 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.
- B System shutdown to verify effluent air results.
- ⁴ System shutdown due to float malfunction.
- ⁵ System re-started after replacing the floats.
- System shutdown due to high-level in oil-water separator. System restarted after replacing a capacitor on the transfer pump.
- System shutdown due to transfer pump malfunction. System could not be restarted pending replacement of transfer pump.
- 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.



TRANSMITTAL

	Date	October 4, 2007
	Project	E2111-03
To:		
Ms. Tiffany Treece		
City of San Leandro		
Civic Center, 835 E. 14 th Street		
San Leandro, CA 94577		

Re: Permit # SD-036, ARCO Service Station No. 2111, 1156 Davis Street, San Leandro

<u>Item</u>	<u>Description</u>
1	Monthly Discharge Report for September 2007
2	Table 1– Sewer Discharge Summary Report

Comments:

Dear Ms. Treece:

Please find attached for your review the *Monthly Discharge Report* for September 2007, for the remediation system at ARCO Service Station No. 2111, located at 1156 Davis Street, San Leandro, California. A total of approximately 8,737 gallons of treated groundwater were discharged to the sanitary sewer between August 20, 2007 and September 17, 2007.

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: <u>August 20, 2007</u> to <u>September 17, 2007</u>. 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 <u>Kiran Nagaraju</u> at (530) 676 6007.

Number of days discharged: 28

Total monthly discharge: 8,737 U. S. Gallons

Signature of Certifying Official:

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

Title: Project Manager

Date: October 1, 2007

<u>Include a brief statement summarizing the month's operations:</u>

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 GETS was found non-functioning on September 5, 2007, due to high-water level alarm on the oil-water separator. The GETS was re-started momentarily on September 5, 2007, and shutdown after sampling, pending receipt of analytical results. Upon receipt of analytical results and compliance verification, the GETS was re-started on September 11, 2007. The GETS was again found non-functioning on September 17, 2007 due to high-water level alarm on the oil-water separator. Stratus attempted to re-start the GETS on September 17, 2007 after conducting maintenance on the oil-water separator but the system was shutdown again. Stratus will further troubleshoot and re-start the remediation systems in October 2007.

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	System Start-up 3,000	5,560
January-07	01/30/07 01/31/07	5,000 6,200 8,560	3,300
February-07	2/1/07 5:15 2/2/07 5:00 2/5/07 5:00 2/20/07 6:30	16,860 25,480 33,400 122,790	114,230
March-07	3/5/07 ² 5:00 3/8/07 ³ 4:50 3/14/07 ⁴ 7:00 3/29/07 ⁵ 10:00	130,565 132,951 NM 133,262	10,472
April-07	4/2/07 ⁶ 5:30 4/10/07 ⁷ 5:00 4/23/07 ⁸ 7:00 4/26/07 6:00	170,596 NM 172,210 200,143	66,881
May-07	5/1/2007 ⁹ 4:50 5/15/2007 ¹⁰ 5:00 5/29/07 8:30	220,892 225,297 410,246	210,103
June-07	6/4/2007 ¹¹ 5:00 6/12/2007 ¹² 5:00 6/26/2007 ¹³ 4:30	429,450 430,092 430,222	19,976

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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	,	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

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.
- 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.
- 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.

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Report Month (month/year)	Date	Effluent Totalizer Reading (gallons)	, ,
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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.