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Atlantic Richfield Company (a BP affiliated company)

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

26 January 2007

Re: Fourth Quarter 2006 Ground-Water Monitoring 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

# Fourth Quarter 2006 Ground-Water Monitoring 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

26 January 2007

Project No. 06-08-615



26 January 2007

Project No. 06-08-615

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

Attn.: Mr. Paul Supple

Re:

Fourth Quarter 2006 Ground-Water Monitoring 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 *Fourth Quarter 2006 Ground-Water Monitoring Report* for Atlantic Richfield Company Station #2111 (herein referred to as Station #2111) located at 1156 Davis Street, San Leandro, California (Property). This report presents results of ground-water monitoring conducted at Station #2111 during the Fourth Quarter 2006.

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,

ROBERT H.

No. 4893

San Leandro, California 94577

Electronic copy uploaded to GeoTracker

ARIZONA CALIFORNIA NEVADA TEXAS

### STATION #2111 OUARTERLY GROUND-WATER MONITORING REPORT

1156 Davis Street, San Leandro, California Facility: #2111 Address: Mr. Paul Supple Environmental Business Manager: Broadbent & Associates, Inc.(BAI)/Rob Miller & Tom Venus Consulting Co./Contact Persons: (530) 566-1400 Consultant Project No.: 06-08-615 Alameda County Environmental Health (ACEH) Primary Agency/Regulatory ID No.: 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 (Fourth Quarter 2006):

- 1. Prepared and submitted Third Quarter 2006 report.
- 2. Conducted ground-water monitoring/sampling for Fourth Quarter 2006. Work performed on 24 October 2006 by Stratus Environmental, Inc. (Stratus).
- 3. Continued installation of Dual-Phase Extraction (DPE) treatment system and trouble-shooting.

### **WORK PROPOSED FOR NEXT QUARTER (First Quarter 2007):**

- 1. Prepared and submitted this Fourth Quarter 2006 Ground-Water Monitoring Report (contained herein).
- 2. Conduct quarterly ground-water monitoring/sampling for First Quarter 2007.
- 3. Prepare and submit First Quarter 2007 Report.
- 4. Complete construction and testing of DPE treatment system.
- 5. Prepare DPE system startup report.

#### **OUARTERLY RESULTS SUMMARY:**

Ground-Water Monitoring/Sampling/Interim Remediation
(DPE system construction and testing in progress)
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
Bailing free product as needed from MW-2;
DPE treatment system under construction.
14.23 ft (MW-6) to 17.15 ft (MW-1)
West
0.003 ft/ft

#### DISCUSSION:

Fourth quarter 2006 ground-water monitoring and sampling was conducted at Station #2111 on 24 October 2006 by Stratus personnel. Water levels were gauged in seven of the eight wells at the Site (MW-8 was reportedly inaccessible). Several wells were gauged with treatment system tubing in the well

(MW-2 and MW-7). An unspecified thickness of free product was detected in well MW-2 during water level gauging. Due to treatment system connections the free product in well MW-2 was not measured or removed during Fourth Quarter 2006. Depth to water measurements ranged from 14.23 ft at MW-6 to 17.15 ft at MW-1. Resulting ground-water surface elevations ranged from 23.41 ft above mean sea level in well MW-7 to 22.17 ft at well MW-5. Water level elevations were between historic minimum and maximum ranges for each well, as summarized in Table 1. Water level elevations yielded a potentiometric ground-water flow direction and gradient to the west at approximately 0.003 ft/ft, consistent with historical data (see Table 3). Ground-water monitoring field data sheets are provided within Appendix A. Measured depths to ground-water and respective ground-water elevations are summarized in Table 1. Historic free product thickness and cumulative product recovery from well MW-2 is presented in Table 4. Potentiometric ground-water elevation contours are presented in Drawing 1.

Water samples were collected from five of the seven wells scheduled to be sampled this quarter. Samples were not collected from well MW-2 (because of the presence of free product and treatment system connections) or well MW-8 (reportedly inaccessible). 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 methyl ether (TAME), tert-Butyl alcohol (TBA), Di-isopropyl ether (DIPE), 1,2-Dibromomethane (EDB), 1,2-Dichloroethane (1,2-DCA), Ethanol, Ethyl tert-butyl ether (ETBE), and Methyl tert-butyl ether (MTBE) by EPA Method 8260B. No significant irregularities were encountered during laboratory analysis of the samples. Groundwater sampling field data sheets and the laboratory analytical report, including chain of custody documentation, are provided in Appendix A.

Gasoline range organics (GRO) were detected above the laboratory reporting limit in three of the five wells sampled at concentrations up to 6,800 micrograms per liter (µg/L) in well MW-7. Benzene was detected above the laboratory reporting limit in two of the five wells sampled at concentrations up to 100 μg/L in well MW-7. Ethylbenzene was detected above the laboratory reporting limit in three of the five wells sampled at concentrations up to 19 μg/L in well MW-1. Total Xylenes were detected above the laboratory reporting limit in two of the five wells sampled at concentrations up to 15 μg/L in well MW-7. TAME was detected above the laboratory reporting limit in four of the five wells sampled at concentrations up to 31 µg/L in well MW-7. TBA was detected above the laboratory reporting limit in two of the five wells sampled at concentrations up to 10,000 µg/L in well MW-7. MTBE was detected above the laboratory reporting limit in each of the five wells sampled at concentrations up to 14,000 µg/L in well MW-7. The remaining fuel additives and oxygenates were not detected above their laboratory reporting limits in the five wells sampled this quarter. Detected analyte concentrations were within the historic minimum and maximum ranges recorded for each well, with the following exceptions: MW-4's Ethylbenzene concentration of 2 μg/L was the highest on record, and the MTBE concentration for MW-5 was the lowest on record (17 µg/L). Historic laboratory analytical results are summarized in Table 1 and Table 2. The most recent GRO, Benzene, and MTBE concentrations are also presented in Drawing 1. A copy of the Laboratory Analytical Report, including chain-of-custody documentation is provided in Appendix A. Ground-water monitoring data (GEO WELL) and laboratory analytical results (EDF) were uploaded to the GeoTracker AB2886 database. Upload confirmation pages are provided in Appendix B.

#### CLOSURE:

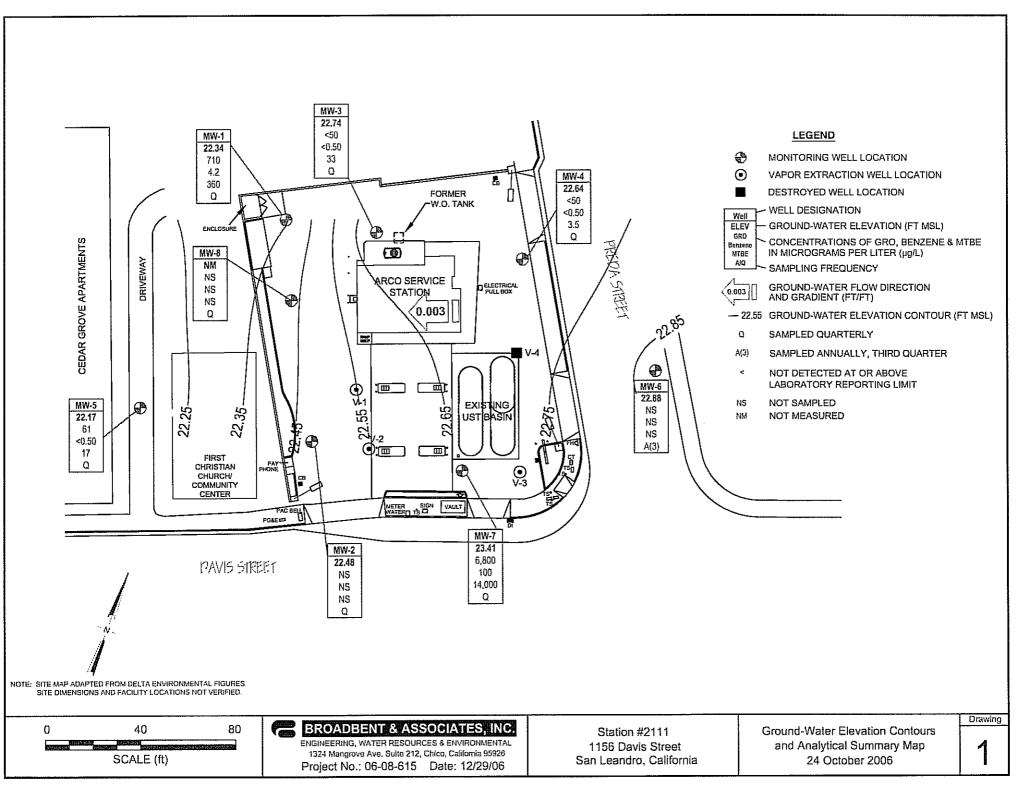
The findings presented in this report are based upon: observations of Stratus field personnel (see Appendix A), the points investigated, and results of laboratory tests performed by Test America (Morgan Hill, California). Our services were performed in accordance with the generally accepted standard of

Page 3

practice at the time this report was written. No other warranty, expressed or implied was made. This report has been prepared for the exclusive use of Atlantic Richfield Company. It is possible that variations in soil or ground-water conditions could exist beyond points explored in this investigation. Also, changes in site conditions could occur in the future due to variations in rainfall, temperature, regional water usage, or other factors.

#### ATTACHMENTS:

- Drawing 1. Ground-Water Elevation Contour and Analytical Summary Map, 24 October 2006, Station #2111, 1156 Davis Street, San Leandro, California
- Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses, Station #2111, 1156 Davis St., San Leandro, CA
- Table 2. Summary of Fuel Additives Analytical Data, Station #2111, 1156 Davis St., San Leandro, CA
- Table 3. Historical Ground-Water Flow Direction and Gradient, Station #2111, 1156 Davis St., San Leandro, CA
- Table 4. Approximate Cumulative Floating Product Recovered, Station #2111, 1156 Davis Street, San Leandro, CA
- 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 Confirmation



				Top of	Bottom of		Water Level			Concentra	tions in (µ <sub>1</sub>	g/L)			
Well and			тос	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	27	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	131	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	=1810/1,100		
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	<b>*</b> \$50	<b>\$0.5</b>	\$0.5	<b>\$0.5</b>	<b>20.5</b>	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	 21000727192070	
7/17/2002	NP		39,60	12.50	2600	17,50	22.10	<50	12	<0.50	<0.50	<b>&lt;</b> 0.50	29	6.9	69
10/9/2002		C	39.60	12.50	26.00	18.27	21.33	240	4.9	<1.0	4.1	7.0	290	6.5	6.5
1/13/2003		i i i i i i i i i i i i i i i i i i i	39.60	12:50	2600	15,97	2423	760	34			56	300	6.8	6.8
04/07/03			39.60	12.50 12.50	26.00 26.00	16.61 17.27	22.99 22.53	<50   <2,500	<0.50	<0.50	<0.50	<0.50   ≹⊒5	22 	6.8	6.8
7/9/2003			39,60	12.50	26.00	16.28	23.21	2,800	31	<25 <25	<25	<b>25</b>	1,100	6.7 0.9	6.5
02/05/2004	NP NP	m (3)(0)(4)(1)(4)(4)(4)(4)(4)(4)(4)(4)(4)(4)(4)(4)(4)	39.49 39.49	12.30	26.00 開開26.00開開	16.25	23.21	2,800 5,800	46	72.7 		ري. الالاكتاب	1,100		
04/05/2004 07/13/2004	NP		39.49	12.50	26.00	17.57	21.92	<1,000	<10	<10	<10	<10	730 730	0.5	6.6
111/04/2004	NE		39.49	12.50 12.50	26,00	##17/178##	21.71 21.71	560	##<5.0	## <b>5</b> 10##	# <b>25.0</b> #	###\$JO	380	0.8	65
日本日本日本日本日本日本日本日本日本日本日本日本日本日本日本日本日本日本日本	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	100 III	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	1771	21.78	<2,500	<b>25</b>	\$25	25	<b>425</b>	970	1.17	6.6
01/18/2006	NP		39.49	12.50	26.00	14.70	24.79	300	<2.5	<2,5	<2.5	<2.5	330	1.07	6.6
Q4/14/2006	NP		39.49	1250	26.00	13,41	26,08	330	25	-2.5	\$2.5	<b>42.5</b>	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	412	25	19	113	360		6.68
MW-2															
6/26/2000		a	37.99	12.0	26.00	14.60	23.39		_						
7/20/2000			37.99	12.0	26.00	15,14	22.85	95,000	2,300	18,000	2,500	19,000	13,000		
9/19/2000		interational material in in its in it	37.99	12.0	26.00	15.95	22.04	63,000	1,200	6,300	2,000	14,000	19,000		

				Top of	Bottom of		Water Level		!	Concentra	tions in (μ	g/L)			
Well and			тос	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-2 Cont.													EMACE PER PER PER PER PER PER PER PER PER PE		
12/21/2000			37.99	12.0	26.00	15.60	22.39	45,900		2,130	1,160	. ,	22,400/24,700	l .	
12/21/00		6	37.99	12.0	26.00			5,010	360	189	213	626	54,300/89,200	4	
3/13/2001		b	37.99	12.0	26.00			<20,000	525	466	408	1,460	91,700/76,000	<b>t</b>	
3/13/2001	- 1		37.99	12:0	26.00	13.77	24.20	3,650	981	<5.0	<5.0	642	3,590/3,260		
9/18/2001		n	37.99	12.0	26.00	16.86	21.13		_					 ##########	-
12/28/2001			37.99	12.0	26.00	14.28	23:7	31,000	1,500	3,800	1300	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		 स्थानव्यास्त
4/23/2002			37.99	12.0	26.00	13,60	2439	9,000	220	110	A70	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.	<b>S</b>	37,99	12:0	26.00	16,69	2130								
1/13/03		g, h	37.99	12.0	26.00	13.59	24.40			 150005000100					
04/07/03			37.99	12.0	26.00	4.70	23.29								
07/09/03		g, h	37.99	12.0	26.00	15.48	22.51 23.43			 	 HTEHEMINHUSEE				 H4051401
02/05/2004	NP	g,m	37.86	12.0	26.00	14,45		2 100	33	<5.0	<5.0	200	750	0.6	
04/05/2004	NP		37.86	12.0	26.00 26.00	14.35 #15//9#	23.51 22.07	2,300 59,000	380	 	2,100	7,900	5,800	0.5	6.4
07/13/2004	NP		37.86	1 <u>2.0</u> 12.0	26.00	15.89	21.97					_			
08/31/2004			37.86	12.0	26.00	15.05	21.97					enwortsmen			
01/20/2004	NP	gib g	37.86	12.0	26.00	13.71	24.15	30,000	450	<50	1,300	3,300	7,000	0.7	6.2
01/20/2005	INP	o Table to the second	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			37.86	12.0	26.00	16.05	21,81						-		
01/18/2006	NP	a 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.	i i i i i i i i i i i i i i i i i i i	37.86	12.0	26.00		25.62	7,800	78	<b>1</b> 550	194	130	2,100	0.81	6.7
7/19/2006	NP	4	37.86	12.0	26.00	14.00	23.86	4,900	31	<10	98	75	930	1.1	6.5
10/24/2006		, e	37.86	12.0	26:00	1538	22.48								6.45
MW-3			4-1-41	na n		11 100 100 100 100 100 100 100 100 100	**************************************	Target and the state of the sta	AND DESCRIPTION OF THE PERSONS ASSESSMENT OF						
	· ·		•												,,,
6/26/2000		e elippoetalografikatingaringulingulinguling	39.32	12.00	26.00	15.96	23.36	 MENISTER			-   205			 USB::::::::::::::::::::::::::::::::::::	NA
7/20/2000			39.32	12 00	26.00	16,42	22.90	<b>350</b>	0.5	₹0.5	ang	SID.	130		
9/19/2000			39.32	12.00	26.00	17.18	22.14	190	17	<0.5	1.4	2.4	160	-	

				Top of	Bottom of		Water Level			Concentra	tions in (µ	g/L)			
Well and			тос	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)	pH
MW-3 Cont.															
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	<b>₹0.5</b>	<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	59	<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	<b>50.5</b>	<b>₹0.5</b>	≼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	inp.		39.32	12:00	26.00	17.87	21,45	<b>45</b> 0	<0.50 €0.50	<b>₹0.50</b>	K0.50	<0.50	26/29	7.2	72
1/13/2003	NP		39.32	12.00	26.00 26.00	14.78 16.15	24.54 23.17	<50 88	<0.50 <0.50	<0.50 <0.50	<0.50	<0.50 <0.50	59 75	6.8	6.8
04/07/03			39.32 39.32	12.00	26.00 26.00	16.79	開催 <del>動</del> 植開新 22.53	100	<0.50	<0.50	<0.50 <0.50	<0.50	52	7.0 6.5	7.0 6.5
7/9/2003 02/05/2004	NP	m m	39.19	12.00	26.00	15.66	22.55	240	\$0.50 s	50.50 80.50	20.50 20.50	-0.50 	92 98997	0.5	
04/05/2004	MP		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 <u>1</u> 9	12:00	26.00	17/20	2199	120	\$0.50	i≷0.50	€0.50	iii≰0.50 ii	35	0.8	67
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	## <b>i</b> 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	
10/21/2005	NP	MANAGES D'ALLICE ENGLISSES SELECTIONS CONTRACTOR OF THE SECOND CONTRACT	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	19.80	25.39	73	<0.50	<0.50	<b>&lt;</b> 0.50	<0.50	13	1113	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 11	0.71	6.6
7/19/2006 10/24/2006	NP P	9-1-	39.19 39.19	12.00 12.00	26.00 26.00	IS.04 16.45	2415 22.74	<50 <50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50	33	2.0 -	6.6 6.77
MW-4															
6/26/2000			38.10	10.0	24 00	14.59	23 51								NA
7/20/2000		enverserran antraktara errentzia	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	2400	15.83	22.27	iio	7	1 ≤0.5	K05	i≼ï,0	60		
12/21/2000		A CONTRACTOR OF THE CONTRACTOR	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		24.37	76	0,796	<b>1 205</b>	505	<0.5	53.7/50		
9/18/2001		Accuration	38.10	10.0	24.00	16.50	21.60	<50	<0.5	<0.5	<0.5	<0.5	25/26		-

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/	1		Ethyl-	Total		DO	1
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.															
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	<b> </b>	<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	2234	<50	<0.50	<0.50	<0.50	≤0.50	16	7.1	71
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	III NP	i i i i i i i i i i i i i i i i i i i	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	100	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		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		97.99	10.0	2400	16.02	21.97	<50	<b>&lt;0.50</b>	K0   50	0.50	<0.50	19	12	167
01/20/2005	NP		37.99	10.0	24.00	13.72	24.27 25 19	65	<0.50 <0.50	<0.50 \$0.50	<0.50 <0.50	<0.50	18 141151	0.6	6.I
04/11/2005	NP		37,99	10.0	2400	12.80		51 <50	<0.50	<0.50	<0.50	<0.50	18	1.46	6.2 7.3
08/01/2005	NP		37.99	10.0	24.00	14.88 15.01	23.11 22.98		0.50 M8050	×0.50	\$0.50	√0.50 M≮0.50	15	1124	7.6
10/2 /2005	NP		37.99 37.99	10.0	24.00 24.00	12.92	25.07	<50	<0.50	<0.50	<0.50	<0.50	8.9	0.77	6.5
01/18/2006 04/14/2006	NP NP		37.99 #37.99	10.0	24:00		25.07	-50 -50	S0.50	±0.50	K0 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	20	<0.50	35		6.90
								duminimi	i mananananana			H (MINIOGHAZIA)		1 1011110111111111111111111111111111111	111111111111111111111111111111111111111
MW-5															
6/26/2000			37.21	9.50	23.50	14.27	22.94						-	-	
7/20/2000			37,21	9:50	2350		22.52	55	<0.5	<b>505</b>	<b>&lt;05</b>	<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	i de la		37.21	9.50	2350	15,15	22,06	72.9	231	<0.5	<b>&lt;0.5</b>	0.961	19,200/21,200	: <b> </b>	
3/13/2001			37.21	9.50	23.50	13.50	23.71	<500	<5	<5	<5 <100	<5	15,900/20,000	***	
9/18/2001			37.21	950	23.50	15.94	2127	<10,000	<b>-100</b>	<100		<1,000	22,000/20,000	16-463247444 <del>4</del>	
12/28/2001	 		37.21	9.50	23.50	13.45	23.76	<10,000	<100 <50	<100 <50	<100    <50	<100 450	10,000/10,000 7,100/7,700		149990007 1
3/14/2002			37.21	9.50	23.50	13.82	23,39	<5,000	<50	<50	<50	>30 <50	8,900		
4/23/2002	-		37.21	9.50	23.50	13.25	23.96	<5,000	-30	~30	\ \JU	730	0,500	-	"

				Top of	Bottom of		Water Level			Concentra	tions in (µ	g/L)			
Well and			тос	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.															
7/17/2002	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 -	la l	87.21	950	23.50	16.02	21.19	2,400	<20 ₪	<20	<b>₹20</b>	*20	7,300/7,500	6.7	67
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	<b>100</b>	<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	1410	23.02	8,100	<b>\$50</b>	<50	₹50	<b>#50</b>	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	15,87	21.75	\$5,000	<b>450</b>	<b>&lt;50</b>	₹50	₹50	4,000	0.8	67
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		37.12	2.50	23.50		23.61	6,500	<b>450</b>	<b>&lt;</b> 50	<b>    &lt;50</b>	<50	6,900	0.7	65
04/11/2005	NP		37.12	9.50	23.50	12.75	24.37	<5,000	<50	<50 ≪1\0	<50    ≼∐0	<50  <1.0	2,600	0.5 	7.0
08/01/2005	NP		37,12	9.50	23 50	14.59	22.53 21.55	110 <250	<1.0 <2.5	<2.5	<2.5	<2.5	130 86	136	75
10/21/2005 01/18/2006	NP NP		37.12 37.12	9.50 9.50	23.50 23.50	15.57	24.52	<250 250	2.5	2.5 25	\$2.5	2.5 #82.5	80 100	1.53 hiji	6.8
04/14/2006	NP		37.12	9.50	23.50	11.74	25.38	310	<2.5	回転記述 <2.5	2.5	/////////////////////////////////////	240	0.93	6.7 6.6
7/19/2006	NP		37.12	9/50 miles	23.50	13.78	23.34		 	2.5	### <b>#2</b> 15###	<2.5	84		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
MW-6	-														<b></b>
	#T1727724164741744444444444444444444444444					-	erand enforced ballet access and a sale little of the	LEGISSETTETTETTETT		larence en	111146024102114	Terresonia engras	31167)27.61.61616.63.11		HAMMAN
6/26/2000	200		37.11	10.00	25,00	13,46	23/65								ΝA
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			37,111	10.00	25,00	1441	22.70	<b>&lt;</b> 50	R05	\$0.5	×0.5	<b>SI</b> 0	₹3.0		
12/21/2000	-		37.11	10,00	25.00 25.00	14.53	22.58	<50	<0.5	<0.5   ≤0.5	<0.5	<0.5	<2.5	 	
3/13/2001 9/18/2001	4		37.11 37.11	10,00	25.00	12.67 15.42	24,44 21.69	<50 <50	<0.5	<0.5	<0.5	<0.5	<2.5/<2.0		
9/18/2001 12/28/2001			37.11 37.11	10.00	25.00 25.00	12.96	21.09	<50	<0.5	<0.5	<0.5	<0.5	12/<0.5	-	Lanamana Lanamana
3/14/2002			37.11	10.00	25.00	12.98	24.13	<50	<0.5	<0.5	<0.5	<0.5	<2.5		
3/14/2002 4/23/2002			37.11	10.00	25.00	12.70	24.67	<50	30.5 80.5	<0.5	-0.5 	-0.5 			
7/17/2002	NP		37.11	10.00	25.00	14.65	22.46		<0.50	<0.50	<0.50	<0.50	個的語言	7.3	7.3
10/9/2002	NP III		3711	10.00	25.00	1551	21.60	-50 	₹0.50	₹0.50	<b>\$0.50</b>	20.50	25		
1/13/2003	NP	PARKATARAN KANTANTAN KANTAN KANTA I	37.11	10.00	25.00	12.27	24.84			<0.50	<0.50	<0.50		6.8	6.8
	1	I	1		1	1		I - "	1	l	I	1	I	1	1

100 400 -				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-6 Cont.															L. L
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	<b>30</b>	<b>8050</b>	<0.50	140.50	ii≮0.50	<0.50	7	7.0
02/05/2004	######################################	m	37.11	10.00	25.00	13.38	23.73	— 	 Carolisian (Carolisian)	 Restantaments					
04/05/2004			1 27,11 H	10,00	25.00	13.31	23,80		40.50	-0.50	-0.50		-0.50		
07/13/2004	NP		37.11	10.00	25.00 25.00	14.65	22.46 22.16	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.7	6.8
11/04/2004 01/20/2005			37.11	10.00	25.00 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		(134 (344)) 1544 (144)	37.11	10.00	25.00	11.80	25.31	_							**
04/14/2006			37,11	10.00	25.00	10,92	2619								
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								
MW-7	***************************************														
6/26/2000			38.68	12.0	27.00	14.34	24.34								70000000
7/20/2000			38,68	12.0	27,00	15.26	23,42	14,000	5,4	<b>K0.5</b>	28	59	71,000		
9/19/2000			38.68	12.0	27.00	15.70	22.98 22.66	8,400	420	38	470	220	5,600		
12/21/2000 3/13/2001			38.68 38.68	12.0 12.0	27.00 27.00	16.02 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	s1 000	l	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	fizitiestintiei	
3/14/2002			38.68	# 12.0 F	27,00	14,60	24,08	<b>\$50,000</b>	£500	<b>\$500</b>	<b>4500</b>	<b>*\$00</b>	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	đ	38.68	12.0	27.00	16.27	72.41	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	7,000/120,00	1	6.8
1713/2003	NPi	E	38.68	120	27,00	13.82	24.86	<50,000	<500	₹500	<500	2200	33,000	6.6	6.6
04/07/03	NP		38.68	12.0	27.00	14.52 15.97	24.16 <u>22</u> .71	<2,500 66,000	30 ≤500	<25	<25 <500	<25	710 36,000	7.0 6.7	7.0
7/9/2003 02/05/2004	NP	m	38.68 38.54	12.0 12.0	27.00 27.00	14.75	23.79	55,000	300	<250	<250	<250	34,000	1.0	6.7 6.7
02/03/2004	INF	""	30.34	12.0	27.00	1 14.13	23.19	33,000	] 500	1 -230	~250	1230	] 37,000	'	1 "

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/	[		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)	pH
MW-7 Cont.						-									
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		3854	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	63
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	<b>\$250</b>	\$250	\$250	iii <b>≮2</b> 50 si	4,800	1.78	1013
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	2594	16,000	310	<b>2100</b>	<100	110	13,000	0.87	67
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	2496	1,300	23	<b>10</b>	18	26	1,600		68
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
MW-8															
02/05/2004	P	m	38.91			15,61	23.30	3,600	<b>525</b>	1-25	25	25	1,900	6.9	6.8
04/05/2004	P	(44300)(43000)	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	<b>&lt;1,000</b>	¢j0	<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	<b>425</b>	25	-25	<b>425</b>	1,400	115	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	2281	<1,000	<b>₹</b> 10	<b>#10</b>	<b>k</b> io	<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	SSO	<5.0	<b>\$5.0</b>	<b>45.0</b> III	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 P		38.91			1475	24.16	4,500	25	25	<b>F25</b>	<b>225</b>	4,200	11.2	6.6
10/24/2006		s	-	-		-	-			_	-				

#### ABBREVIATIONS:

- -- = Not analyzed/applicable/measured/available
- <= Not detected at or above specified laboratory reporting limit

DO = Dissolved oxygen

DTW = Depth to water in ft bgs

ft bgs = feet below ground surface

ft MSL = feet above mean sea level

GRO = Gasoline range organics

GWE = Groundwater elevation in ft MSL

mg/L = Milligrams per liter

MTBE = Methyl tert-butyl ether

NP = Well not purged prior to sampling

P = Well purged prior to sampling

TOC = Top of casing elevation in ft MSL

TPH-g = Total petroleum hydrocarbons as gasoline

μg/L = Micrograms per liter

#### FOOTNOTES:

- a = Product sheen noted.
- b = Well was sampled after batch extraction event.
- c = Chromatogram Pattern: Gasoline C6-C10 for GRO/TPH-g.
- d = Hydrocarbon pattern was present in the requested fuel quantitation range but did not resemble the pattern of the requested fuel for GRO/TPH-g.
- e = Discrete peak @C6-C7 for GRO/TPH-g.
- f = This sample was analyzed beyond the EPA recommended holding time for TPH-g, benzene, toluene, ethylbenzene, and total xylenes (BTEX), and MTBE. The results may still be useful for their intended purpose.
- g = Well not sampled due to the detection of free product (FP).
- h = GWE adjusted for FP: (thickness of FP x 0.8) + measured GWE.
- j = The closing calibration for benzene and total xylenes was outside acceptance limits by 1%. This should be considered in evaluating the result. The average % difference for all analytes met the 15% requirement and the QC suggested that calibration linearity was not a factor.
- k = The closing calibration was outside acceptance limits by 6%. This should be considered in evaluating the result. The average % difference for all analytes met the 15% requirement and the QC suggested that calibration linearity was not a factor.
- 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 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	ns in (μg/L)				
Sample Date	Ethanol	TBA	MTBE	DIPE	ЕТВЕ	TAME	1,2-DCA	EDB	Comments
MW-1				-					
4/7/2003	<100	<20	1,100	<0.50	< 0.50	<0.50	<u></u>		
7/9/2003	\$5,000	<b>1</b> 0000 <b>1</b> ≥ 1	690	25	# <b>525</b>	<25			
02/05/2004	<5,000	<1,000	1,100	<25	<25	32	<25	<25	
04/05/2004	€5,000 III		1700	<25	<b>\$25</b>	38	<25	<25	0
07/13/2004	<2,000	780	730	<10	<10	19	<10	<10	a
11/04/2004	≥1,000	<b>₹2</b> 00	380	₹5.0	<5.0	12	₹5.0	<b>45.0</b>	
01/20/2005	<1,000	<200	570	<5.0	<5.0	17	<5.0	<5.0	a Tanggangganggangganggangganggangganggang
04/11/2005	≤5,000	€1,000	1,100	<b>C25</b>	25	34	₹25	<b>-25</b>	
08/01/2005	<2,000	<400	1,400	<10	<10	40	<10	<10	
10/21/2005	<5.000	₹1,000	970	<b>425</b>	\$25	25	25	225	
01/18/2006	<1,500	<100	330	<2.5	<2.5	9.7	<2.5	<2.5	
04/14/2006	<1,500	<b>≮100</b>	310	₹2.5	<2.5	93	<b>₹2</b> 15	<2.5	
7/19/2006	<1,500	<100	180	<2.5	<2.5	3.2 10	<2.5		
10/24/2006	<1.500	<100	360	\$2.5	₹2.5	10	549		<u>Papak ke magusak ke bulan da kabupat ke balan ada kabupat ke bagai ada kabupat ke bagai kabupat ke bagai ke b</u> I
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	<b> </b> <50	<b>50</b>	
08/31/2004			_	_					
01/20/2005	<10,000	<2,000	7,000	<b>\$50</b>	≤50	<b>450</b>	## <b>&lt;50</b>	\$50	
04/11/2005	<10,000	<2,000	2,700	<50	<50	<50	<50	<50	
08/01/2005	<10,000	≥<2,000	2,700	<50	jiji   <b>₹50</b>	₹50	<b>&gt;50</b>	<b>&lt;50</b>	
01/18/2006	<30,000	<2,000	1,600	<50	<50	<50	<50     <b>&lt;</b> 50	<50	
04/14/2006	≪30,000	\$2,000	2,100	<b>50</b>	<b>&lt;</b> 50	<b>550</b>		<50 <10	
7/19/2006	<6,000	<400	930	<10	<10	<10	<10	<u> </u>	WANT LIMAN LIMAN
MW-3	1								
4/7/2003		20	iii ii 75 iiii	₹0.50	<0.50	6.5			
7/9/2003	<100	<20	52	<0.50	<0.50	4.2	_		AND THE PROPERTY OF THE PROPER
02/05/2004	<b>2100</b>	₹20	37.	\$0.50	<0.50	31	<0.50	<b>20</b> 50	
04/05/2004	<100	<20	53	<0.50	<0.50	3.7	<0.50	<0.50	a
07/13/2004	- <100 ·	44	35	£0.50	<0.50	3.2	<0.50	<0.50	

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

Well and				Concentratio	ns in (μg/L)				
Sample Date	Ethanol	TBA	МТВЕ	DIPE	ETBE	TAME	1,2-DCA	EDB	Comments
MW-3 Cont.							1.2		
11/04/2004	<100	<b>₹2</b> 0	25	<0.50	<b>2030</b>	22	<0.50	<b>4050</b>	
01/20/2005	<100	<20	27	<0.50	<0.50	2.6	<0.50	<0.50	
04/11/2005	<100	<b>&lt;20</b>	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	<b>2050</b>	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	67	<b>≮0</b> :50	<b>2030</b>	0.61	<b>&lt;</b> 0.50	<0.50 <0.50	
7/19/2006	<300	<20	11	<0.50 <b>&lt;0.50</b>	<0.50 <b>&lt;0.50</b>	0.72 <b>2.8</b>	<0.50	<0.50 	
10/24/2006	300	₹20	43	## <b>\$VI</b> 5V	SUBUL.				and the state of the control of the state of
MW-4	ŧ.								
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	<0.50	
04/05/2004	100	₹20	27	<0.50	<0.50 <0.50	7.2 7.4	<0.50	<0.50 <0.50	a
07/13/2004	<100 ##≪100	26 #20	27 	<0.50	<0.50 20.50	51	<0.50	<0.50 <0.50	
11/04/2004 01/20/2005	<100 <100	<20 <20	18	<0.50	<0.50	5.2	<0.50	<0.50	
04/11/2005	<100  ≪100	-20 ≮20	14	<0.50	# <b>#0.50</b>	40	₹0.50	₹0.50	
08/01/2005	<100	<20	18	<0.50	< 0.50	3.9	< 0.50	<0.50	SHAMEDING TO THE PROPERTY OF T
10/21/2005	<100	₹20	15	FÖ.50	F050	46	<b>40 50</b>	<0,50	
01/18/2006	<300	<20	8.9	<0.50	<0.50	2.5	<0.50	<0.50	
04/14/2006	≤300	-20	42	<0.50	<0.50	13	<0.50	<0.50	
7/19/2006	<300	<20	3.4	<0.50	<0.50	0.69	<0.50	<0.50	T
10/24/2006	<300	<20	3.5	<0.50	<0.50	0.91	<0.50	40.50 E	
MW-5	A CONTRACTOR OF THE CONTRACTOR								
4/7/2003	<20,000	<4,000	3,700	<100	<100	<100			THE STATE OF THE S
7/9/2003	<10,000	<2,000	6,500	₹50	<50	<\$0			
02/05/2004	<10,000	<2,000	7,900	<50	<50	<50	<50	<50	
04/05/2004	≥5,000	<1,000	2,000	<b>25</b>	₹25	<25	1 ≤25	\$25	
07/13/2004	<10,000	3,200	4,000	<50	<50	<50	<50	<50	a

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

Well and				Concentratio	ns in (µg/L)	· · · · · · · · · · · · · · · · · · ·			
Sample Date	Ethanol	ТВА	мтве	DIPE	ETBE	TAME	1,2-DCA	EDB	Comments
MW-5 Cont.									
	<10,000	<2,000	6,300	<50	<50	<50	<50	<50	
11/04/2004	<10,000 0.000	2,000 2,000	6,900	<50 mm	450 E	<b>&lt;</b> 50	₹50	<b>450</b>	a a constant
04/11/2005	<10,000	3,600	2,600	<50	<50	<50	<50	<50	# 1927 The Control of the State of the Control of t
08/01/2005	<b>₹200</b>	1,600	130	<10	i Kijo	≤i.o	<b>310</b>	<10	
10/21/2005	<500	1,400	86	<2.5	<2.5	<2.5	<2.5	<2.5	POST NAME OF THE POST N
01/18/2006	£1,500	2,200	100	<b>K25</b>	<b>1 2</b> 5	₹25	25	₹2.5	
04/14/2006	<1,500	2,100	240	<2.5	<2.5	<2.5	<2.5	<2.5	
7/19/2006	S1500	2,800	84	<2.5	<25	<25	<b>225</b>	\$2.5	
10/24/2006	<300	1,200	17	<0.50	<0.50	<0.50	<0.50	<0.50	a
MW-6				1					
A/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		<u> </u>	A SAME AND
07/13/2004	<100	<b>\$20</b>	<b>3050</b>	<0.50	<ö.50	<b>\$0.50</b>	K050	<0.50	р
08/01/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
7/19/2006	300	<b>420</b>	₹0.50	<0.50	\$0.50	<0.50	K0.50	<0.50	
MW-7									
4/7/2003	<5,000	<1,000	710	<25	<25	<25			
7/9/2003	<100,000	<20,000	36,000	<b>2500</b>	<b>3500</b>	<b>₹500</b>			
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	
04/11/2005	<5,000	<1,000	1,200	₹25	-25	25	25	225	
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	<100	
01/18/2006	<60,000	15,000	13,000	<100	<100	<100	<100	<100 <100	
04/14/2006	<60,000	\$4,000	4 700	≥100	\$100	<100	<100 <10	<10	
7/19/2006	<6,000	720	1,600	<10	<10	<10 31	<50	25.0	
10/24/2006	<3,000	10,000	14,000	<5.0   5	<5.0				al brucoresoni originamento de la companio de la c

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

Well and				Concentratio	ns in (μg/L)				
Sample Date	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	Comments
MW-8							*:		
02/05/2004	<5,000	<1,000	1,900	<25	<25	<25	<25	<25	
04/05/2004	2,000 m	<400	1,200	<b>310</b>	sio .	12	\$10	<10	
07/13/2004	<2,000	770	760	<10	<10	<10	<10	<10	а
11/04/2004	<1,000 l	<b>≈200</b>	820	<5.0	€5.0	9.6	<5.0	<b>₹5.0</b>	
01/20/2005	<5,000	<1,000	1,400	<25	<25	<25	<25	<25	a a second secon
04/11/2005	<u> </u>   €1,000	₹200	610	₹5.0	<5.0	8.1	\$50	₹5.0	
08/01/2005	<2,000	<400	900	<10	<10	<10	<10	<10	
10/21/2005	<1,000	<b>×2</b> 00	490	<5.0	<5.0	<5.0	<5.0	<b>&lt;5.0</b>	
01/18/2006	<3,000	<200	500	<5.0	<5.0	5.2	<5.0	<5.0	
04/14/2006	<3,000	₹200	300	<b>5</b> .0	<b>&lt;</b> 50	## <b>\$</b> 50	<5.0	<5.0	
7/19/2006	<15,000	<1,000	4,200	<25	<25	45	<25	<25	

#### ABBREVIATIONS:

-- = Not analyzed/applicable/measured/available

<= Not detected at or above specified laboratory reporting limit

1,2-DCA = 1,2-Dichloroethane

DIPE = Di-isopropyl ether

EDB = 1,2-Dibromoethane

ETBE = Ethyl tert-butyl ether

MTBE = Methyl tert-butyl ether

TAME = tert-Amyl methyl ether

TBA = tert-Butyl alcohol

μg/L = Micrograms per Liter

#### FOOTNOTES:

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

#### NOTES:

All volatile organic compounds analyzed using EPA Method 8260B.

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

Table 3. Historical Ground-Water Flow Direction and Gradient Station #2111, 1156 Davis St, San Leandro, CA

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
7/20/2000	West-Northwest	0.006
9/19/2000	West-Northwest	0.004
12/21/2000	West-Northwest	0.004
3/13/2001	- West-Northwest	0.005
5/30/2001	West-Northwest	0.004
9/18/2001	West-Northwest	0,003
12/28/2001	West-Northwest	0.003
3714/2002	West	0.004
4/23/2002	West	0.006
7/17/2002	all a light to the second of the light of the second of th	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	
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	800.0
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

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 Product Recovery Designation 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	0.01 0.01		
MW-2 MW-2	09/21/99 11/10/99	ND	0.00		
MW-2 MW-2	02/09/00	ND 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 0.03	0.00		
MW-2	06/24/03 07/09/03	0.03	0.01		
MW-2 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 08/31/04	ND ND	0.00		
MW-2 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	<u> </u>	0.00		
MW-2	05/12/05	ND	0.00		
MW-2	06/20/05	ND ND	0.00		
MW-2 MW-2	08/01/05 08/24/05	ND	0.00		
MW-2 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		

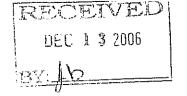
### FOOTNOTES:

(1) Free product encountered, but unable to gauge.

### APPENDIX A

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





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

December 4, 2006

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

Re:

Groundwater Sampling Data Package, BP Service Station No. 2111, located at 1156 Davis Street., San Leandro, California (Quarterly Monitoring performed on October 24, 2006)

#### General Information

Data Submittal Prepared / Reviewed by: Sandy Hayes / Jay Johnson

Phone Number: (530) 676-6000

On-Site Supplier Representative: Vince Zalutka

Date: October 24, 2006

Arrival: 05:10 Departure: 13:15

Weather Conditions: Cloudy Unusual Field Conditions: None

Scope of Work Performed: Quarterly monitoring and sampling

Variations from Work Scope: Well MW-1 in fenced area, not accessable. Well MW-2 has hydrocarbon oder. Well MW-8 and MW-2 could not access to sample due to connection to treatment system.

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

Sincerely,

STRATUS ENVIRONMENTAL SINC.

Jay R. Johnson

No. 5867

Project Manager

Project Manager

### Attachments:

- Bill of Lading
- Field Data Sheets
- Calibration Form
- Chain of Custody Documentation

CC: Mr. Paul Supple, BP/ARCO

# BP GEM OIL COMPANY

# TYPE A BILL OF LADING

SOURCE RECORD BILL OF LADING FOR NON-HAZARDOUS **PURGEWATER** RECOVERED GROUNDWATER WELLS AT BP GEM OIL COMPANY FACILITIES IN THE STATE OF CALIFORNIA. THE NON-HAZARDOUS PURGEWATER WHICH HAS RECOVERED BEEN FROM GROUNDWATER WELLS COLLECTED BY THE CONTRACTOR, MADE UP INTO LOADS OF APPROPRIATE SIZE AND HAULED BY BELSHIRE ENVIRONMENTAL TO ENVIRONMENTAL IN REDWOOD CITY, CALIFORNIA. **SEAPORT** 

The contractors performing this work are Stratus Environmental, Inc. [Stratus, 3330 Cameron Park Drive, Suite 550, Cameron Park, CA 95682, (530) 676-6004], and Dulous Environmental, Inc. [Dulous, PO Box 2559, Orangevale, CA 95662, (916) 990-0333]. Stratus is authorized by BP GEM OIL COMPANY to recover, collect, and apportion into loads the nonhazardous well purgewater that is drawn from wells at BP GEM Oil Company facilities and deliver that purgewater to BP GEM Oil Company facility 5786 located in West Sacramento, California. Dulous also performs these services under subcontract to Stratus. Transport routing of the non-hazardous well purgewater may be direct from one BP GEM facility to the designated destination point; from one BP GEM facility to the designated destination point via another BP GEM facility; from a BP GEM facility to the designated destination point via the contractor's facility, or any combination thereof. The non-hazardous well purgewater is and remains the property of BP GEM Oil Company.

This Source Record BILL OF LADING was initiated to cover the recovery of non-hazardous well purgewater from wells at the BP GEM Oil Company facility described below:

ARCO	21//
Station #	1
: 1156 Par	115 ST, SAN LEANDRE
Station Address	<u>'</u>
Total Gallons Collected From G	roundwater Monitoring Wells:
Added Equipment Rinse Water	Any Other Adjustments
TOTAL GALS. RECOVERED 64.5	loaded onto Stratus vehicle #
Stratus Project #	time date
Signature Vine Za	elethan !
********	*****
RECEIVED AT	time date
Unloaded by Signature Vince 3	1830 10125106 Lette

### HYDROLOGIC DATA SHEET



Gauge Date:	10-24-06
-------------	----------

Project Name: ARCO 2111

Field Technician: Vince Zalutka

Project Number:

TOC = Top of Well Casing Elevation
DTP = Depth to Free Product (FP or NAPH) Below TOC
DTW = Depth to Groundwater Below TOC
DTB = Depth to Bottom of Well Casing Below TOC

DIA = Well Casing Diameter ELEV = Groundwater Elevation DUP = Duplicate

	T DEPEN	DOLLOID III 11	CH CHAINE DE	IOW TOC						
WELL OR LOCATION	ТІМЕ			1	REMENT			PURGE & SAMPLE	SHEEN CONFIRMATION	COMMENTS
	<u> </u>	TOC	PTT	DTW	DTB	DIA	ELEV		(w/bailer)	
mw-1				17.15	26.40	4				1.6
5-2	0700			15.38	26.70	4				٠. ا
( -3	0647			14.45						
) -4	0551				21.50			· ·		19
5-5					23.80					<u>                                     </u>
5 - 6	0736				20,60					
> -7	0711				26.40					not Sample
mw_8	0650					女				not accessable
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W	ATER SAMPI	E FIELD DATA	SHEET		
PROJECT#: ARCO 2111  CLIENT NAME: ARCO 2111  LOCATION: San Leandro	PURGED BY: _ SAMPLED BY:	Vince Z Vince Z		E I.D.:	
DATE PURGED 10 24 06  DATE SAMPLED 10 24 06  SAMPLE TYPE: (X3) Groundwater x	START (2400hr) SAMPLE TIME ( Surface Wai	(2400hr) // /	END (2-	400hr) //	2/
CASING DIAMETER: 2" Casing Volume: (gallons per foot) (0.17)	(0.38)	4" (0.67) 5" (1.0	02) 6" (1.50)	(2.60)	Other ()
DEPTH TO BOTTOM (feet) = 26,4  DEPTH TO WATER (feet) = 17,1  WATER COLUMN HEIGHT (feet) = 9,2	5	CALC	NG VOLUME (gal) = ULATED PURGE (g AL PURGE (gal) =		19
	FIELD N	ÆASUREMENTS			
DATE TIME VOLUME (2400hr) (gal)  102406 1050 &  5 1107 9  10-24-8 1116 18.5	TEMP. (degrees F) 18.2 18.9	CONDUCTIVITY (umhos/cm) 770 785 963	pH (units) 7.03 6.63 6.68	COLOR (visual)  Clear  clear	TURBIDITY 7. (NTU) 0/0 N/A 16.0 Loudy
SAMPLE DEPTH TO WATER:/7.2./	SAMPLE	INFORMATION	SAMPLE TURBI	DITY:	te cloudy
80% RECHARGE. YES NO	ANAL	YSES:			/
ODOR: SAMPLE VES	SSEL/PRESERVA	ITVE:	HLC		<del></del>
PURGING EQUIPMENT  Bladder Fump  Centrifugal Pump  Bailer (PV	flon) (C) inless Steel)	Bladder Pum Centrifugal P Submersible i Peristalic Pun Other:	SAMPLING EQU D Baile ump Baile Pump Baile	IPMENT or (Teflon) or ( PVC or (Stainless Steel	ordisposable) )
WELL INTEGRITY: Cared  REMARKS: Box in  SIGNATURE: Vinil Beliefty	Ferred	trea.	LOCK#:	w/A	age of



w	ATER SAMPLE F	ŒLD DATA S	HEET		
PROJECT #: 2 /// CLIENT NAME:	PURGED BY: SAMPLED BY:	VZ	<del></del>	.D.: E I.D.;	5-2
LOCATION: San Lean dr.		0	QA SAN		NJA
DATE PURGED	START (2400hr) SAMPLE TIME (2400h		END (24	00hr)	
SAMPLE TYPE: Groundwater x	Surface Water	·	nt Effluent	_ _ Other _	
CASING DIAMETER: 2" Casing Volume: (gallons per foot) (0.17)	3" 4" (0.38)	5" (1.02)	6" (1.50)	8" <u>(2.60)</u>	Other ( )
DEPTH TO BOTTOM (feet) = N/A  DEPTH TO WATER (feet) = N/A  WATER COLUMN HEIGHT (feet) =	5/A	CALCUI	G VOLUME (gal) = LATED PURGE (ga L PURGE (gal) =	l) =	3.
	FIELD MEASU	REMENTS	· · · · · · · · · · · · · · · · · · ·		
DATE TIME VOLUME (2400hr) (gal)		DUCTIVITY (umhos/cm)	pH (units)	COLOR (visual) Clear	TURBIDITY (NTU)  A/A
SAMPLE DEPTH TO WATER: N/M	SAMPLE INFO	RMATION	SAMPLE TURBIE	DITY: C	lear_
80% RECHARGE: YES NO	ANALYSES:				
PURGING EQUIPMENT  Bladder Pump Bailer (Te Centrifugal Pump Bailer (PV	C) infess Steel)	Bladder Pump Centrifugal Pum Submersible Pum Peristalic Pump	SAMPLING EQUIL  Bailer  Bailer  Bailer	r (Teflon) r ( PVC o r (Stainless Steel)	
wp-well con	elly wer	ccssable	LOCK#: th sys. for ba	ten h	ook Sempling
SIGNATURE:				Pt	ige Zof



WATER SAMPLE FIELD DATA SHEET
PROJECT#: 211 PURGED BY: Vince 7: WELL I.D.: MW-J  CLIENT NAME: SAMPLED BY: Vince 2: SAMPLE I.D.: MW-J  LOCATION: San Leandro QA SAMPLES: 3
DATE FURGED         10240b         START (2400hr)         940         END (2400hr)         1027           DATE SAMPLED         10240b         SAMPLE TIME (2400hr)         1017           SAMPLE TYPE:         Groundwater x         Surface Water         Treatment Effluent         Other
CASING DIAMETER: 2" 3" 4" \( \sum 5" 6" 8" \) Other Casing Volume; (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60)
DEPTH TO BOTTOM (fcct) = $26.13$ CASING VOLUME (gal) = $6.48$ DEPTH TO WATER (fcct) = $16.45$ CALCULATED PURGE (gal) = $19.4$ WATER COLUMN HEIGHT (fcct) = $9.68$ ACTUAL PURGE (gal) = $19.6$
FIELD MEASUREMENTS
DATE TIME VOLUME TEMP. CONDUCTIVITY pH COLOR TURBIDITY (2400hr) (gal) (degrees F) (umhos/cm) (units) (visual) (NTU) P/O (102406 1003 10 78.1 752 6.63 clear N/A 7.1 % (102406 1020 19 18.0 749 6.77 clear N/A
SAMPLE DEPTH TO WATER: 16.43 SAMPLE INFORMATION SAMPLE TURBIDITY:
80% RECHARGE; YES NO ANALYSES: 41000
ODOR: None SAMPLE VESSEL / PRESERVATIVE: HCL
PURGING EQUIPMENT  Bladder Pump Bailer (Teflon) Centrifugal Pump Bailer (PVC) Submersible Pump Bailer (Stainless Steel) Peristalic Pump Dedicated  Other:  Pump Depth:  SAMPLING EQUIPMENT  Bailer (Teflon) Centrifugal Pump Bailer (Teflon) Bailer (Teflon) Centrifugal Pump Bailer (Teflon) Bailer (Teflon) Centrifugal Pump Bailer (Stainless Steel) Peristalic Pump Dedicated  Other:
WELL INTEGRITY: Cood - Bolt holesstripped LOCK#: N/A  REMARKS: clean looking samples
SIGNATURE: Vine Jahrth

V	VATER SAMPLE FIE	ELD DATA SHEE	Γ	
PROJECT#: ARCO 211) CLIENT NAME: LOCATION: San Leandro	PURGED BY: \( \begin{aligned} \forall \text{\text{\$V\$}} \\ SAMPLED BY: \( \begin{aligned} \forall \text{\$V\$} \end{aligned} \]	3	WELL I.D.: SAMPLE I.D.: QA SAMPLES:	mw-4
DATE PURGED 10-24-06  DATE SAMPLED 10-24-06  SAMPLE TYPE: Groundwater x	START (2400hr) 6 SAMPLE TIME (2400hr) Surface Water	800 083 Treatment Efflu		0 8 5 /
CASING DIAMETER: 2" Casing Volume: (gallons per foot) (0.17)	3" 4" <u>X</u> (0.38)		6" 8" (1.50)	Other (2.60)
· · · · · · · · · · · · · · · · · · ·	50 35 .15	CASING VOLI CALCULATED ACTUAL PUR	O PURGE (gal) =	4.12 12.36 12.0
	FIELD MEASUR			
DATE TIME (2400hr) (gal)  10 2406 0812 &  10 2406 0820 G  10 2406 0840 12	(degrees F) (ur 19.9 7	mhos/cm) (u 193 6 184 6	.55 Lile	
	SAMPLE INFOR	MATION		
SAMPLE DEPTH TO WATER: 15.34	art dat the immer as the immer		PLE TURBIDITY:	cloudy
	ANALYSES: _	HCL		
PURGING EQUIPMENT  Bladder Pump	VC) tainless Steel)	SAMF Bladder Pump Centrifugal Pump Submersible Pump Peristalic Pump	PLING EQUIPMENT	m) PVC or disposable)
REMARKS: lite o  Replaced Bolts with	oder other u		· · · · · · · · · · · · · · · · · · ·	to Page V of E

W	ATER SAME	LE FIELD	DATA SHI	ŒT	,	
PROJECT#: 2/1   CLIENT NAME: ARCO 2/1/  LOCATION: San Leandre	PURGED BY: SAMPLED BY	V3 V3			.D.: E I.D.: MPLES:	
DATE PURGED 10-24-06  DATE SAMPLED  SAMPLE TYPE: Groundwater x	START (2400h SAMPLE TIME Surface W	(2400hr)	0 g 92/ Treatment I		Other	930
CASING DIAMETER: 2"	3" (0.38)	4" (0.67)	5" (1.02)	6" (1.50)	(2.60)	Other ( )
DEPTH TO BOTTOM (feet) = 23.86  DEPTH TO WATER (feet) = /4.95  WATER COLUMN HEIGHT (feet) = 8.85			CALCULAT	OLUME (gal) = IED PURGE (ga URGE (gal) =	nl) = 4	.50 .5
		MEASUREME		- (gai)		-
DATE TIME VOLUME (2400hr) (gal)  102406 0907 & 0920 4.5	TEMP. (degrees F) / 8 · 3 / 8 · 3	CONDUCT (umhos/	IVITY  Icm)  4  8	pH (units) 6.58 6.69	COLOR (visual)  clear	TURBIDITY D/E (NTU) D/E N/A 10.7 None
SAMPLE DEPTH TO WATER:/5-07	SAMPL	E INFORMATI		MPLE TURBII	DITY:	Nove
80% RECHARGE: YES NO ODOR: VIEW SAMPLE VES! PURGING EQUIPMENT	ANA SEL/PRESERVA	LYSES:	HCL			
Bladder Pump Bailer (Teff Centrifugal Pump Bailer (PVC Submersible Pump Bailer (Stai Peristalic Pump Dedicated Other: Pump Depth:	C)	Cen	SA dder Pump strifugal Pump stersible Pump stalic Pump	Bailer	(Teflon)  ( PVC	
WELL INTEGRITY: 9000 A	samp	le	early	LOCK#:	NA	
SIGNATURE: V Jakothe				· · · · · · · · · · · · · · · · · · ·	P	age 5 of



	WATER SAMP	LE FIELD DATA SE	HEET	
PROJECT#: 211\ CLIENT NAME: ARCO 211\ LOCATION: SUN Leund:	PURGED BY:	Vine Z	WELL I.D.:  SAMPLE I.D.:  QA SAMPLES:	-
DATE PURGED 10 24 04  DATE SAMPLED /0 24 06  SAMPLE TYPE: Groundwater x	START (2400hr SAMPLE TIME Surface Wa	(2400hr) 115		T
CASING DIAMETER: 2" Casing Volume: (gallons per foot) (0.1)	7) 3" (0.38)	4" <u>X</u> 5" (1.02)	6" 8" (2.60) (2.60)	Other ( )
DEPTH TO WATER (feet) =	6.40 5·13 1.27	CALCUL		1.55 -2.6 5 Dry
	FIELD I	MEASUREMENTS		
DATE TIME (2400hr) (gal)    0240b   13	(degrees F) 20,6 19,6 Dry	CONDUCTIVITY (umhos/cm) 838 886 862	pH COLOR (visual) 6.88 Wea 6.85 Gray	cloudy/sa
SAMPLE DEPTH TO WATER: 22.9	8 SAMPLI	EINFORMATION	SAMPLE TURBIDITY:	Joudy.
80% RECHARGE: YES NO	ANAI	LYSES:		<i>V</i>
ODOR: No SAMPLE	VESSEL / PRESERVA	TIVE: HLC		
PURGING EQUIPMENT  Bladder Pump  Centrifugal Pump  Bailer	r (Teflon) r (PVC) r (Stainless Steel)			VC or disposable) Steel)
			7 7	
- CA EV P	tem How	ever, valu	LOCK#: NO/A	- Aff
SIGNATURE: Vine Jah	it/hy			Page 6 of

Sampled by: Vine 3. Date: 15-27-06

Last Meter Calibration (SN and Date): Box Lack Cracked Cracked Missing Water Box οr Good (Replaced Bolt-hales Broken Bolls or Well ID Condition with new) Bolts Stripped Stripped Box Bolt-holes Missing Notes and Other Stuff Carrol MW-6 Bolts stick up - Replace W/pins

Some holes stripped

Sits in hole W/pinned bolts

erack in glass on vacagaage X mw-5 mw-3mw-1 Visitor Log, Date, and Time:

. | 1 +

JAME.	#			Chain o
	hr	)	Project Name:	ARCO 2
SALAS	~		BP BU/AR Region	on/Enfos Segment:
741		Original	State or Lead Re	egulatory Agency:

# **Chain of Custody Record**

ARCO ZIII Quanterly Monitoring

Project Name: BP BU/AR Region/Enfos Segment:

> BP > Americas > West Coast > Retail > Alameda > 2111 | Sky Conditions: RWQCB - San Frasisco

Requested Due Date (mm/dd/yy):

Page\_[ On-site Time: 0510 Temp: 6015 Off-site Time: Temp: 7015 clouder Meteorological Events: Wind Speed: -Direction:

Lab I	Name: Test America	BP/AR F	BP/AR Facility No.: 2111																									
	ess: 885 Jarvis Drive	BP/AR Facility Address: 1156 Davis St. San Leandry										Consultant/Contractor: Stratus Environmental, Inc																
	Morgan Hill, CA 95037	Site Lat/Long: N/A									Ad	1																
Lab I	PM: Lisa Race		T										-	Cameron Park, CA 95682														
	Fax: 408.782.8156 / 408.782.6308	Enfos Pro	California Global ID No.: TOGOO101764											Consultant/Contractor Project No.:														
_	R PM Contact:	9 9 00 P 3										_	Consultant/Contractor PM: Jay Johnson															
	ess: 2010 Crow Canyon Place, suite												Tele/Fax: 530 676-6000 530 676-6005															
	San Ramon, CA									7	Report Type & QC Level: Level 1 with EDF																	
	Fax: 925 275-3506	4 . 3 1/1								E-mail EDD To: cjewitt@stratusinc.net																		
Lab Bottle Order No: Matrix							16111*	$\overline{}$	Preservative															Richfield Co.				
		T	T	╣╌	11411			, ca	<b> </b>	Preser		vativ	ative				Req	uested Analysis				_		8260		ALI	_ e 'v	
Item No.	Sample Description	Time Time Soil/Solid		Water/Liquid		Laboratory No.	No. of Containers	Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO3	HCI	Methanol	A. T.	ત્રાં	Sexy's S	1.7-0'L	ero.								le Poin	t Lat/Long	-	
1	mw-1	11.11	1024	1	X		***************************************	3			-	X		<b></b> -	Υ×	+	1~	+		- 1		+						
2	MW-3	1017	3	十一	X	-		3	Н		$\dashv$		$\dashv$							$\dashv$	$\dashv$	+	$\dashv$				<del></del>	
		, ,,,,	<del>  -</del>	╢─				<u> </u>	$\vdash\vdash$	-	$\dashv$	<u> </u>			$\neg$	$\neg$	$\neg$	<b>/</b>				$\dashv$						
3	MW-4	0837	12	╢	<del>                                     </del>	_		6				<u> </u>		_  _			<u> </u>											
4	mw - 5	542	1024		X			3				X	1	1,	λb	<  /	火	×			- 1							
5	MW-7	1159	1024		X			3			$\Box$	k		يز	/ ×	( 7	2 ×	X										
6	T82111/0242006	0621	1024		X			2	$\Box$		4	$\dashv$		7	7	1			_	$\dashv$	_	寸	コ		H	011	<u> </u>	
7															1	$\top$	<del>  -</del>			1		十	十			+	<u> </u>	
8											寸			┪		$\top$	+	i		_	-	十	$\dashv$					
9	, , , , , , , , , , , , , , , , , , , ,		<u> </u>	╟		1		П		$\dashv$	_ -	$\dashv$	_	╫	$\top$		+			$\dashv$	$\dashv$	+	$\dashv$			-		
10				-						<del> </del>	+	$\dashv$	+	- -	+	+	+		$\dashv$	$\dashv$	-	+	$\dashv$					
	ler's Name: Vince 2.	1	Relinquished By / Affiliation Date								Date	1-	<u> </u>		Agsepted By / Aff													
	<u> </u>	June 3 alutto							ᆜ는				-		A	dec br	<u>=                                    </u>	y / Al	шано	<u>n</u>		Date	Time					
Sampler's Company: STRATUS EXU. Shipment Date: 10-24-06							yane Jacques							ď	10-24-86 1440					71-							101397	14140
Shipment Method: STRATUS																												
Shipment Tracking No:																$\vdash$								<del></del>				
	ll Instructions:	<del></del>					· · · · · · · · · · · · · · · · · · ·											•								<u>                                     </u>		
				-			<del></del>			,								· · · · · · · · · · · · · · · · · · ·										
Custo	dy Seals In Place Yes No			Te	nn Ria	nk Yes	No	,				`oole	r Ter	mne	ahire	on 1	Recei	nt	O	F/C				Blank	Vac		T	
الباط الدعمة سب	-, INO			1 61	מום איי	111/ 1 (2)	טאַז					~001C	. 101	וטעויי	TITLE	- 011 1	انادىب	P.F.	···········	70		1	TIID.	DIMIK	1 05		lo	



13 November, 2006

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

RE: ARCO #2111, San Leandro, CA

Work Order: MPJ1031

Enclosed are the results of analyses for samples received by the laboratory on 10/25/06 08:30. 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.





Stratus Environmental Inc. [Arco] Project: ARCO #2111, San Leandro, CA MPJ1031
3330 Cameron Park Dr., Suite 550 Project Number: G0C28-0023 Reported:
Cameron Park CA, 95682 Project Manager: Jay Johnson 11/13/06 15:42

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MPJ1031-01	Water	10/24/06 11:11	10/25/06 08:30
MW-3	MPJ1031-02	Water	10/24/06 10:17	10/25/06 08:30
MW-4	МРЈ1031-03	Water	10/24/06 08:37	10/25/06 08:30
MW-5	MPJ1031-04	Water	10/24/06 09:21	10/25/06 08:30
MW-7	MPJ1031-05	Water	10/24/06 11:59	10/25/06 08:30
TB211110242006	MPJ1031-06	Water	10/24/06 06:21	10/25/06 08:30

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 intact custody seals.





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023 Project Manager: Jay Johnson MPJ1031 Reported: 11/13/06 15:42

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	ampled: 10/24/06 11:11		10/25/06	08:30			7 1111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11100	170165
Gasoline Range Organics (C4-C	12) 710	250	ug/l	5	6J30001	10/30/06	10/30/06	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4	!	108 %	60-	-145	n	н	11	n n	
MW-3 (MPJ1031-02) Water S	ampled: 10/24/06 10:17	Received:	10/25/06	08:30					
Gasoline Range Organics (C4-C12	2) ND	50	ug/l	1	6J30001	10/30/06	10/30/06	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4	!	111 %	60-	-145	n	"	"	11	
MW-4 (MPJ1031-03) Water S	ampled: 10/24/06 08:37	Received:	10/25/06	08:30					
Gasoline Range Organics (C4-C12	2) ND	50	ug/l	1	6J30001	10/30/06	10/30/06	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4	!	114%	60-	-145	11	11	**	u	
MW-5 (MPJ1031-04) Water S	ampled: 10/24/06 09:21	Received:	10/25/06	08:30					
Gasoline Range Organics (C4-C	12) 61	50	ug/l	ı	6K06016	11/06/06	11/07/06	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4	!	104 %	60-	-145	n	"	If	If .	
MW-7 (MPJ1031-05) Water Sa	ampled: 10/24/06 11:59	Received:	10/25/06	08:30					
Gasoline Range Organics (C4-C	12) 6800	1000	ug/l	20	6J30001	10/30/06	10/30/06	LUFT GCMS	PV
Surrogate: 1,2-Dichloroethane-d4		110%	60-	-145	11	и	Ħ	**	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023 Project Manager: Jay Johnson MPJ1031 Reported: 11/13/06 15:42

## Volatile Organic Compounds by EPA Method 8260B

## TestAmerica - Morgan Hill, CA

Analyte R	lesult	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-1 (MPJ1031-01) Water Sampled: 10/24/0	6 11:11	Received:	10/25/06 0	8:30					
tert-Amyl methyl ether	10	2.5	ug/l	5	6J30001	10/30/06	10/30/06	EPA 8260B	
Benzene	4.2	2.5	II	n	μ	u	ĮI.	11	
	ND	100	И	14	11	u u	¢1	Ħ	
	ND	2.5	11	ır	n	n	ti	ť	
1,2-Dibromoethane (EDB)	ND	2.5	ŧı	11	If	19	ij	II	
1,2-Dichloroethane	ND	2.5	Ħ	tt	Ц	)r	It	U	
Ethanol	ND	1500	19	U.	h	†I	Ħ	н	
Ethyl tert-butyl ether	ND	2.5	11	U	11	0	ti	11	
Ethylbenzene	19	2.5	II	11	tì	11	0	**	
Methyl tert-butyl ether	360	2.5	H	н	19	10	If .	ti	
Toluene	ND	2.5	ij	н	II	10	11	н	
Xylenes (total)	13	2.5	0	0	11	H	Ħ	ii.	
Surrogate: Dibromofluoromethane		102 %	75-13	30	n	H	n	11	
Surrogate: 1,2-Dichloroethane-d4		108 %	60-14	<i>15</i>	n	tt.	u	rr	
Surrogate: Toluene-d8		101 %	70-13	30	"	**	"	II .	
Surrogate: 4-Bromofluorobenzene		102 %	60-12	20	u	11	"	n .	
MW-3 (MPJ1031-02) Water Sampled: 10/24/0	6 10:17	Received: 1	10/25/06 08	8:30					
tert-Amyl methyl ether	2.8	0.50	ug/l	ı	6J30001	10/30/06	10/30/06	EPA 8260B	
Benzene	ND	0.50	n	n	11	n	ti	u	
tert-Butyl alcohol	ND	20	n	19	H		U	14	
* **	ND	0.50	lf .	(1	Ħ	H	U	m	
1,2-Dibromoethane (EDB)	ND	0.50	Ц	H	ti	н	0	H	
1,2-Dichloroethane	ND	0.50	и.	It	11	It	n	и	
Ethanol	ND	300	H	н	n	Iŧ	19	н	
Ethyl tert-butyl ether	ND	0.50	И	и	m	И	"	п	
Ethylbenzene	ND	0.50	н	и	n	4	10	11	
Methyl tert-butyl ether	33	0.50	н	И	lt.	и	If	Ħ	
Toluene	ND	0.50	Ħ	н	и	н	11	ti	
Xylenes (total)	ND	0.50	ti	11	II	n	H	n	
Surrogate: Dibromofluoromethane		104 %	75-13	30	11	n	"	"	
Surrogate: 1,2-Dichloroethane-d4		111%	60-14	15	IJ	n	Ħ	rr -	
Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8		111 % 97 %	60-14 70-13	-	u H	"	11	rr H	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023 Project Manager: Jay Johnson MPJ1031 Reported: 11/13/06 15:42

## Volatile Organic Compounds by EPA Method 8260B

## TestAmerica - Morgan Hill, CA

Analyte  MW-4 (MPJ1031-03) Water Samp  tert-Amyl methyl ether  Benzene tert-Butyl alcohol Di-isopropyl ether 1,2-Dibromoethane (EDB) 1,2-Dichloroethane Ethanol	Result led: 10/24/06 08:37 0.91 ND ND ND	0.50 0.50	ug/l	Dilution	Batch	Prepared	Analyzed	Method	Note
tert-Amyl methyl ether Benzene tert-Butyl alcohol Di-isopropyl ether 1,2-Dibromoethane (EDB) 1,2-Dichloroethane	<b>0.91</b> ND ND	0.50 0.50	ug/l	3:30					
Benzene tert-Butyl alcohol Di-isopropyl ether 1,2-Dibromoethane (EDB) 1,2-Dichloroethane	ND ND	0.50	_						
tert-Butyl alcohol Di-isopropyl ether 1,2-Dibromoethane (EDB) 1,2-Dichloroethane	ND			1	6J30001	10/30/06	10/30/06	EPA 8260B	
Di-isopropyl ether 1,2-Dibromoethane (EDB) 1,2-Dichloroethane		20	п	11	10	и	ti	10	
1,2-Dibromoethane (EDB) 1,2-Dichloroethane	ND	20	n	IP	11		**	ır	
1,2-Dichloroethane		0.50	ø	11	11	"	11	Ħ	
	ND	0.50	II	n	H	ij	н	O	
Ethanol	ND	0.50	II	н	0	11	н	ŋ	
	ND	300	ji .	If	n	19	H	11	
Ethyl tert-butyl ether	ND	0.50	н	н	R	H	II .	H	
Ethylbenzene	2.0	0.50	**	И	ti .	Ц	11	и	
Methyl tert-butyl ether	3.5	0.50	H	Ħ	ħ	n	н	н	
Toluene	ND	0.50	"	b	ei	H	ti	ii .	
Xylenes (total)	ND	0.50	((	n	ri	fl	ti	41	
Surrogate: Dibromofluoromethane		103 %	75-13	0	,,	и	ı	и	
Surrogate: 1,2-Dichloroethane-d4		114 %	60-14	5	tt	H	tt.	n	
Surrogate: Toluene-d8		96 %	70-13	0	"	"	n	n .	
Surrogate: 4-Bromofluorobenzene		93 %	60-12	0	**	"	"	"	
MW-5 (MPJ1031-04) Water Sampl	led: 10/24/06 09:21	Received:	10/25/06 08	:30					
ert-Amyl methyl ether	ND	0.50	ug/l	1	6K06016	11/06/06	11/07/06	EPA 8260B	
Benzene	ND	0.50	If	n	u	*11	ч	11	
tert-ButyI alcohol	1200	20	и	U	U	**	U	11	
Di-isopropyl ether	ND	0.50	II .	it.	U	n	II .	н	
1,2-Dibromoethane (EDB)	ND	0.50	п	и	H	II .	ft	Iŧ	
I,2-Dichloroethane	ND	0.50	*1	н	If	И	Ü	II	
Ethanol	ND	300	et .	Ħ	п	11	п	II	IC
Ethyl tert-butyl ether	ND	0.50	H	*1	ŧI.	п	*1	H	
Ethylbenzene	ND	0.50	н	11	ri .	#1	IJ	11	
Methyl tert-butyl ether	17	0.50	н	n	U	Ħ	0	n	
Toluene – – – – – – – – – – – – – – – – – –	ND	0.50	h	It	0	H	B	Ü	
Xylenes (total)	ND	0.50	tt		10	н	н	ff .	
Surrogate: Dibromofluoromethane		103 %	75-13	0	rr	"	ıı	"	
Surrogate: 1,2-Dichloroethane-d4		104 %	60-14.	5	Ħ	"	U	rr .	
Surrogate: Toluene-d8		94 %	70-136	0	ft	**	rt .	tt	
Surrogate: 4-Bromofluorobenzene		87 %	60-126	0		n	"	rr .	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023 Project Manager: Jay Johnson MPJ1031 Reported: 11/13/06 15:42

## Volatile Organic Compounds by EPA Method 8260B

### TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 (MPJ1031-05) Water Sai	mpled: 10/24/06 11:59	Received:	10/25/06 (	08:30					
tert-Amyl methyl ether	31	5.0	ug/l	10	6K06016	11/06/06	11/07/06	EPA 8260B	
Benzene	100	5.0	н	н	H	11	н	11	
tert-Butyl alcohol	10000	200	**	11	**	"	U	n	
Di-isopropyl ether	ND	5.0	n	0	Ü	n	U	0	
I,2-Dibromoethane (EDB)	ND	5.0	I+	ų	H	n	11	n	
1,2-Dichloroethane	ND	5.0	И	10	IT	19	l <del>t</del>	n	
Ethanol	ND	3000	14	It	It	II‡	11	III	IC
Ethyl tert-butyl ether	ND	5.0	н	11	II .	И	#1	10	
Ethylbenzene	16	5.0	II	И	11	41	rı .	jr	
l'oluene	ND	5.0	)(	н	*1	11	Ħ	11	
Xylencs (total)	15	5.0	*11	н	н	**	п	H	
Surrogate: Dibromofluoromethane		103 %	75-1	30	n	u	"	II	
Surrogate: 1,2-Dichloroethane-d4		102 %	60-1	45	#	"	H	н	
Surrogate: Toluene-d8		96 %	70-1	30	н	"	n	n.	
Surrogate: 4-Bromofluorobenzene		89 %	60-1	20	"	"	n	n	
MW-7 (MPJ1031-05RE1) Water	Sampled: 10/24/06 11	:59 Receiv	ed: 10/25	/06 08:30					CL
Methyl tert-butyl ether	14000	100	ug/l	200	6K08015	11/08/06	11/09/06	EPA 8260B	
Surrogate: Dibromofluoromethane		108 %	75-1	30	"	"	tr	n	
Surrogate: 1,2-Dichloroethane-d4		136 %	60-1	45	n	"	n	и	
Surrogate: Toluene-d8		92 %	70-1	30	11	n	n	"	
Surrogate: 4-Bromofluorobenzene		87 %	60-1	20	a)	н	n	"	





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023 Project Manager: Jay Johnson MPJ1031 Reported: 11/13/06 15:42

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

A		Reporting		Spike	Source		%REC		RPD	
Analyte	Resuit	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 6J30001 - EPA 5030B P/T / LUFT	r GCMS									
Blank (6J30001-BLK1)				Prepared	& Analyze	d: 10/30/	06			
Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Surrogate: 1,2-Dichloroethane-d4	2.68		,,	2.50		107	60-145			~~~
Laboratory Control Sample (6J30001-BS2)				Prepared	& Analyze	d: 10/30/	06			
Gasoline Range Organics (C4-C12)	461	50	ug/l	440		105	75-140			
Surrogate: 1,2-Dichloroethane-d4	2.78		"	2.50	****	111	60-145		V-14-1-11-11-11-11-11-11-11-11-11-11-11-1	***
Laboratory Control Sample Dup (6J30001-E	SD2)			Prepared	& Analyze	d: 10/30/	06			
Gasoline Range Organics (C4-C12)	445	50	ug/l	440		101	75-140	4	20	
Surrogate: 1,2-Dichloroethane-d4	2.73		"	2.50		109	60-145	7	*****	
Batch 6K06016 - EPA 5030B P/T / LUF	T GCMS									
Blank (6K06016-BLK1)				Prepared a	& Analyze	d: 11/06/	06			
Gasoline Range Organics (C4-C12)	ND	50	ug/l		-			•	W-110014-1	
Surrogate: 1,2-Dichloroethane-d4	2.51		H	2,50		100	60-145			
Laboratory Control Sample (6K06016-BS2)				Prepared a	& Analyze	d: 11/06/	06			
Gasoline Range Organics (C4-C12)	519	50	ug/l	440	***************************************	118	75-140			***************************************
Surrogate: 1,2-Dichloroethane-d4	2.50		n	2.50		100	60-145			
Laboratory Control Sample Dup (6K06016-1	BSD2)			Prepared o	& Analyze	d: 11/06/	06			
Gasoline Range Organics (C4-C12)	405	50	ug/l	440		92	75-140	25	20	RI
Surrogate: 1,2-Dichloroethane-d4	2.51		н	2.50	***************************************	100	60-145			





Project: ARCO #2111, San Leandro, CA

Spike

Source

Project Number: G0C28-0023 Project Manager: Jay Johnson MPJ1031 Reported: 11/13/06 15:42

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 6J30001 - EPA 5030B P/T /	EPA 8260B									
Blank (6J30001-BLK1)		<u></u>		Prepared	& Analyze	:d: 10/30/	06			
tert-Amyl methyl ether	ND	0.50	ug/l	····		***************************************				***************************************
Benzene	ND	0.50	te.							
tert-Butyl alcohol	ND	20	И							
Di-isopropyl ether	ND	0.50	ŧ							
1,2-Dibromoethane (EDB)	ND	0.50	**							
1,2-Dichloroethane	ND	0.50	19							
Ethan <b>ol</b>	ND	300	IF							
Ethyl tert-butyl ether	ND	0.50	n							
Ethylbenzene	ND	0.50	**							
Methyl tert-butyl ether	ND	0.50	e							
Toluene	ND	0.50	U							
Xylenes (total)	ND	0.50	0							
Surrogate: Dibromofluoromethane	2.45		**	2.50		98	75-130	·		
Surrogate: 1,2-Dichloroethane-d4	2.68		"	2.50		107	60-145			
Surrogate: Toluene-d8	2.37		"	2.50		95	70-130			
Surrogate: 4-Bromofluorobenzene	2,29		"	2.50		92	60-120			
Laboratory Control Sample (6J30001	-BS1)			Prepared o	& Analyze	d: 10/30/0	06			
tert-Amyl methyl ether	11.1	0,50	ug/l	10.0		111	65-135		******	
Benzene	10.0	0.50	н	10.0		100	70-125			
tert-Butyl alcohol	191	20	O	200		96	60-135			
Di-isopropyl ether	10.4	0.50	H	10.0		104	70-130			
1,2-Dibromoethane (EDB)	12.1	0.50	#	10.0		121	80-125			
1,2-Dichloroethane	10.9	0.50	If	10.0		109	75-125			
Ethanol	174	300	11	200		87	15-150			
Ethyl tert-butyl ether	10.6	0.50	†I	10.0		106	65-130			
Ethylbenzen <b>e</b>	9.79	0.50	н	10.0		98	70-130			
Methyl tert-hutyl ether	11.4	0.50	н	10.0		114	50-140			
Toluene	10.1	0.50	te .	10.0		101	70-120			
Xylenes (total)	29.8	0.50	н	30.0		99	80-125			
Surrogate: Dibromofluoromethane	2.55		п	2.50		102	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.60		11	2.50		104	60-145			
Surrogate: Toluene-d8	2.45		n	2.50		98	70-130			
Surrogate: 4-Bromofluorobenzene	2.41		n	2.50		96	60-120			





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023
Project Manager: Jay Johnson

MPJ1031 Reported: 11/13/06 15:42

## 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 6J30001 - EPA 5030B P/T / E	PA 8260B									, ,,,,,
Matrix Spike (6J30001-MS1)	Source: M	PJ1031-03		Prepared	& Analyze	d: 10/30/	06			
tert-Amyl methyl ether	12.8	0,50	ug/l	10.0	0.91	119	65-135			•••
Benzene	10.6	0.50	H	10.0	ND	106	70-125			
tert-Butyl alcohol	167	20	n	200	ND	84	60-135			
Di-isopropyl ether	11.4	0.50		0.01	ND	114	70-130			
1,2-Dibromoethane (EDB)	12.9	0.50	17	10.0	ND	129	80-125			LN
1,2-Dichloroethane	11.8	0.50	H.	10.0	ND	118	75-125			
Ethanol	160	300	п	200	ND	80	15-150			
Ethyl tert-butyl ether	11.4	0.50	п	10.0	ND	114	65-130			
Ethylbenzene	11.4	0.50	п	10,0	2.0	94	70-130			
Methyl tert-butyl ether	15.8	0.50	и	10.0	3.5	123	50-140			
Toluene	10.7	0.50	11	10.0	ND	107	70-120			
Xylenes (total)	28.9	0.50	*1	30.0	0.45	95	80-125			
Surrogate: Dibromofluoromethane	2.60		it.	2.50		104	75-130		***************************************	
Surrogate: 1,2-Dichloroethane-d4	2.69		**	2.50		108	60-145			
Surrogate: Toluene-d8	2.49		"	2.50		100	70-130			
Surrogate: 4-Bromofluorobenzene	2.47		n	2.50		99	60-120			
Matrix Spike Dup (6J30001-MSD1)	Source: M	PJ1031-03		Prepared o	& Analyze	d: 10/30/0	)6			
tert-Amyl methyl ether	13.4	0.50	ug/l	10.0	0.91	125	65-135	5	25	
Benzene	10.8	0.50	e	10.0	ND	108	70-125	2	15	
ert-Butyl alcohol	173	20	If	200	ND	86	60-135	4	35	
Di-isopropyl ether	11.8	0.50	н	10.0	ND	118	70-130	3	35	
1,2-Dibromocthane (EDB)	13.1	0.50	н	10.0	ND	131	80-125	2	15	LN
1,2-Dichloroethane	12.0	0.50	n.	10.0	ND	120	75-125	2	10	
Ethanol	177	300	**	200	ND	88	15-150	10	35	
Ethyl tert-butyl ether	11.9	0.50	Ħ	10.0	ND	119	65-130	4	35	
Ethylbenzene	11.6	0.50	н	10.0	2.0	96	70-130	2	15	
Methyl tert-butyl ether	16.7	0.50	н	0.01	3.5	132	50-140	6	25	
Toluene	10.8	0.50	10	10.0	ND	108	70-120	0.9	15	
Xylenes (total)	29.1	0.50	11	30.0	0.45	96	80-125	0.7	15	
Surrogate: Dibromofluoromethane	2.65		n	2.50		106	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.77		rr .	2.50		111	60-145			
Surrogate: Taluene-d8	2.52		n	2.50		101	70-130			
Surrogate: 4-Bromofluorobenzene	2.45		tr	2.50		98	60-120			





Project: ARCO #2111, San Leandro, CA

Project Number: G0C28-0023 Project Manager. Jay Johnson

MPJ1031 Reported: 11/13/06 15:42

## 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 6K06016 - EPA 5030B P/T /	EPA 8260B									
Blank (6K06016-BLK1)				Prepared	& Analyze	:d: 11/06/0	)6			
tert-Amyl methyl ether	ND	0.50	ug/l		•		••••			
Benzene	ND	0.50	n							
tert-Butyl alcohol	ND	5.0	U							
Di-isopropyl ether	ND	0.50	It							
1,2-Dibromoethane (EDB)	ND	0.50	If							
1,2-Dichloroethane	ND	0.50	II							
Ethanol	ND	300	11							
Ethyl tert-butyl ether	ND	0.50	n							
Ethylbenzene	ND	0.50	n							
Methyl tert-butyl ether	ND	0.50	U							
Toluene	ND	0.50	И							
Xylenes (total)	ND	0.50	11							
Surrogate: Dibromofluoromethane	2.41		11	2.50	······························	96	75-130	***************************************		
Surrogate: 1,2-Dichloroethane-d4	2.51		n	2.50		100	60-145			
Surrogate: Toluene-d8	2.33		"	2.50		93	70-130			
Surrogate: 4-Bromofluorobenzene	2.15		"	2.50		86	60-120			
Laboratory Control Sample (6K06016-	BS1)			Prepared o	& Analyze	d: 11/06/0	16			
tert-Amyl methyl ether	9,33	0.50	ug/i	10,0		93	65-135			
Benzene	9.43	0.50	*1	0.01		94	70-125			
tert-Butyl alcohol	210	5.0	H	200		105	60-135			
Di-isopropyl ether	8.91	0.50	н	10.0		89	70-130			
1,2-Dibromoethane (EDB)	10.9	0.50	H	10.0		109	80-125			
1,2-Dichloroethane	10.6	0.50	н	10.0		106	75-125			
Ethanol	294	300	н	200		147	15-150			
Ethyl tert-butyl ether	9.29	0.50	n	10.0		93	65-130			
Ethylbenzene	9.45	0.50	IJ	10.0		94	70-130			
Methyl tert-butyl ether	9.49	0.50	U	10.0		95	50-140			
l'oluene	9.81	0.50	п	10.0		98	70-120			
Xylenes (total)	29,8	0.50	15	30.0		99	80-125			
Surrogate: Dibromofluoromethane	2,52		"	2.50		101	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.56		n	2.50		102	60-145			
Surrogate: Toluene-d8	2,38		н	2.50		95	70-130			
Surrogate: 4-Bromofluorobenzene	2.16		,,	2.50		86	60-120			



RPD



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

Project: ARCO #2111, San Leandro, CA

Spike

Source

MPJ1031 Project Number: G0C28-0023 Reported: Project Manager: Jay Johnson 11/13/06 15:42

%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 6K06016 - EPA 5030B P/T / E	EPA 8260B	,								
Matrix Spike (6K06016-MS1)	Source: MP	K0051-04		Prepared	& Analyze	ed: 11/06/	06			
tert-Amyl methyl ether	10.1	0.50	ug/l	10.0	ND	101	65-135			
Benzene	10.3	0.50	ŧ	10.0	ND	103	70-125			
tert-Butyl alcohol	219	5.0	н	200	ND	110	60-135			
Di-isopropyl ether	10.0	0.50	17	10.0	ND	100	70-130			
1,2-Dibromoethane (EDB)	11.6	0.50	11	10.0	ND	116	80-125			
1,2-Dichloroethane	11.3	0.50	н	10.0	ND	113	75-125			
Ethanol	313	300	n	200	ND	156	15-150			LM
Ethyl tert-butyl ether	10.2	0.50	11	10.0	ND	102	65-130			
Ethylbenzene	9.81	0.50	31*	0.01	ND	98	70-130			
Methyl tert-butyl ether	9.97	0.50	**	10.0	ND	100	50-140			
Toluene	10.9	0.50	н	10,0	ND	109	70-120			
Xylenes (total)	30.9	0.50	11	30.0	ND	103	80-125			
Surrogate: Dibromofluoromethane	2.63	T-3	0	2,50		105	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.48		"	2.50		99	60-145			
Surrogate: Toluene-d8	2.43		"	2.50		97	70-130			
Surrogate: 4-Bromofluorobenzene	2.12		"	2.50		85	60-120			
Matrix Spike Dup (6K06016-MSD1)	Source: MP	K0051-04		Prepared &	& Analyze	d: 11/06/0	)6			
tert-Amyl methyl ether	11.2	0.50	ug/l	10,0	ND	112	65-135	10	25	
Benzene	10.8	0.50	H	10.0	ND	108	70-125	5	15	
tert-Butyl alcohol	225	5.0	n	200	ND	112	60-135	3	35	
Di-isopropyl ether	10.6	0.50	п	10.0	ND	106	70-130	6	35	
I,2-Dibromoethane (EDB)	13.0	0.50	н	10.0	ND	130	80-125	11	15	LM
1,2-Dichloroethane	12.3	0.50	U	10.0	ND	123	75-125	8	10	
Ethanol	274	300	н	200	ND	137	15-150	13	35	
Ethyl tert-butyl ether	11.2	0.50	н	10.0	ND	112	65-130	9	35	
Ethylbenzene	10.1	0.50	ft	10.0	ND	101	70-130	3	15	
Methyl tert-butyl ether	11.2	0.50	ž†	10.0	ND	112	50-140	12	25	
Toluene	11.2	0.50	n .	10.0	ND	112	70-120	3	15	
Xylenes (total)	31.7	0.50	0	30,0	ND	106	80-125	3	15	
Surrogate: Dibromofluoromethane	2.58		u	2.50	11000	103	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.58		**	2.50		103	60-145			
P 4 . 77 I IO			"	2 50						
Surrogate: Toluene-d8	2,44		.,	2.50		98	70-130			





Project: ARCO #2111, San Leandro, CA

Spike

Source

%REC

Project Number: G0C28-0023 Project Manager: Jay Johnson MPJ1031 Reported: 11/13/06 15:42

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 6K08015 - EPA 5030B P/T	/ EPA 8260B									
Blank (6K08015-BLK1)				Prepared:	11/08/06	Analyzed	: 11/09/06		11111111111111	
tert-Amyl methyl ether	ND	0.50	ug/l		*	<del></del>		Turamina	~········	
Benzene	ND	0.50	+1							
tert-Butyl alcohol	ND	20	п							
Di-isopropyl ether	ND	0.50	ø							
1,2-Dibromoethane (EDB)	ND	0.50	0							
1,2-Dichloroethane	ND	0.50	12							
Ethanol	ND	300	It							
Ethyl tert-butyl ether	ND	0.50	н							
Ethylbenzene	ND	0.50	11							
Methyl tert-butyl ether	ND	0.50	<b>81</b>							
Toluene	ND	0.50	11							
Xylenes (total)	ND	0.50	a							
Surrogate: Dibromofluoromethane	2.71		и	2.50	···	108	75-130			
Surrogate: 1,2-Dichloroethane-d4	3.07		"	2.50		123	60-145			
Surrogate: Toluene-d8	2.40		**	2.50		96	70-130			
Surrogate: 4-Bromofluorobenzene	2.25		**	2.50		90	60-120			
Laboratory Control Sample (6K08015	5-BS1)			Prepared a	& Analyze	:d: 11/08/0	)6			
tert-Amyl methyl ether	8.91	0.50	ug/l	10.0		89	65-135			
Вепзепе	9.73	0.50	11	10.0		97	70-125			
tert-Butyl alcohol	198	20	u	200		99	60-135			
Di-isopropyl ether	11.1	0.50	n	0.01		111	70-130			
1,2-Dibromoethane (EDB)	9.22	0.50	19	10.0		92	80-125			
1,2-Dichloroethane	11.3	0.50	п	10.0		113	75-125			
Ethanol	289	300	и	200		144	15-150			
Ethyl tert-butyl ether	9.95	0.50	и	10.0		100	65-130			
Ethylbenzene	9.92	0.50	n	10.0		99	70-130			
Methyl tert-butyl ether	10.6	0.50	o o	10.0		106	50-140			
Toluene	9.53	0.50	0	10.0		95	70-120			
Xylenes (total)	30.8	0.50	H	30.0		103	80-125			
Surrogate: Dibromofluoromethane	2.68		n	2.50		107	75-130	**********		
Surrogate: 1,2-Dichloroethane-d4	2,93		**	2.50		117	60-145			
Surrogate: Toluene-d8	2.55		#	2.50		102	70-130			
Surrogate: 4-Bromofluorobenzene	2.53		"	2.50		101	60-120			





Project: ARCO #2111, San Leandro, CA

Spike

Source

MPJ1031 Reported: 11/13/06 15:42

RPD

%REC

Project Number: G0C28-0023
Project Manager: Jay Johnson

Reporting

## 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 6K08015 - EPA 5030B P/T / I	EPA 8260B									
Matrix Spike (6K08015-MS1)	Source: MP	K0019-16		Prepared	& Analyze	ed: 11/08/	06			
tert-Amyl methyl ether	9.39	0.50	ug/l	10.0	ND	94	65-135	****		
Benzene	10.1	0.50	ti	10.0	ND	101	70-125			
ert-Butyl alcohol	185	20	ti .	200	7.8	89	60-135			
Di-isopropyl ether	11.4	0.50	0	10.0	ND	114	70-130			
,2-Dibromoethane (EDB)	9.42	0.50	17	10.0	ND	94	80-125			
,2-Dichloroethane	11,1	0.50	17	10.0	ND	111	75-125			
Ethanol	244	300	R	200	ND	122	15-150			
Ethyl tert-butyl ether	10.2	0.50	11	10.0	ND	102	65-130			
Ethylbenzene	10.1	0.50	41	0.01	ND	101	70-130			
Methyl tert-butyl ether	10.5	0.50	н	10.0	ND	105	50-140			
Foluene ·	9.86	0.50	н	10.0	ND	99	70-120			
Kylenes (total)	31.4	0.50	н	30.0	ND	105	80-125			
Surrogate: Dibromofluoromethane	2.68		п	2.50		107	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.88		n	2.50		115	60-145			
Surrogate: Toluene-d8	2,52		"	2.50		101	70-130			
Surrogate: 4-Bromofluorobenzene	2.66		и	2.50		106	60-120			
Matrix Spike Dup (6K08015-MSD1)	Source: MP	K0019-16		Prepared a	& Analyze	d: 11/08/0	06			
ert-Amyl methyl ether	9.30	0.50	ug/l	10.0	ND	93	65-135	Í	25	
Benzene	9.89	0.50	ti	10.0	ND	99	70-125	2	15	
ert-Butyl alcohol	185	20	н	200	7.8	89	60-135	0	35	
Di-isopropyl ether	11.0	0.50	U	10.0	ND	110	70-130	4	35	
,2-Dibromoethane (EDB)	9.44	0.50	u	10.0	ND	94	80-125	0.2	15	
,2-Dichloroethane	11.2	0.50	19	10.0	ND	112	75-125	0.9	10	
Ethanol	249	300	n	200	ND	124	15-150	2	35	
Ethyl tert-butyl ether	10.2	0.50	n	10.0	ND	102	65-130	0	35	
Ethylbenzene	9.79	0.50	н	10.0	ND	98	70-130	3	15	
Methyl tert-butyl ether	10.8	0.50	14	10.0	ND	108	50-140	3	25	
·oluene	9.56	0.50	14	10.0	ND	96	70-120	3	15	
(ylenes (total)	30.3	0.50	lt	30.0	ND	101	80-125	4	15	
urrogate: Dibromofluoromethane	2.64	,	ft.	2.50		106	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.96		"	2.50		118	60-145			
Surrogate: Toluene-d8	2.58		11	2,50		103	70-130			

2,50

2.57

Surrogate: 4-Bromofluorobenzene

60-120

103



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 MPJ1031 Reported: 11/13/06 15:42

#### Notes and Definitions

RB RPD exceeded method control limit; % recoveries within limits.

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

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

IC Calib. verif. is within method limits but outside contract limits

CL Initial analysis within holding time but required dilution

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



## Chain of Custody Record

Project Name: ARCO ZIII Quanterly Monitoring
BP BU/AR Region/Enfos Segment:

BP > Americas > West Coast > Retail > Alameda > 211 RWQCB - San Frasisco

State or Lead Regulatory Agency:

Requested Due Date (mm/dd/yy):

•	#d	TH	7

On-site Time: 0510	Temp: 60'5
Off-site Time: 12/5	Temp: 7015
Sky Conditions:	louder
Meteorological Events:	NA
Wind Speed:	———Direction:

														Consultant/Contractor: Stratus Environmental, Inc														
Address: 885 Jarvis Drive													Ad	Address: 3330 Cameron Park Drive, Suite 550														
Morgan Hill, CA 95037						Site Lut/Long: N/A									Cameron Park, CA 95682													
Lab PM: Lisa Race						California Global ID No.: 7 0600101764								Co	Consultant/Contractor Project No.:													
Tele/F	ax: 408.782.8156 / 408.782.6308					Enfos Project No.: GOC18-0023								Co	Consultant/Contractor PM: Jay Johnson													
	RPM Contact:	Paul Su	pple											Te	Tele/Fax: 530 676-6000 530 676-6005													
Addre	ss: 2010 Crow Canyon Place, suite	150												Re	Report Type & QC Level; Level 1 with EDF													
	San Ramon, CA					Sub Phase/Task: 03 - Avalytical							E-1	E-mail EDD To: cjewitt@stratusinc.net														
L	Fax: 925 275-3506					Cost Element: 01-Con tractor Labor								Inv	Invoice to: Atlantic Richfield Co.													
Lab B	ottle Order No:			M	atrix				P	reser	rvative	!				Rec	uest	uested Analysis 8260 ALL										
Item No.	Sample Description	Time	7007 Date	Soil/Solid	Water/Liquid Air	Laboratory No.	No. of Containers	Unpreserved	H₂SO₄	HNO3	HCI	Methanol		7	Sexu's de	£ (2	1 _	- Inventor						Sam	ple-Po	int L	at/Long ents	
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Sampler's Name: Vince Zalutka				Relinquished By / Affiliation Date Tlme					Tlme		Aquepted By / Affiliation Date Time																	
Sampler's Company: STRATUS EXV.				Vine Robertea Vo.					8-24-1										10/24/2	14140								
Shipment Date: 10-24-06				19/24 154					745			W	<u>i£r</u>	٧Ġ	/ M	<del>41</del> )				1925	১৪৯							
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	White Conv. I physician I Valley Conv. BD/Atlantic Dielicial Co. / Dielic Conv. Conv. Hard Contractor																											

## TEST AMERICA SAMPLE RECEIPT LOG

CLIENT NAME: BP  REC. BY (PRINT) TULIE  WORKORDER: MPDO		DATE REC'D AT LAB: . TIME REC'D AT LAB: . DATE LOGGED IN:	10   25   0		. DH	r Regulatory Purposes?
CIRCLE THE APPROPRIATE RES	POHOE					ASTE WATER YES (NO)
	SAMPLE#	CLIÉNT ID	CONTAINER. PR	ATIVE PH	l f	DATE : REMARKS: AMPLED CONDITION (ETC.)
1. Custody Seal(s) Present / A					· · · · · · ·	TWIFTED SONDITION (ETC.)
2. Chain-of-Custody Present / A	<del></del> 1.			-	<u> </u>	
3. Traffic Reports or						
Packing List: Present / Al	b(sen)t				• •	
4. Airbill: Airbill / Stick						
Present / Al	bsent . ;				- \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
5. Airbill #: SEE ATTACHEC						
6. Sample Labels: Present / Al				<del></del>	(0)	
7. Sample IDs: Listed / Not				-  - 7		
on Chain-of			· · · · ·	· · · · · · · · · · · · · · · · · · ·	<del>/,</del>	
8. Sample Condition: Ir(tact / Brok	cen*/			0./	· <del>(</del>	
Leaking*	·			البي	<del>,  -</del>	· · · · · · · · · · · · · · · · · · ·
9. Does information on chain-of-cust	tody,		- X	<del>, 1 ?  </del>	· ·	
traffic reports and sample labels			3			
- agree? (es)	/No*			<del></del>		
0: Sample received within				<del></del>	<del></del>	
hold time? (e)	'No*	-	/.			
Adequate sample volume	· ·	•	<del>/   -</del>			
received?	No* ·			<del>-   </del> -	·	
2. Proper preservatives used? (e) /	No*	/				
3. Trip Blank / Temp Blank Received? .			<u>·</u>	· · ·	<u> </u>	
(circle which, if yes) ·· Yes /	No*		· · · · · · · · · · · · · · · · · · ·			
4. Read Temp: 4.17						
Corrected Temp: · · · · · · · · · · · · · · · · · · ·	<del>-</del>					
Is corrected temp 4.+/-2°C? · Kes /	No**	<del>/</del>			<u> </u>	
Acceptance range for samples requiring thermal p					1	
*Exception (if any): METALS / DFF ON	IICE.	·-				
or Problem COC	·····		• • • • • • • • • • • • • • • • • • • •		·	
		AND THE PERSON OF THE PERSON O	AND THE PROPERTY OF THE PERSONS ASSESSED.		HANDE DE VIEW CONTRACTOR	

SRL Revision 8 Replaces Rev 7 (07/19/05) Effective 09/13/06

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

Page \_\_\_\_\_of \_\_\_\_

## APPENDIX B

GEOTRACKER UPLOAD CONFIRMATION

## **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:** 

4Q06 GEO\_WELL

Submittal Date/Time:

1/24/2007 3:27:07 PM

**Confirmation Number:** 

7011919915

Back to Main Menu

Logged in as BROADBENT-C (CONTRACTOR)

CONTACT SITE ADMINISTRATOR.

## **Electronic Submittal Information**

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

Your EDF file has been successfully uploaded!

Confirmation Number: 5226812720

Date/Time of Submittal: 1/25/2007 2:39:13 PM

Facility Global ID: T0600101764
Facility Name: ARCO #2111

**Submittal Title:** 4Q06 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)

 CONF #
 TITLE
 QUARTER

 5226812720
 4Q06 GW Monitoring
 Q4 2006

SUBMITTED BY
Broadbent & Associates, Inc.

SUBMIT DATE
1/25/2007

STATUS
PENDING REVIEW

#### SAMPLE DETECTIONS REPORT

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

#### METHOD QA/QC REPORT

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

#### QA/QC FOR 8021/8260 SERIES SAMPLES

TECHNICAL HOLDING TIME VIOLATIONS 5 METHOD HOLDING TIME VIOLATIONS 5 LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT n LAB BLANK DETECTIONS DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING? - LAB METHOD BLANK - MATRIX SPIKE N - MATRIX SPIKE DUPLICATE Ν - BLANK SPIKE Υ - SURROGATE SPIKE

#### WATER SAMPLES FOR 8021/8260 SERIES

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

# SOIL SAMPLES FOR 8021/8260 SERIES MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135% n/a MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% n/a

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

#### **FIELD QC SAMPLES**

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

Logged in as BROADBENT-C (CONTRACTOR)

CONTACT SITE ADMINISTRATOR.