



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

20 April 2007

Re: First Quarter 2007 Ground-Water Monitoring Report Atlantic Richfield Company Station #374 6407 Telegraph Avenue Oakland, California

ACEH Case # RO0000078

"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."

RECEIVED

1:17 pm, May 01, 2007

Alameda County Environmental Health

Submitted by:

Paul Supple

Environmental Business Manger



First Quarter 2007 Ground-Water Monitoring Report

Atlantic Richfield Company Station #374 6407 Telegraph Avenue Oakland, 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

20 April 2007

Project No. 06-08-602



20 April 2007

Project No. 06-08-602

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

Attn.: Mr. Paul Supple

Re:

First Quarter 2007 Ground-Water Monitoring Report, Atlantic Richfield Company (a BP affiliated company) Station #374, 6407 Telegraph Avenue, Oakland, Alameda County,

California. ACEH Case #RO0000078

Dear Mr. Supple:

Attached is the *First Quarter 2007 Ground-Water Monitoring Report* for Atlantic Richfield Company Station #374 (herein referred to as Station #374) located at 6407 Telegraph Avenue, Oakland, California (Property). This report presents results of ground-water monitoring conducted during the First Quarter of 2007.

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.

luber 7/- Mill

Principal Hydrogeologist

Enclosures

cc: Mr. Steven Plunkett, Alameda County Environmental Health (Submitted via ACEH ftp site)

Electronic copy uploaded to GeoTracker

ARIZONA CALIFORNIA

NEVADA

TEXAS

ROBERT H.

MILLER

STATION #374 QUARTERLY GROUND-WATER MONITORING REPORT

Facility: #374 Address: 6407 Telegraph Avenue, Oakland, California

Environmental Business Manager: Mr. Paul Supple

Consulting Co./Contact Persons: Broadbent & Associates, Inc.(BAI)/Rob Miller & Tom Venus

(530) 566-1400

Consultant Project No.: 06-08-602

Primary Agency/Regulatory ID No.: Alameda County Environmental Health (ACEH)

ACEH Case #RO0000078

Facility Permits/Permitting Agency: NA

WORK PERFORMED THIS QUARTER (First Quarter 2007):

1. Prepared and submitted Fourth Quarter 2006 Ground-Water Monitoring Report.

2. Conducted ground-water monitoring/sampling for First Quarter 2007. Work performed on 7 February 2007 by Stratus Environmental, Inc (Stratus).

WORK PROPOSED FOR NEXT QUARTER (Second Quarter 2007):

1. Prepared and submitted this First Quarter 2007 Ground-Water Monitoring Report (contained herein).

2. Conduct quarterly ground-water monitoring/sampling for Second Quarter 2007.

3. Prepare and submit Second Quarter 2007 Ground-Water Monitoring Report.

QUARTERLY RESULTS SUMMARY:

Current phase of project:	Ground-water monitoring/sampling
Frequency of ground-water monitoring:	Quarterly: MW-1, MW-2, MW-3, MW-4, MW-5, MW-6
Frequency of ground-water sampling:	Quarterly: MW-1
	Semi-Annually (1Q and 3Q): MW-2 and MW-4 Annually (3Q): MW-3, MW-5, and MW-6
Is free product (FP) present on-site:	No
Current remediation techniques:	NA
Depth to ground water (below TOC):	5.00 ft (MW-6) to 8.25 ft (MW-5)
General ground-water flow direction:	Southwest
Approximate hydraulic gradient:	0.03 ft/ft

DISCUSSION:

First quarter 2007 ground-water monitoring and sampling was conducted at Station #374 on 7 February 2007 by Stratus. Water levels were gauged in the six wells at the Site. No irregularities were noted in the field during this quarter's water level gauging. Depth to water measurements ranged from 5.00 ft at MW-6 to 8.25 ft at MW-5. Resulting ground-water surface elevations ranged from 157.17 ft above mean sea level in well MW-1 to 143.08 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 southwest at approximately 0.03 ft/ft, consistent with historical data reported in 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. Potentiometric ground-water elevation contours are presented in Drawing 1.

Consistent with the current ground-water sampling schedule, water samples were collected from wells MW-1, MW-2, and MW-4 at the Site. No irregularities were reported during sampling. 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. The GRO concentration for well MW-1 was partly due to individual peak(s) in the quantitative range. No other irregularities were encountered during laboratory analysis of the samples. Ground-water sampling field data sheets and the laboratory analytical report, including chain of custody documentation, are provided in Appendix A.

Gasoline range organics (GRO) were detected above the laboratory reporting limits in two of the three wells sampled at concentrations up to 3,100 micrograms per liter (µg/L) in well MW-4. Benzene was detected above the laboratory reporting limit in two of the three wells sampled at concentrations up to 570 µg/L in well MW-4. Toluene was detected above the laboratory reporting limit in one of the three wells sampled at a concentration of 17 µg/L in well MW-4. Ethylbenzene was detected above the laboratory reporting limit in one of the three wells sampled at a concentration of 170 µg/L in well MW-4. Total Xylenes were detected above the laboratory reporting limit in one of the three wells sampled at a concentration of 110 µg/L in well MW-4. MTBE was detected above the laboratory reporting limit in each of the wells sampled at concentrations up to 190 µg/L in well MW-1. The remaining fuel additives and oxygenates were not detected above their laboratory reporting limits in the three wells sampled this quarter. Detected analyte concentrations were within the historic minimum and maximum ranges recorded for each well. 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 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 Contours and Analytical Summary Map, 7 February 2007, Station #374, 6407 Telegraph Avenue, Oakland, California
- Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses, Station #374, 6407 Telegraph Ave., Oakland, CA
- Table 2. Summary of Fuel Additives Analytical Data, Station #374, 6407 Telegraph Ave., Oakland, CA

Table 3. Historical Ground-Water Flow Direction and Gradient, Station #374, 6407 Telegraph

Ave., Oakland, 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

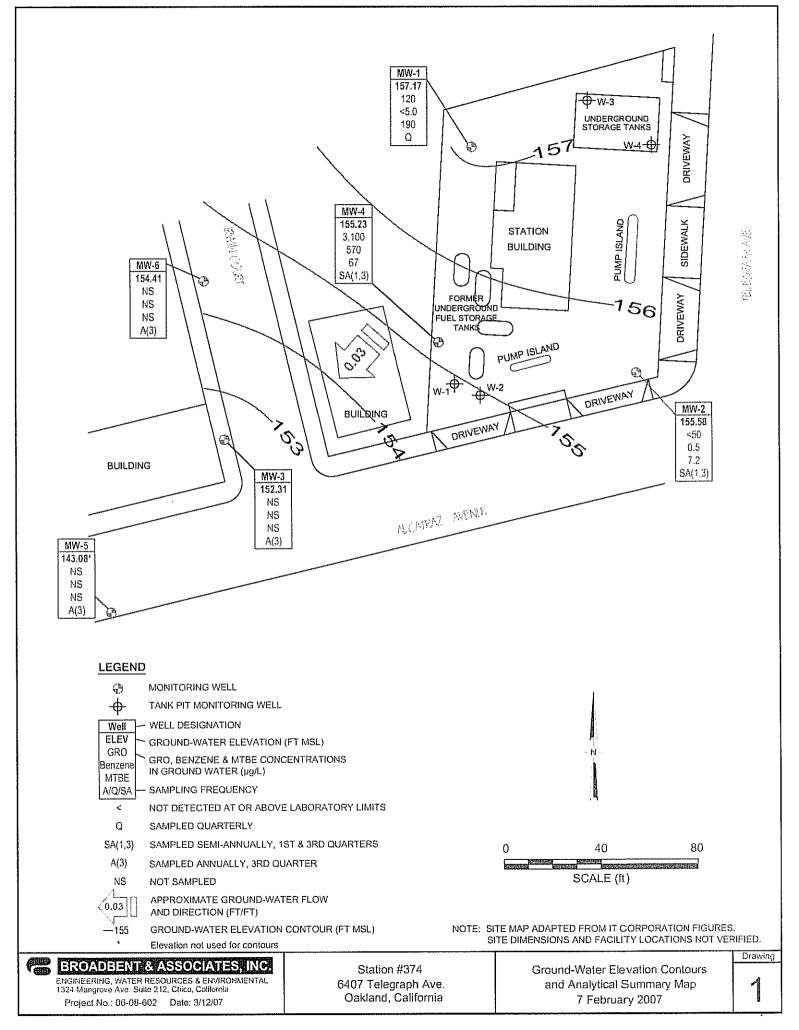


Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses
Station #374, 6407 Telegraph Ave., Oakland, CA

				Top of	Bottom of		Water Level			Concentra	ions in (µ	g/L)			
Well and			тос	Screen	Screen	DTW	Elevation	GRO/			Ethyl-	Total		DO	1
Sample Date	P/NP	Comments	(fect msl)	(ft bgs)	(ft bgs)	(feet bgs)	(feet msl)	TPHg	Benzene	Toluene	Benzene	Xylenes	MTBE	(mg/L)	pН
MW-1															
6/20/2000			158.91	7.00	27.0	6.86	152.05			11.5					
9/28/2000	<u></u>		158.91	7.00	27.0	7.50	151.41			-		_	-		-
12/17/2000			158.91	7,00	270	7.49	151.42								
3/23/2001		1 A TO THE COURSE OF THE PARTY	158.91	7.00	27.0	5.90	153.01	<50	<0.5	<0.5	<0.5	<0.5	2,710	-	
6/21/2001			158.91	7.00	27.0	7.45	151,46								
9/23/2001			158.91	7.00	27.0	8.46	150.45			<u> </u>				 EUTESTICHERE	
12/31/2001			158.91	7.00	27.0	5.50	153.41						2.000		
3/21/2002			158.91	7.00	27.0	4.71	154.20	<5,000	<50	<50	<50	<50	2,000	-	 158885518
4/17/2002			158.91	7.00	27.0	5.54	15397								
8/12/2002			158.91	7.00	27.0	7.77	151.14		-						
12/6/2002			158.91	7.00	27.0	7.65	151 26								
1/29/2003		Ь	158.91	7.00	27.0 27.0	5.88	153.03 153.29	<10,000		- <100	 <100	 ≤100	1,600	1	7:1
5/23/2003			158.91	7.00 7.00	27.0 27.0	5.62 7.85	151.06					_			
9/4/2003			158.91 158.91	7.00	27.0	8.17	150.74	1,600			 	≤10	1,500	17	67
11/20/2003	P P	f	164.57	7.00	27.0	6.71	157.86			-				1.0	
02/02/2004 05/14/2004	P		164.57	7.00	27.0	7.08	157.49	<2,500	25	- 	<25	25	1,200	1114	6.6
09/02/2004	P		164.57	7.00	27.0	8.12	156.45	580	<5.0	<5.0	<5.0	<5.0	660	3.8	6.7
11/04/2004	P		164.57	7.00	27.0	738	157,19	1,700	\$10	 	=!!\\$\\\0	≝ ≤ 10	580	6.0	6.5
02/08/2005	P		164.57	7.00	27.0	6.60	157.97	<1,000	<10	<10	<10	<10	610	0.71	6.5
05/09/2005	P		164.57	7.00	27.0	6.84	157.73	540	₹5.0	<5,0	25.0	5.5	620	3.12	6.6
08/11/2005	P		164.57	7.00	27.0	7.36	157.21	540	<2.5	<2.5	<2.5	4.0	390	8.0	6.6
11/18/2005	P	e e	164.57	7.00	27.0	8.02	156.55	350	<2.5	<2.5	<2,5	<2.5	340	2.6	6.7
02/16/2006	P	e e	164.57	7.00	27.0	6.44	158.13	350	<2.5	<2.5	<2.5	<2.5	340	1.6	6.7
5/30/2006	P		164.57	7.00	27.0	6.87	157,70	270	₹2,5	<2.5	<2.5	≮2,5	420	4.73	6,4
8/24/2006	P	25 125 Pr. y FRANCE (2005) 22 22 25 3 11 4 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	164.57	7.00	27.0	7.75	156.82	95	<5.0	<5.0	<5.0	<5.0	180	0.65	6.9
11/1/2006	P.		164.57	7,00	27.0	8.28	156.29	120	<5.0∶	/ :::<5.0	₹5.0.	<5.0	220	1.65	7,07
2/7/2007	NP	C	164.57	7.00	27.0	7.40	157.17	120	<5.0	<5.0	<5.0	<5.0	190	1.88	7.45
MW-2						-									
6/20/2000			157.92	7.00	27.0	7,67	150.25								

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Station #374, 6407 Telegraph Ave., Oakland, CA

				Top of	Bottom of		Water Level			Concentra	tions in (µ;	g/L)	:		
Well and			тос	Screen	Screen	DTW	Elevation	GRO/			Ethyl-	Total		DO	ĺ
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.															
9/28/2000	in to the day of the control of the		157.92	7.00	27,0	8.51	149.41								
12/17/2000		C // Port of the control of the cont	157.92	7.00	27.0	8.14	149.78	-	4 11 12 2 C C C C C C C C C C C C C C C C	-			 ***********************************		
3/23/2001			157.92	7.00	27.0	7.21	150.71	- 450	<0.5	<0.5	<0.5	<0.5	<2.5		
6/21/2001			157.92	7.00	27.0	7.99	149.93				 manaskarasasa				
9/23/2001			157,92	7.00	27.0	8.52	149.40								
12/31/2001	-		157.92	7.00	27.0	6.01	151.91		_				-	2-44447-1004705	-
3/21/2002			157.92	7.00	27.0	5.95	151 97	<50	<0.5	<0.5	<0.5	<0.5	45		
4/17/2002			157.92	7.00	27.0	6.45	151.47					-		-	
8/12/2002			157.92	7.00	27.0	8.08	149.84								
12/6/2002			157.92	7.00	27.0	8.29	149.63						<u>-</u>		
1/29/2003		6	157.92	7.00	27.0	7.22	150.70								
5/23/2003			157.92	7.00	27.0	6.85	151.07	<50	<0.50	<0.50	<0.50	<0.50	55	1.4	7,2
9/4/2003			157.92	7.00	27.0	7.94	149.98								
11/20/2003			157.92	7.00	27.0	8.05	149.87 156.46	74	 	- <0.50	 ≪0,50	- <0.50	37	 1111	89
02/02/2004		f	163,46	7.00	27.0	7.00	155.49		<0.50						
05/14/2004			163.46	7.00	27.0 27.0	7.97 8.19	155.27	 <250	- <2.5	25	25	-22.5	67	2.7	6.9
09/02/2004	R. S.		163.46	7.00 7.00	27.0	7.54	155.92								
11/04/2004			163.46	7.00 7.00	27.0	6.72	156.74	<50	<0.50	 ≪0.50	<0.50	<0.50		0.86	6.7
02/08/2005	P		163.46	7.00 7.00	27.0	7.16	156.30	uning dis		Sartin Carlos					
05/09/2005	-		163.46 163.46	7.00	27.0	7.85	155.61	350	<0.50	<0.50	<0.50	< 0.50	1201235	1.0	6.6
08/11/2005	P		163.46	7.00 7.00	27.0	8.23	155.23						-		
11/18/2005 02/16/2006	 		163.46	7.00	27.0	6.82	156.64	<50	<0.50	<0.50		<0.50	39	1.3	7.0
5/30/2006			163.46	7.00	27.0	7.23	156.23								-
8/24/2006	 P		163,46	7.00	27.0	8.00	155.46	60	<0.50	<0.50	<0.50	<0.50	25	0.90	6.8
11/1/2006			163.46	7.00	27.0	8.38	155.08			-		-		1:00:00	
2/7/2007	NP		163.46	7.00	27.0	7.88	155,58	<50	0.50	<0.50	<0.50	<0.50	7.2	0.94	7,39
MW-3	134.002						POSSESSION CONTRACTOR	1 032115500525	- 1.252 maren (53)		4.01.10(212)@#########		o construction and the		
MARCO					27.0	6.42	147.20	<50	<0.5	<0.5	 ≪0.5	<1.0	<10		
6/20/2000			153.64	7.00	27.0	7.31	146.33								
9/28/2000			153.64	7.00	27.0	1.31	140.55			-			1	1	1

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses
Station #374, 6407 Telegraph Ave., Oakland, 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	Toluenc	Benzenc	Xylenes	MTBE	(mg/L)	pН
MW-3 Cont.															
12/17/2000	Madegosk		153.64	7.00	27.0	6.45	147.19	<50	₹0.5	₹0.5	₹0.5	<0.5	<2.5		
3/23/2001			153.64	7.00	27.0	6.01	147.63		_				-	!	
6/21/2001			153,64	7,00	27.0	6.80	146.84	110	55	₹0.5	5.4	41	2.5		
9/23/2001			153.64	7.00	27.0	7.32	146.32			-		-			
12/31/2001			153,64	7.00	27.0	4.48	149.16	<50	<0.5	<0.5	<0.5	<0.5	49		
3/21/2002		-24-23-29-11-12-23-14-24-25-11-15-11-11-11-11-11-11-11-11-11-11-11	153.64	7.00	27.0	4.36	149.28					_	-		
4/17/2002			153,64	7.00	27.0	531	148.33	<50	K0 5	<0.5	<0.5	<0.5	8.7		
8/12/2002		112311299309 1224 1424 3011	153.64	7.00	27.0	7.00	146.64	-						_	
12/6/2002			153.64	7.00	27.0	7.32	14632	₹50	<0.5	≤0.5	<0.5	<0.5	6.2	1.4	6.7
1/29/2003		ь	153.64	7.00	27.0	6.07	147.57								
5/23/2003			153 64	7.00	27.0	6.45	147.19	<50	<0.50	₹0.50	<0.50	<0.50	1.6	0.9	7.7
9/4/2003		c	153.64	7.00	27.0	6,93	146.71	-		-		-	Sisterniamentinisi	 :::::::::::::::::::::::::::::::::::	lusuen
11/20/2003		'c	153.64	7.00	27.0	7.04	146.60								
02/02/2004		f	159.21	7.00	27.0	5.92	153.29								
05/14/2004			159:21	7.00	27.0	7.52	151.69					-0.50			9.0
09/02/2004	P	1	159.21	7.00	27.0	7.19	152.02	<50	<0.50	< 0.50	<0.50	<0.50	6.5	9.3	8.9
11/04/2004			159.21	7.00	27.0	6.40	152.81								
02/08/2005		52	159.21	7.00	27.0	6.01	153.20								
05/09/2005			159.21	7.00	27.0	6,74	152.47			-0.50		o en	11	1.9	6.5
08/11/2005	P		159.21	7.00	27.0	6.77	152.44	<50	<0.50	<0.50	<0.50	<0.50		la man	۳.0
11/18/2005			159.21	7.00	27.0	7.83	15138								
02/16/2006			159.21	7.00	27.0	7.26	151.95		-				-		
5/30/2006			159.21	7.00	27.0	5.82	153.39	<50	<0.50	<0.50	<0.50	<0.50	7.6	1.15	6.4
8/24/2006	P		159.21	7.00	27.0	7,00	152.21	<30 	Haramanak	e annaronam	denomination		7.0	100000000000000000000000000000000000000	
11/1/2006			159.21	7.00	27.0	7.50	15170						_		
2/7/2007			159.21	7.00	27.0	6.90	152.31	-		-	<u> </u>		1 -	-	+
MW-4										ing and engine					
6/20/2000		C.	156.53	7.00	27.0	7.50	149.03	20,000	5,100	440	1,000	1,700	<250		
9/28/2000			156.53	7.00	27.0	8.20	148.33	-			 				
12/17/2000			156.53	7.00	27.0	8.11	148.42	4,320	1,240	<20	27.2	249	<100		

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses Station #374, 6407 Telegraph Ave., Oakland, 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	(fect msl)	(ft bgs)	(ft bgs)	(feet bgs)	(feet msl)	TPHg	Benzene	Toluene	Benzenc	Xylenes	MTBE	(mg/L)	pН
MW-4 Cont.	**-														
3/23/2001			156.53	7.00	27:0	6.69	149.84								
6/21/2001	90,454,464,664 		156.53	7.00	27.0	8.01	148.52	2,800	470	16	19	160	130		
9/23/2001			156.53	7,00	27.0	8.91	147.62								
12/31/2001	imunensalisis. —		156.53	7.00	27.0	4.42	152.11	4,600	1,500	100	160	210	160		
3/21/2002			156.53	7.00	27.0	4,98	151.55								
4/17/2002		egiccing and an extension of the second and an extension of th	156.53	7.00	27.0	6.23	150.30	7,100	2,200	110	290	450	<250		
8/12/2002			156.53	7,00	27.0	8.24	148.29								
12/6/2002		а	156.53	7.00	27.0	8.42	148.11	1,500	410	6.8	20	29	43	1.1	6.7
1/29/2003		b	156.53	7.00	27.0	7.20	149.33								
5/23/2003			156.53	7.00	27.0	7.18	149.35	<5,000	1,300	89	210	260	<50	1.4	6.9
9/4/2003		E	156.53	7.00	27.0	8.15	14838						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
11/20/2003		C	156.53	7.00	27.0	8.73	147.80		 280	 21	 29	38	29	1.4	10.6
02/02/2004	P	c, f, g	163.25	7.00	27.0	6.25	157.00	980		-		20			
05/14/2004		g managananananananan	163.25	7.00	27.0 27.0	8.38 8.36	154.87 154.89	260		 - ≼1.0	1 55	14	28	2.4	7.4
09/02/2004	P	8	163.25	7.00	27.0	7.71	155.54								
11/04/2004		c, g	163.25 163.25	7.00 7.00	27.0	6.27	156.98	7.500	1.700	320	480	920	45	0.65	65
02/08/2005	P	g	163.25	7,00	27.0	5.90	157.35			-			-		
05/09/2005	 P	g	163.25	7.00	27.0	7.96	155.29	3.100	1.100	41	160	110	32	0.6	6.5
08/11/2005 11/18/2005		B	163,25	7.00	27.0	8.57	154.68						_	- 02231235	
02/16/2006	p	g g	163.25	7.00	27.0	6.28	156.97	9,400	1,800	130	600	420	35	0.5	6.8
5/30/2006		g E	163.25	7.00	27.0	7.02	156.23					10. 10.11.1y19.11871128713411			
8/24/2006	P	, i	162.47	7.00	27.0	8.26	154.21	3,600	1,400	21	110	70	39	1.00	6.8
11/1/2006	-		163.25	7.00	27.0	8.67	154.58		***************************************	-		-	-		-
2/7/2007	NP.		163,25	7.00	27.0	8.02	155.23	3,100	570	17	170	110	67	0.95	7.07
MW-5		and the second of the second s	411-11-11-11-11-11-11-11-11-11-11-11-11-												
·porticialistichylibrichyngerialistichyllinis			151.33	10:00	23.0	7.84	143.49	<50	<0.5	<0.5	<0,5	<1.0	<10		
6/20/2000 9/28/2000			151.33	10.00	23.0	8.37	142.96	<50	<0.5	<0.5	<0.5	<0.5	<2.5	-	
9/28/2000	-		151.33	10.00	23.0	8,36	142.97	<50	< 0.5	< 0.5	< 0.5	< 0.5	25		
3/23/2001			151.33	10.00	23.0	7.55	143.78	<50	< 0.5	< 0.5	< 0.5	< 0.5	<2.5		

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses Station #374, 6407 Telegraph Ave., Oakland, 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)	pН
MW-5 Cont.															
6/21/2001			151,33	10.00	23.0	8.20	143.13	<50	≤ 0.5	< 0.5	< 0.5	< 0.5			
9/23/2001		dazmenio - 30 ilo 80 2022 2011 1 - 04 8 1 1 1 20 4 1 1 1 20 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	151.33	00.01	23.0	8.68	142.65	<50	<0.5	< 0.5	< 0.5	< 0.5	<2.5		
12/31/2001			151,33	10.00	23.0	7,57	143.76	<50	<0.5	< 0.5	<0.5	<0.5	<2,5		
3/21/2002			151.33	10.00	23.0	6.12	145.21	<50	<0.5	<0.5	<0.5	<0.5	3.2	-	
4/17/2002			151.33	10.00	23.0	6.61	144.72	<50	<0.5	<0.5	< 0.5	< 0.5	<2.5		
8/12/2002		\$255577754 558 1944 559 8 \$4250 13 13 13 13 13 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15	151.33	10.00	23.0	8.14	143.19	<50	<0.5	<0.5	<0.5	<0.5	<2.5	4.1	7.6
12/6/2002			151.33	10:00	23.0	8,65	142.68	<50	<0,5	<0.5	<0.5	<0.5	<2.5		6.8
1/29/2003		ь	151.33	10.00	23.0	7.22	144.11	<50	<0.5	<0.5	<0.5	<0.5	<0.5	1	6.6
5/23/2003			151.33	10.00	23.0	7,31	144.02	<50	<0.50	<0.50	<0.50	<0.50	<0.50		6.6
9/4/2003		<u> </u>	151.33	10.00	23.0	9.50	141.83	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.2	6.7
11/20/2003			151.33	10.00	23.0	8.31	143.02								
02/02/2004		c, f, h	151.33	10.00	23.0	6.92	144.41						-		
05/14/2004		'n	151.33	10.00	23.0	8.56	142.77	1444							
09/02/2004	P	h	151.33	10.00	23.0	8.79	142.54	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.5	6.8
11/04/2004		c,h	151:33	10.00	23.0	8,33	143.00								
02/08/2005		h	151.33	10.00	23.0	7.28	144.05	_							
05/09/2005		in in the second	151:33	10.00	23.0	8.19	143.14	122 127 128							
08/11/2005	P	h	151.33	10.00	23.0	8.39	142.94	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	6.6
11/18/2005		hara b	151.33	10,00	23.0	11.25	140.08								
02/16/2006		h	151.33	10.00	23.0	9.22	142.11					-			-
5/30/2006		h	15133	10.00	23.0	7.52	143.81								
8/24/2006	P	h		10.00	23.0	7.95		<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.60	6.6
11/1/2006			151.33	10.00	23.0	8.32	143.01								
2/7/2007		Statistical interpretation of	151.33	10.00	23.0	8.25	143.08	-						-	
MW-6															
6/20/2000			153.84	5,00	15.0	4.79	149.05)		
9/28/2000	1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		153.84	5.00	15.0	5.39	148.45	-		-	-		-		an contract; asis
12/17/2000			153.84	5.00	15.0	4.71	149.13						77		
3/23/2001			153.84	5.00	15.0	4.69	149.15	<50	< 0.5	< 0.5	< 0.5	< 0.5	<2.5		
6/21/2001			153.84	5.00	15.0	5.22	148,62								

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses
Station #374, 6407 Telegraph Ave., Oakland, CA

				Top of	Bottom of		Water Level			Concentra	tions in (µ;	g/L)			_
Well and Sample Date	P/NP	Comments	TOC	Screen (ft bgs)	Screen (ft bgs)	DTW (feet bgs)	Elevation (feet msl)	GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	МТВЕ	DO (mg/L)	pН
MW-6 Cont.															
9/23/2001			153.84	5.00	15.0	5.40	148.44								
12/31/2001		JS /-Perros esterio-militario (SES) (1 Personal America	153.84	5.00	15.0	3.95	149.89			<u> </u>	-				
3/21/2002			153.84	5.00	15.0	2.94	150.90	<50	<0.5	<0.5	<0.5	<0.5	5.2		
4/17/2002	——————————————————————————————————————	12 (1 (153.84	5.00	15.0	5.11	148.73				***	-		-	
8/12/2002			153.84	5.00	15.0	5,23	148.61								
12/6/2002	-	90.000-competition and an experimental con-	153.84	5.00	15.0	5.29	148.55	_	_			-		_	
1/29/2003		ь	153.84	5.00	15:0	4.79	149.05								
5/23/2003		(20002111111111111111111111111111111111	153.84	5.00	15.0	4.31	149.53	<50	<0.50	<0.50	<0.50	<0.50	9.4	1	6.7
09/04/03		d	153.84	5,00	15:0							Section (Control of Control of Co			
11/20/2003			153.84	5.00	15.0	6.31	147.53	-				_			
02/02/2004	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		159.41	5.00	15,0	4.78	154.63			44:-	1				
05/14/2004			159.41	5.00	15.0	6.29	153.12	-					-	_	
09/02/2004		a i	159.41	5.00	15.0	5.79	153.62	-							
11/04/2004		d	159.41	5.00	15.0					-				n	
02/08/2005			159.41	5.00	15.0	5.13	154.28								
05/09/2005			159,41	5.00	15.0	4.52	154.89	-							
08/11/2005	P		159,41	5.00	15.0	5.02	15439	₹50	<0.50	<0.50	<0.50	<0.50	7.6	2.1	6.6
11/18/2005		SERVICE CONTROL OF THE PROPERTY OF THE PROPERT	159.41	5.00	15.0	6.31	153.10		-					-	
02/16/2006			159.41	5.00	15.0	4:24	155.17								
5/30/2006	-		159.41	5.00	15.0	4.45	154.96	-		-			-	-	
8/24/2006	P. C. P. C.		159,41	5.00	15.0	5.18	154.23	K50	<0.50	<0.50	<0.50	<0.50	12	3.4	6.8
11/1/2006	H M M M M M M M M M		159.41	5.00	15.0	6.05	153.36			_			***	_	
2/7/2007			159,41	5.00	15.0	5.00	154,41								

SYMBOLS AND ABBREVIATIONS:

- -- = Not analyzed/applicable/measured/available
- < = Not detected at or above 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 measured in ft MSL

mg/L = Milligrams per liter

MTBE = Methyl tert-butyl ether

NP = Well was not purged prior to sampling

P = Well was purged prior to sampling

TOC = Top of casing measured in ft MSL

TPH-g = Total petroleum hydrocarbons as gasoline

це/L = Micrograms per liter

BTEX = Benzene, toluene, ethylbenzene and xylenes

FOOTNOTES:

- a = Chromatogram pattern: Gasoline C6-C10 for GRO/TPH-g.
- b = Beginning this quarter, groundwater samples were analyzed by EPA method 8260B for TPH-g, BTEX, and fuel oxygenates.
- c = Wells gauged with ORC sock in well.
- d = Well inaccessible
- e = The hydrocarbon result for GRO was partly due to individual peaks in the quantitative range.
- f = Well resurveyed on 1/27/2004
- g = Upon review of survey data (1/27/2004), TOC elevation for MW-4 is actually 162.47 ft.
- h = Upon review of survey data (1/27/2004), MW-5 was not surveyed from the TOC. MW-5 was surveyed from the pavement due to inaccessibility to the TOC. Therefore, survey data for MW-5 from the TOC is unavailable.

NOTES:

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.

The DTW's and TOC's for wells MW-5 and MW-6 were taken from Delta Environmental sampling sheets because the well logs were not available.

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 #374, 6407 Telegraph Ave., Oakland, CA

Well and				Concentration	ons in (µg/L)				
Sample Date	Ethanol	TBA	MTBE	DIPE	ЕТВЕ	TAME	1,2-DCA	EDB	Comments
MW-1									
5/23/2003	<20,000	64,000	1,600	<100	≤100	<100			
11/20/2003	<2,000	<400	1,500	<10	<10	<10	Linger in the second	######################################	a
05/14/2004	<5,000	<1,000	1,200	<25	<25	<25	\$25	425	
09/02/2004	<1,000	<200	660	<5.0	<5.0	<5.0	<5.0	<5.0	1 CONT. 1 CONT
11/04/2004	<2,000	<400	580	<10	<10	10	<10	<10	
02/08/2005	<2,000	<400	610	<10	<10	<10	<10	<10	
05/09/2005	<1,000	<200	620	<5.0	<5.0	<5.0	≰5.0	<5.0	
08/11/2005	<500	250	390	<2.5	<2.5	2.6	<2.5	<2.5	
11/18/2005	<500	<100	340	2. 5	\$2.5	\$255.5	25	25	
02/16/2006	<1,500	<100	340	<2.5	<2.5	<2.5	<2.5	<2.5	
5/30/2006	≤1,500	≤100	420	2.5	25			<2.5	
8/24/2006	<3,000	<200	180	<5.0	<5.0 	<5.0	<5.0 <5.0	<5.0 	
11/1/2006	<3,000	200	220	<50	<5.0°	<5.0 <5.0	<5.0	<5.0 <5.0	
2/7/2007	<3,000	<200	190	<5.0	<5.0	~5.0	75.0	3.0	
MW-2							**************************************	T OF VOICES TO 45 CO CHECKS INCIDENT	Tropically o company of the many points promited discriptive of the specific discriptive structures are many the specific discriptive structures and the specific discriptive structures are the specific discriptive structures and the specific discriptive structures are the specific discriptive structures and the specific discriptive structures are the specific discriptive structures and the specific discriptive structures are the specific discriptive structures and the specific discriptive structures are the specific disc
5/23/2003	<100	<20	55	<0.50	<0.50	0.53			
02/02/2004	<100	<20	37	<0.50	<0.50	<0.50	<0.50	<0.50	
09/02/2004	<500	<100	67	25	25	<2.5	25	225	
02/08/2005	<100	<20	30	<0.50	<0.50	<0.50	<0.50	<0.50	
08/11/2005	<100 ■	<20	35	<0.50	<0.50	<0.50	<0.50	<0.50	
02/16/2006	<300	<20	39	<0.50	<0.50	<0.50	<0.50	<0.50 <0.50	
8/24/2006	₹300	<20	25	<0.50	<0.50	<0.50 <0.50	<0.50 <0.50	<0.50	
2/7/2007	<300	<20	7.2	<0.50	<0.50	<0.50	70.30	~0.50	MANUAL MA
MW-3									THE STATE OF THE S
5/23/2003	<100	<20	1.6	<0.50	<0.50	<0,50			
09/02/2004	<100	<20	6.5	<0.50	<0.50	<0.50	<0.50	<0.50	ALL COMMENTS OF THE PROPERTY O
08/11/2005	<100	₹ 20	11	<0.50	<0,50	<0.50	<0.50	≤0.50	0
8/24/2006	<300	<20	7.6	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-4					-				
5/23/2003	<10,000	<2,000	<50	<50	<50	<50			

Table 2. Summary of Fuel Additives Analytical Data Station #374, 6407 Telegraph Ave., Oakland, CA

		. · · · · ·			tion #374, 64	io, relegia	J. 1. 2., C., C.		
Well and				Concentration		77 4 3 4 57	12 DC4	EDB	Comments
Sample Date	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	Commons
MW-4 Cont.									
02/02/2004	<500	<100	29	2 5	25	26	25	75	
09/02/2004	<200	<40	28	<1.0	<1.0	<1.0	<1.0	<1.0	
02/08/2005	<5,000	<1,000	1 4 5	<25	<25	<25	25	Q 5	
08/11/2005	<2,000	<400	32	<10	<10	<10	<10	<10	
02/16/2006	≤6,000	<400	35	<10	<10	<10	<10	<10	
8/24/2006	<1,500	<100	39	<2.5	<2.5	<2.5	<2.5	<2.5	
2/7/2007	<6,000	<400	67	<10	<10	<10	<10	<10	
MW-5									
	240	₹20	 	< 0.50	K0150	<0.50	- 12 CONTROL - 12		
1/29/2003 5/23/2003	<100	<20	<0.50	<0.50	<0.50	<0.50			CONTRACTOR OF THE CONTRACTOR O
9/4/2003	<100 ≪100	20	<0.50	<0.50	₹0.50	≤ 0,50	<0.50	<0.50	
09/02/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
08/11/2005	<100	20	<0.50	₹0,50	<0.50	<0.50	<0.50	<0,50	
8/24/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-6			İ						
	<100	 ≮20	9.4	<0.50	<0.50	<0.50			
5/23/2003		<20	7.9	<0.50	<0.50	<0.50	<0.50	<0.50	a a
08/11/2005	<100 <300	√20 ≈2 0	12	<0.50	<0.50	₹0,50	<0.50	<0.50	
8/24/2006	# 					e igggaeringen gener	11 11-11-11-15-15-17-17-17-17-17-17-15-15-15-15-15-15-15-15-15-15-15-15-15-	te language de la company de l	Y DIAMAN THE PROPERTY OF THE P

SYMBOLS AND ABBREVIATIONS:

- -- = Not analyzed/applicable/measured/available
- < = Not detected at or above the laboratory reporting limi
- 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 limits, however, it was within method acceptance limits. The data should still be 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 #374, 6407 Telegraph Ave., Oakland, CA

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
1/31/1996	Southwest	0.04
4/10/1996	Southwest	0,04
7/16/1996	Southwest	0.03
10/14/1996	Southwest	0.03
3/27/1997	Southwest	0.04
5/27/1997	Southwest Southwest	0;03
8/12/1997	Southwest	0.03
17/17/1997 3/16/1998	Southwest	0.03
5/12/1998	Southwest	0.04
7/27/1998	Southwest	0.04
10/15/1998	Southwest	0.02
2/18/1999	Southwest	0.05
5/24/1999	Southwest	E010
8/27/1999	Southwest	0.03
[0/26/1999	Southwest	0.03
2/3/2000	Southwest	0.047
6/20/2000	Southwest	0.035
9/28/2000	Southwest	0.034
12/17/2000	Southwest Southwest	
3/23/2001 6/21/2001	Southwest	0.032
9/23/2001	Southwest	0.029
12/51/2001	Southwest	0,043
3/21/2002	Southwest	0.038
4/17/2002	Southwest	0.031
8/12/2002	Southwest	0.032
12/6/2002	Southwest	0.020
1/29/2003	Southwest	0.027
5/23/2003	Southwest	0.039
9/4/2003	Southwest Southwest	0.029
11/20/2003	Southwest	0.043 (a)
2/2/2004 5/14/2004	Southwest	0.037 (a)
9/2/2004 9/2/2004	Southwest	0,027 (a)
174/2004	Southwest	0.034 (a)
2/8/2005	Southwest	0.061 (a)
5/9/2005	Southwest	0.08 (a)
8/11/2005	Southwest	0.06 (n)
11/18/2005	Southwest:	0.07 (a)
2/16/2006	Southwest	0.09 (a)
5/30/2006	Southwest	0:06 (a)

Table 3. Historical Ground-Water Flow Direction and Gradient Station #374, 6407 Telegraph Ave., Oakland, CA

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
8/24/2006	Southwest	0.03
1 [/1/2006	Southwest	0.02
2/7/2007	Southwest	0.03

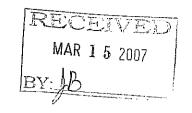
a = Gradients protentially suspect due to error in MW-4 and MW-5 TOC measuring point elevations discovered third quarter 2006.

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

APPENDIX A

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

March 6, 2007

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

Re:

Groundwater Sampling Data Package, BP Service Station No. 374, located at 6407 Telegraph Avenue, Oakland, California (Quarterly Monitoring performed on February 7, 2007)

General Information

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

Phone Number: (530) 676-6000

On-Site Supplier Representative: Jerry Gonzales

Date: February 7, 2007

Arrival: 13:00 Departure: 14:10

Weather Conditions: Clear

Unusual Field Conditions: None

Scope of Work Performed: Quarterly monitoring and sampling

Variations from Work Scope: None noted

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

Sincerely,

STRATUS ENVIRONMENTAL, INC.

Jay R. Johnson, P.G.

Project Manager

Sincerely,

Stratus Environmental, INC.

Jay R. Johnson

OF CALIFORNIA

Attachments:

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

CC: Mr. Paul Supple, BP/ARCO

BP ALAMEDA PORTFOLIO

HYDROLOGIC DATA SHEET

Gauge Date: 2/7/67 Project Name: Oakland - 6407 Telegraph Ave.

Field Technician: Oerre Project Number: 374

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

	D I R = Debtu to 1	· ····				-				
WELL OR LOCATION	TIME			MEASU	REMENT			PURGE & SAMPLE	SHEEN CONFIRMATION	COMMENTS
		TOC	DTP	DTW	DTB	DIA	ELEV		(w/bailer)	
MW-1	13:02			7.40	26,5S	411		4es 4eg		
MW.2	12-58			7.88	26.15	411		4.09		
MW-3	12:45		·	6,90	26.15 26.65	411				
MW-4	1254			802	26.80	411		Yes		
MW.5	1250			8.25	22.95	411				
MW-1 MW-3 MW-4 MW-5 MW-6	12:40			5.00	14.45	411				
	-									.,
										·
			<u> </u>		-					
										
						-				

BP ALAMEDA PORTFOLIO WATER SAMPLE FIELD DATA SHEET WELL L.D.: MW. / 374 PROJECT #: PURGED BY: SAMPLE I.D.: NW/ SAMPLED BY: CLIENT NAME: Oakland - 6407 Telegraph Ave. LOCATION: QA SAMPLES: DATE PURGED 2705 START (2400hr) /3:/4 END (2400hr) / 3:/5 DATE SAMPLED SAMPLE TIME (2400hr) SAMPLE TYPE: Surface Water Treatment Effluent Groundwater CASING DIAMETER: Other (0.17) (1.02) (1.50) Casing Volume: (gallons per foot) (0.38)(2.60) 76 *SS* DEPTH TO BOTTOM (feet) = CASING VOLUME (gal) = CALCULATED PURGE (gal) = DEPTH TO WATER (feet) = WATER COLUMN HEIGHT (feet) = ACTUAL PURGE (gal) = FIELD MEASUREMENTS DATE TIME VOLUME TEMP. CONDUCTIVITY рΗ COLOR TURBIDITY (2400hr) (umhos/cm) (units) (gal) (degrees F) (visual) (NTU) 13:76 SAMPLE INFORMATION SAMPLE DEPTH TO WATER: SAMPLE TURBIDITY: 80% RECHARGE: YES ANALYSES: SAMPLE VESSEL / PRESERVATIVE: 3 Voa - HCC ODOR: 10 PURGING EQUIPMENT SAMPLING EOUIPMENT Bladder Pump Bailer (Teflon) Bladder Pump Bailer (Teflon) Bailer (PVC) Bailer (PVC or / disposable) Bailer (Stainless Steel) Centrifugal Pump Centrifugal Pump Submersible Pump Bailer (Stainless Steel) Submersible Pump Peristalic Pump Dedicated Peristalic Pump Dedicated Other: Other: Pump Depth: 1600 LOCK#: Maste WELL INTEGRITY: REMARKS: SIGNATURE: Page

BP ALAMEDA PORTFOLIO WATER SAMPLE FIELD DATA SHEET WELL I.D.: M. PURGED BY: \ 6 PROJECT#: SAMPLED BY: SAMPLE I.D.: MW.2 CLIENT NAME: LOCATION: Oakland - 6407 Telegraph Ave. QA SAMPLES: START (2400hr) / 3 29 DATE PURGED 2/5/07 END (2400hr) /332 DATE SAMPLED SAMPLE TIME (2400hr) Treatment Effluent SAMPLE TYPE: Surface Water Groundwater x CASING DIAMETER: 2" Other (0.17) (1.02) (2.60)Casing Volume: (gallons per foot) (0.38)26.15 CASING VOLUME (gal) = DEPTH TO BOTTOM (feet) = 7-88 CALCULATED PURGE (gal) = DEPTH TO WATER (feet) = WATER COLUMN HEIGHT (feet) = ACTUAL PURGE (gal) = FIELD MEASUREMENTS DATE TIME VOLUME TEMP. CONDUCTIVITY pΗ COLOR TURBIDITY (2400hr) (degrees F) (umhos/cm) (visual) (NTU) 2/7/05 SAMPLE INFORMATION 7.88 SAMPLE TURBIDITY: Ofer SAMPLE DEPTH TO WATER: 80% RECHARGE: XYES NO ANALYSES: <=e work order ODOR: 10 SAMPLE VESSEL / PRESERVATIVE: PURGING EQUIPMENT SAMPLING EQUIPMENT Bailer (Teflon) Bladder Pump Bladder Pump Bailer (Teflon) Bailer (PVC) Bailer (PVC or \checkmark disposable) Centrifugal Pump Centrifugal Pump Bailer (Stainless Steel) Bailer (Stainless Steel) Submersible Pump Submersible Pump Peristalic Pump Dedicated Peristalic Pump Dedicated Other: Other: Pump Depth: New LOCK#: MOSTS WELL INTEGRITY: REMARKS: SIGNATURE: Page ___

BP ALAMEDA PORTFOLIO WATER SAMPLE FIELD DATA SHEET WELL I.D.: M PURGED BY: 🔾 💪 PROJECT #: SAMPLE I.D.: SAMPLED BY: CLIENT NAME: LOCATION: Oakland - 6407 Telegraph Ave. OA SAMPLES: START (2400hr) / 3:49 END (2400hr) 1345 DATE PURGED 2/9/07 SAMPLE TIME (2400hr) 13 45 DATE SAMPLED 2/7/07 Treatment Effluent Surface Water Other SAMPLE TYPE: Groundwater Other CASING DIAMETER: (0.17) (1.02)(1.50) (2.60)Casing Volume: (gallons per foot) (0.38) (0.67) 26.80 CASING VOLUME (gal) = DEPTH TO BOTTOM (feet) = 8.02 DEPTH TO WATER (feet) = CALCULATED PURGE (gal) = ACTUAL PURGE (gal) = WATER COLUMN HEIGHT (feet) = FIELD MEASUREMENTS VOLUME CONDUCTIVITY COLOR TURBIDITY TIME TEMP. рΗ DATE (units) (visual) (NTU) (2400hr) (degrees F) (gal) deen SAMPLE INFORMATION 80: g. SAMPLE TURBIDITY: SAMPLE DEPTH TO WATER: ANALYSES: See work orden 80% RECHARGE: YES SAMPLE VESSEL/PRESERVATIVE: 3 VOWHCL ODOR: NO SAMPLING EQUIPMENT PURGING EQUIPMENT Bladder Pump Bailer (Teflon) Bailer (Teflon) Bladder Pump Bailer (___ PVC or 🌿 disposable) Centrifugal Pump 区 Bailer (PVC) Centrifugal Pump Bailer (Stainless Steel) Submersible Pump Bailer (Stainless Steel) Submersible Pump Dedicated Peristalic Pump Dedicated Peristalic Pump Other: Other: Pump Depth: NOME LOCK#: MESTER. WELL INTEGRITY: REMARKS! SIGNATURE:

Wellhead Observation Form

Account:	
Sampled by: Jerr 9	Date: 2/7/07

Well ID	Box in good condition	Lock Missing (Replaced with new)		Bolts Missing	Bolts Stripped	Bolt-Holes Stripped	Cracked or Broken Lid	Cracked Box and/or Bolt - Holes	Misc.	Add'l Notes and Other Stuff
mu-1	403	No	NO	NO	NO	NO	No	NO		
mr2	Yes	NO	NO	No	No	NO	NO	NO		
MW-3	Yces	10	NO	gus	10	N-B	No	No		
mu 4	4005	NO	No	NO	NO	No	No	NO		
Mus	4.05	NO	NO	NO	No.	10	NO	10		
mer 6	465	10	yces	10.	100	NO	NO	10	:	·
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						4				·
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Atlantic Richfield Company A BP affiliated company

Chain of Custody Record

Project Name: BP 374 BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > CA > Alameda>374 State or Lead Regulatory Agency: Requested Due Date (mm/dd/yy):

	1 ugo ur ,
On-site Time: 1300	Temp: Coe/
Off-site Time: 14/0	Temp: 00/
Sky Conditions: Cla	
Meteorological Events: $\int \mathcal{D}$	ne
Wind Speed:	Direction: Ma

	P/AR Facility No.: 374	Consultant/Contractor: Stratus Environmental, Inc.
	P/AR Facility Address: 6407 Telegraph Ave.,	Oakland Address: 3330 Cameron Park Drive, Suite 550
	te Lat/Long:	Cameron Park, CA 95682
	alifornia Global ID #: T0608100106	Consultant/Contractor Project No.:
	nfos Project No.: G0C21-0015	Consultant/Contractor PM: Jay Johnson
	ovision or RCOP (circle one) Provision	Tele/Fax: (530) 676-6000 / (530) 676-6005
	ase/WBS: 04-Monitoring	Report Type & QC Level: Level 1 with EDF
	b Phase/Task: 03-Analytical	E-mail EDD To: cjewitt@stratusinc.net
	est Element: 01-Contractor labor	Invoice to: Atlantic Richfield Co.
Lab Bottle Order No: Matrix	Preservative	Requested Analysis
Item Sample Description Time Date Air Air	No. of Containers Unpreserved HNO3 HCI Methanol	Sample Point Lat/Long and Comments *Oxy = MTBD, TAME, ETBE, DIPE, TBA
1 MW-1 1315 2/7/09 X	3 x	x x x x
2 MW-2 /330) X		X X X X
······································		
		X X X X X
4 TB 374 070707 500 X	2 X	X X X X HOLD
5		
6		
7		
8		
9		
10		
Sampler's Name: LMJ 6Dn Pale	Relinquished By / Affiliation	Date Mime Accepted By / Affiliation Date Time
Sampler's Company: DOLLOS Que	nu Han	7/9/07/24 1655 MANDED TA-SAC 2/2/05 1655
Shipment Date:	/	
Shipment Method:		
Shipment Tracking No:	·	
Special Instructions: Please cc results to: rmiller@broad	dbentinc.com	
Custody Seals In Place: Yes / No Temp Blank: Yes / No	Cooler Temp on Receipt: °F/C	Trip Blank: Yes / No MS/MSD Sample Submitted: Yes / No



26 February, 2007

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

RE: ARCO #0374, Oakland, CA

Work Order: MQB0413

Enclosed are the results of analyses for samples received by the laboratory on 02/13/07 07:55. 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 #0374, Oakland, CA	MQB0413
3330 Cameron Park Dr., Suite 550	Project Number: G0C21-0015	Reported:
Cameron Park CA, 95682	Project Manager: Jay Johnson	02/26/07 15:34

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MQB0413-01	Water	02/07/07 13:15	02/13/07 07:55
MW-2	MQB0413-02	Water	02/07/07 13:30	02/13/07 07:55
MW-4	MQB0413-03	Water	02/07/07 13:45	02/13/07 07:55
TB 374 020707	MQB0413-04	Water	02/07/07 05:00	02/13/07 07:55

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.





Stratus Environmental Inc. [Arco] 3330 Cameron Park Dr., Suite 550 Cameron Park CA, 95682 Project: ARCO #0374, Oakland, CA

Project Number: G0C21-0015 Project Manager: Jay Johnson MQB0413 Reported: 02/26/07 15:34

Total Purgeable Hydrocarbons by GC/MS (CA LUFT)

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MQB0413-01) Water Sampled:	02/07/07 13:15	Received:	02/13/07	7 07:55					
Gasoline Range Organics (C4-C12)	120	50	սց/l	l	7B19001	02/19/07	02/19/07	LUFT GCMS	PV
Surrogate: 1,2-Dichloroethane-d4		97 %	60-	145	11	n	"	"	
MW-2 (MQB0413-02) Water Sampled:	02/07/07 13:30	Received:	02/13/07	7 07:55					
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	7B17001	02/17/07	02/17/07	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		99 %	60-	145	11		"	"	
MW-4 (MQB0413-03) Water Sampled:	02/07/07 13:45	Received:	02/13/07	7 07:55					
Gasoline Range Organics (C4-C12)	3100	1000	ug/l	20	7B19004	02/19/07	02/19/07	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		102 %	60-	145	n	n	17	17	





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

Project: ARCO #0374, Oakland, CA

Project Number: G0C21-0015 Project Manager: Jay Johnson MQB0413 Reported: 02/26/07 15:34

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-1 (MQB0413-01) Water	Sampled: 02/07/07 13:15	Received	: 02/13/07 0	7:55				, ",	
tert-Amyl methyl ether	ND	5.0	ug/l	10	7B17001	02/17/07	02/17/07	EPA 8260B	
Benzene	ND	5.0	10	и	И	4	Ħ	ti.	
tert-Butyl alcohol	ND	200	II	H	11	W.	1)	U	
Di-isopropyl ether	ND	5.0	И	Ħ)(11	U	n	
1,2-Dibromoethane (EDB)	ND	5.0	H	Ħ	И	It	ti	n	
1,2-Dichloroethane	ND	5.0	н	ti	¥I	и	ti	It .	
Ethanol	ND	3000	11	ŧI	ŧı	IF	II	11	
Ethyl tert-butyl ether	ND	5.0	Ħ	ŧ	Ħ	н	II	It	
Ethylbenzene	ND	5.0	U.	ti	U	H	D	и	
Methyl tert-butyl ether	190	5.0	0	U	u	11	D	И	
Toluene	ND	5.0	u	U	U	n	l)	И	
Xylenes (total)	ND	5.0	U	D.	U	п	It	и	
Surrogate: Dibromofluoromethan	е	105 %	75-13	0	H	17	"	rr rr	
Surrogate: 1,2-Dichloroethane-d-	4	106 %	60-14	5	n	II .	n	n	
Surrogate: Toluene-d8		93 %	70-13	0	"	"	"	tt	
Surrogate: 4-Bromofluorobenzene	е	92 %	60-12	0	n	"	"	"	
MW-2 (MQB0413-02) Water	Sampled: 02/07/07 13:30	Received:	02/13/07 0	7:55					
tert-Amyl methyl ether	ND	0.50	ug/l	1	7B17001	02/17/07	02/17/07	EPA 8260B	
Benzene	0.50	0.50	t t	14	0	Ħ	If	н	
tert-Butyl alcohol	ND	20	"	н	0	ti	19	и	
Di-isopropyl ether	ND	0.50	11	It	0	**	11	н	
1,2-Dibromoethane (EDB)	ND	0.50	*	14	0	**	14	и	
1,2-Dichloroethane	ND	0.50	H	10	0	n	11	И	
Ethanol	ND	300	14	IF	0	Ħ	H	И	
Ethyl tert-butyl ether	ND	0.50	14	IF	17	ø	И	и	
Ethylbenzene	ND	0.50	14	И	D	U	И	и	
Methyl tert-butyl ether	7.2	0.50	P	R	Ħ	0	И	и	
Toluene	ND	0.50	If	It	n	O	И	н	
Xylenes (total)	ND	0.50	П	Л	I†	ti	н	н	
Surrogate: Dibromofluoromethan	e	104 %	75-13	0	"	n	"	"	
Surrogate: 1,2-Dichloroethane-d-	4	99 %	60-14	5	"	n	11	n	
Surrogate: Toluene-d8		96 %	70-13	0	"	n	"	11	
Surrogate: 4-Bromofluorobenzene	e e	86 %	60-12	0	"	u	11	11	





Stratus Environmental Inc. [Arco] 3330 Cameron Park Dr., Suite 550 Cameron Park CA, 95682 Project: ARCO #0374, Oakland, CA

Project Number: G0C21-0015
Project Manager: Jay Johnson

MQB0413 Reported: 02/26/07 15:34

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-4 (MQB0413-03) Water	Sampled: 02/07/07 13:45	Received:	02/13/0	7 07:55					
tert-Amyl methyl ether	ND	10	ug/l	20	7B19004	02/19/07	02/19/07	EPA 8260B	
Benzene	570	10	0	11	*1	IF	10	U	
tert-Butyl alcohol	ND	400	n)1	U	11	It	H	
Di-isopropyl ether	ND	10	17	ıı	tt	11	Ħ	If	
1,2-Dibromoethane (EDB)	ND	10	It	11	n	*1	*1	It	
1,2-Dichloroethane	ND	10	R	łi .	n	11	Ħ	It	
Ethanol	ND	6000	Įŧ.	*1	14	H	п	It.	
Ethyl tert-butyl ether	ND	10	#	**	I†	0	#1	It.	
Ethylbenzene	170	10	41	*1	tr .	ti.	*1	tt.	
Methyl tert-butyl ether	67	10	#	0	tf	44	*1	R	
Foluene	17	10	Ħ	0	11	ti	ėi.	lt .	
Xylenes (total)	110	10	11	n	If	H	H	н	
Surrogate: Dibromofluoromethan	ne	98 %	75	-130	"	11	11	"	
Surrogate: 1,2-Dichloroethane-d	4	102 %	60-	-145	**	ır	n	rt .	
Surrogate: Toluene-d8		98 %	70-	-130	"	"	fr	"	
Surrogate: 4-Bromofluorobenzen	e	98 %	60-	-120	n	11	п	"	





Stratus Environmental Inc. [Arco] 3330 Cameron Park Dr., Suite 550 Cameron Park CA, 95682 Project: ARCO #0374, Oakland, CA

MQB0413 Reported:

Project Number: G0C21-0015 Project Manager: Jay Johnson

02/26/07 15:34

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7B17001 - EPA 5030B P/T / LUFT	GCMS									
Blank (7B17001-BLK1)				Prepared	& Analyze	ed: 02 /17/	07			
Gasoline Range Organics (C4-C12)	ND	50	u <u>e</u> /l							
Surrogate: 1,2-Dichloroethane-d4	2.54		"	2,50	***************************************	102	60-145			
Laboratory Control Sample (7B17001-BS2)				Prepared .	& Analyze	d: 02/1 7 /	07			
Gasoline Range Organics (C4-C12)	536	50	ug/l	500	_	107	75-140		······································	***************************************
Surrogate: 1,2-Dichloroethane-d4	2.70		11	2,50	***************************************	108	60-145			
Laboratory Control Sample Dup (7B17001-E	SD2)			Prepared a	& Analyze	d: 02/17/	07			
Gasoline Range Organics (C4-C12)	503	50	ug/l	500		101	75-140	6	20	
Surrogate: 1,2-Dichloroethane-d4	2.68	***************************************	11	2.50		107	60-145			
Batch 7B19001 - EPA 5030B P/T / LUF7	r GCMS									
Blank (7B19001-BLK1)				Prepared	& Analyze	d: 02/19/	07			
Gasoline Range Organics (C4-C12)	ND	50	ug/l	_						
Surrogate: 1,2-Dichloroethane-d4	2.36	······································	JI .	2,50		94	60-145			
Laboratory Control Sample (7B19001-BS2)				Prepared & Analyzed: 02/19/07						
Gasoline Range Organics (C4-C12)	511	50	ug/l	500		102	75-140	***************************************	***************************************	******************
Surrogate: 1,2-Dichloroethane-d4	2.39		n	2.50		96	60-145			
Laboratory Control Sample Dup (7B19001-B	SD2)			Prepared a	& Analyze	:d: 02/19/	07			
Gasoline Range Organics (C4-C12)	517	50	ug/l	500		103	75-140	1	20	
Surrogate: 1,2-Dichloroethane-d4	2,27		"	2.50		91	60-145	·····	***************************************	***************************************
Batch 7B19004 - EPA 5030B P/T / LUFT	GCMS									
Blank (7B19004-BLK1)				Prepared a	& Analyze	d: 02/19/	07			
Gasoline Range Organics (C4-C12)	ND	50	n6\J	***************************************	······································					
Surrogate: 1,2-Dichloroethane-d4	2.74		п	2.50		110	60-145			



RPD



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

Project: ARCO #0374, Oakland, CA

Spike

Source

MQB0413 Project Number: G0C21-0015 Reported: Project Manager: Jay Johnson 02/26/07 15:34

%REC

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

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7B19004 - EPA 5030B P/T /	LUFT GCMS									
Laboratory Control Sample (7B19004	-BS2)			Prepared	& Analyze	ed: 02/19/	07			
Gasoline Range Organics (C4-C12)	473	50	ug/l	500		95	75-140			
Surrogate: 1,2-Dichloroethane-d4	2,61		11	2.50		104	60-1-15			
Laboratory Control Sample Dup (7B1	9004-BSD2)			Prepared	& Analyze	ed: 02/19/	07			
Gasoline Range Organics (C4-C12)	463	50	ug/l	500		93	75-140	2	20	
Surrogate: 1,2-Dichloroethane-d4	2.74	······································	"	2.50		110	60-145			





Stratus Environmental Inc. [Arco] 3330 Cameron Park Dr., Suite 550 Cameron Park CA, 95682 Project: ARCO #0374, Oakland, CA

Project Number: G0C21-0015

MQB0413 Reported: 02/26/07 15:34

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

Project Manager: Jay Johnson

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

Blank (7B17001-BLK1)				Prepared & An	alyzed: 02/17/	07				
tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	и							
tert-Butyl alcohol	ND	20	41							
Di-isopropyl ether	ND	0.50	†I							
1,2-Dibromoethane (EDB)	ND	0.50	ti ti							
I,2-Dichloroethane	ND	0.50	u							
Ethanol	ND	300	0							
Ethyl tert-butyl ether	ND	0.50	0							
Ethylbenzene	ND	0.50	Ħ							
Methyl tert-butyl ether	ND	0.50	ıt							
Toluene	ND	0.50	ıt							
Xylenes (total)	ND	0.50	11							
Surrogate: Dibromofluoromethane	2.50		n	2.50	100	75-130				
Surrogate: 1,2-Dichloroethane-d4	2.54		rr	2.50	102	60-145				
Surrogate: Toluene-d8	2.40		n	2.50	96	70-130				
Surrogate: 4-Bromofluorobenzene	2.31		"	2.50	92	60-120				
Laboratory Control Sample (7B17001-	·BS1)			Prepared & Analyzed: 02/17/07						
tert-Amyl methyl ether	9.03	0.50	ug/i	10.0	90	65-135				
Benzene	8.99	0.50	H	10,0	90	70-125				
tert-Butyl alcohol	163	20	H	200	82	60-135				
Di-isopropyl ether	7.56	0.50	н	0,01	76	70-130				
1,2-Dibromoethane (EDB)	9,43	0.50		0.01	94	80-125				
1,2-Dichloroethane	9,36	0,50	H	0.01	94	75-125				
Ethanol	176	300	If	200	88	15-150				
Ethyl tert-butyl ether	8.23	0.50	н	0.01	82	65-130				
Ethylbenzene	9.07	0.50	н	10.0	91	70-130				
Methyl tert-butyl ether	8.19	0.50	и	10.0	82	50-140				
Toluene	8.51	0.50	н	10.0	85	70-120				
Xylenes (total)	26.3	0.50	H	30.0	88	80-125				
Surrogate: Dibromofluoromethane	2.58		ır	2.50	103	75-130				
Surrogate: 1,2-Dichloroethane-d-l	2.52		"	2.50	101	60-145				
Surrogate: Toluene-d8	2.48		"	2.50	99	70-130				
Surrogate: 4-Bromofluorobenzene	2.49		н	2.50	100	60-120				



Reported:

Notes

RPD

Limit



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

Analyte

Project: ARCO #0374, Oakland, CA

Spike

Level

MQB0413 Project Number: G0C21-0015 Project Manager: Jay Johnson 02/26/07 15:34

%REC

%REC

Limits

RPD

Source

Result

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

Units

Reporting

Limit

Result

2.47

2.31

2.54

2.58

Matrix Spike (7B17001-MS1)	Source: MQ	B0412-01		Prepared of	& Analyze	d: 02/17	/07			
tert-Amyl methyl ether	19.8	1.0	ug/l	20.0	ND	99	65-135			
Benzene	19.8	1.0	**	20.0	0.28	98	70-125			
tert-Butyl alcohol	392	40	U	400	45	87	60-135			
Di-isopropyl ether	15.7	1.0	U	20.0	ND	78	70-130			
1,2-Dibromoethane (EDB)	22.8	1.0	U	20.0	ND	114	80-125			
I,2-Dichloroethane	18.5	1.0	u	20.0	ND	92	75-125			
Ethanol	329	600	Ü	400	ND	82	15-150			
Ethyl tert-butyl ether	17.2	1.0	O	20.0	ND	86	65-130			
Ethylbenzene	24.0	1.0	U	20,0	5.2	94	70-130			
Methyl tert-butyl ether	29.4	1.0	U	20.0	13	82	50-140			
Foluene	19.9	1.0	n	20.0	0.88	95	70-120			
Xylenes (total)	59.0	1.0	U	60.0	1.3	96	80-125			
Surrogate: Dibromofluoromethane	2.48		#	2.50		99	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.35		n	2.50		94	60-145			
Surrogate: Toluene-d8	2.52		"	2.50		101	70-130			
Surrogate: 4-Bromofluorobenzene	2.61		"	2.50		104	60-120			
Matrix Spike Dup (7B17001-MSD1)	Source: MQ	B0412-01		Prepared o	& Analyze	/07				
ert-Amyl methyl ether	20.1	1.0	ug/l	20.0	ND	100	65-135	2	25	
Benzene	20.3	1.0	lt	20,0	0.28	100	70-125	2	15	
ert-Butyl alcohol	396	40	Ħ	400	45	88	60-135	1	35	
Di-isopropyl ether	16.0	1.0	#1	20.0	ND	80	70-130	2	35	
1,2-Dibromoethane (EDB)	22.8	1.0	*1	20.0	ND	114	80-125	0	15	
1,2-Dichloroethane	18.6	1.0	*1	20.0	ND	93	75-125	0.5	10	
Ethanol	342	600	Ħ	400	ND	86	15-150	4	35	
Ethyl tert-butyl ether	18.3	1.0	u	20.0	ND	92	65-130	6	35	
Ethylbenzene	24.1	0.1	ti	20.0	5.2	94	70-130	0.4	15	
Methyl tert-butyl ether	29.6	1.0	tı	20.0	13	83	50-140	0.7	25	
Toluene	20.5	1.0	a	20.0	0.88	98	70-120	3	15	
Xylenes (total)	59.7	0.1	Ħ	60.0	1.3	97	80-125	1	15	

2.50

2.50

2.50

2.50

Surrogate: Dibromofluoromethane

Surrogate: 1,2-Dichloroethane-d4

Surrogate: 4-Bromofluorobenzene

Surrogate: Toluene-d8

75-130

60-145

70-130

60-120

99

92

102

103





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

Analyte

Project: ARCO #0374, Oakland, CA

Spike

Level

Source

Result

%REC

%REC

Limits

RPD

MQB0413 Reported:

Cameron Park CA, 95682

Project Number: G0C21-0015
Project Manager: Jay Johnson

Reporting

Limit

Result

2.55

2,70

02/26/07 15:34

Notes

RPD

Limit

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

ramyte	Neaun	Limit	Omia	Level	Resun	/BICLSC	Linns	MD	Finite	HUIES
Batch 7B19004 - EPA 5030B P/T / EPA	8260B		_	-	_					
Blank (7B19004-BLK1)				Prepared	& Analyze	:d: 02/19/	07			
tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	16							
tert-Butyl alcohol	ND	20	It							
Di-isopropyl ether	ND	0.50	Iŧ							
,2-Dibromoethane (EDB)	ND	0.50	It							
,2-Dichloroethane	ND	0.50	14							
Ethanol	ND	300	н							
Ethyl tert-butyl ether	ND	0.50	и							
Ethylbenzene	ND	0.50	н							
Methyl tert-butyl ether	ND	0.50	н							
oluene	ND	0.50	н							
Xylenes (total)	ND	0.50	n							
Surrogate: Dibromofluoromethane	2.46		17	2.50		98	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.74		"	2.50		110	60-145			
Surrogate: Toluene-d8	2.44		"	2.50		98	70-130			
Surrogate: 4-Bromofluorobenzene	2.43		и	2.50		97	60-120			
Laboratory Control Sample (7B19004-BS1)				Prepared of	& Analyze	d: 02/19/	07			
ert-Amyl methyl ether	12.0	0.50	ug/l	10.0		120	65-135			
Benzene	11.3	0.50	n	10.0		113	70-125			
ert-Butyl alcohol	203	20	ı	200		102	60-135			
Di-isopropyl ether	11.2	0.50	n	10.0		112	70-130			
,2-Dibromoethane (EDB)	12.0	0.50	n	10.0		120	80-125			
,2-Dichloroethane	12.0	0.50	n	10.0		120	75-125			
Ethanol	173	300	n	200		86	15-150			
Ethyl tert-butyl ether	11.3	0.50	U	10.0		113	65-130			
Ethylbenzene	11.3	0.50	O	10.0		113	70-130			
Methyl tert-butyl ether	11.4	0.50	n	10.0		114	50-140			
l'oluene l'alle	11.2	0.50	U	0.01		112	70-120			
Kylenes (total)	34.6	0.50	U	30.0		115	80-125			
Surrogate: Dibromofluoromethane	2.67		13	2.50	·	107	75-130			,,,
Surrogate: 1,2-Dichloroethane-d4	2.80		'n	2.50		112	60-145			

Surrogate: 4-Bromofluorobenzene

Surrogate: Toluene-d8

70-130

60-120

102

108

2.50

2.50





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

Project: ARCO #0374, Oakland, CA

Spike

Source

%REC

Project Number: G0C21-0015 Project Manager: Jay Johnson MQB0413 Reported: 02/26/07 15:34

RPD

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

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7B19004 - EPA 5030B P/T / E	EPA 8260B									
Matrix Spike (7B19004-MS1)	Source: M	QB0418-05		Prepared						
tert-Amyl methyl ether	14,2	0.50	ug/l	10.0	ND	142	65-135	***************************************		LN
Benzene	13.2	0.50		10.0	ND	132	70-125			LN
tert-Butyl alcohol	243	20	a	200	ND	122	60-135			
Di-isopropyl ether	13.9	0.50	U	10.0	ND	139	70-130			LN
1,2-Dibromoethane (EDB)	14.6	0.50	U	10.0	ND	146	80-125			LN
1,2-Dichloroethane	14.4	0.50	17	10.0	ND	144	75-125			LN
Ethanol	247	300	10	200	ND	124	15-150			
Ethyl tert-butyl ether	13.8	0.50	It	10.0	ND	138	65-130			LN
Ethylbenzene	12.3	0.50	н	0.01	ND	123	70-130			
Methyl tert-butyl ether	14.4	0.50	"	10.0	ND	144	50-140			LN
Toluene	12.5	0.50	11	0.01	ND	125	70-120			LN
Xylenes (total)	37.3	0.50	11	30.0	ND	124	80-125			
Surrogate: Dibromofluoromethane	2,66		11	2.50		106	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.82		н	2.50		113	60-145			
Surrogate: Toluene-d8	2.43		n	2.50		97	70-130			
Surrogate: 4-Bromofluorobenzene	2.47		IJ	2.50		99	60-120			
Matrix Spike Dup (7B19004-MSD1)	Source: M	QB0418-05		Prepared	& Analyze	ed: 02/19/	07			
tert-Amyl methyl ether	12.8	0.50	ug/l	10.0	ND	128	65-135	10	25	
Benzene	12.3	0.50	0	10.0	ND	123	70-125	7	15	
tert-Butyl alcohol	226	20	U	200	ND	113	60-135	7	35	
Di-isopropyl ether	12.6	0.50	U	10.0	ND	126	70-130	10	35	
1,2-Dibromoethane (EDB)	13.0	0.50	0	10.0	ND	130	80-125	12	15	LN
1,2-Dichloroethane	12.9	0.50	0	10.0	ND	129	75-125	11	10	LM, B
Ethanol	242	300	Ü	200	ND	121	15-150	2	35	
Ethyl tert-butyl ether	12.4	0.50	tt	10.0	ND	124	65-130	11	35	
Ethylbenzene	11.7	0.50	u	10.0	ND	117	70-130	5	15	
Methyl tert-butyl ether	12.9	0.50	U	10.0	ND	129	50-140	11	25	
Toluene	11.8	0.50	U	10.0	ND	118	70-120	6	15	
Xylenes (total)	35.3	0.50	U	30.0	ND	118	80-125	6	15	
Surrogate: Dibromofluoromethane	2.64		**	2.50		106	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.67		"	2.50		107	60-145			
Surrogate: Toluene-d8	2.53		"	2,50		101	70-130			
Surrogate: 4-Bromofluorobenzene	2.49		n	2,50		100	60-120			





Relative Percent Difference

RPD

Stratus Environmental Inc. [Arco] Project: ARCO #0374, Oakland, CA MQB0413
3330 Cameron Park Dr., Suite 550 Project Number: G0C21-0015 Reported:
Cameron Park CA, 95682 Project Manager: Jay Johnson 02/26/07 15:34

Notes and Definitions

PV	Hydrocarbon result partly due to individ, peak(s) in quant, range
LM	MS and/or MSD above acceptance limits. See Blank Spike(LCS).
BA	Relative percent difference out of control
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

Page	1	of_	_1_
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Atlantic Richfield
Company

Chain of Custody Record

Project Name: BP 374

BP BU/AR Region/Enfos Segment:

BP > Americas > West > Retail > CA > Alameda>374

State or Lead Regulatory Agency:

Requested Due Date (mm/dd/yy):

	·
On-site Time: 130D	Temp: COP/
Off-site Time: 1410	Temp: csO/
Sky Conditions: Cla	
Meteorological Events:	
Vind Speed: .FT	Direction: Ma

Lab :	Name: TestAmerica						BP/AR Facility No	.:	3	74									Con	sulta	nt/C	ontra	actor.		Stratus Environmen	tal, Inc.				
1	ess: 885 Jarvis Drive						BP/AR Facility Ad	dress	;	640	7 Te	legra	ıph Av	/e., (Oak	land			Address: 3330 Cameron Park Drive, Suite 550						*****					
Mor	gan Hill, CA 95937						Site Lat/Long:												Cameron Park, CA 95682											
	PM: Lisa Race					_	California Global II			6001		06							Consultant/Contractor Project No.:											
	Fax: 408-782-8156 408-782-630	8 (fax)				<u> </u>	Enfos Project No.:	.,			5								Consultant/Contractor PM: Jay Johnson											
	R PM Contact: Paul Supple					╢_	Provision or RCOP	(cir	cle o	ne)		Prov	vision						Tele/Fax: (530) 676-6000 / (530) 676-6005											
Addr	ess: 2010 Crow Canyon Place, Suit	te 150	······································			┦_	Phase/WBS:			Moni		_							Report Type & QC Level: Level 1 with EDF											
<u> </u>	San Ramon, CA					╢	Sub Phase/Task:			Analy									E-mail EDD To: cjewitt@stratusinc.net											
	Fax: 925-275-3506			7			Cost Element:									Invoice to: Atlantic Richfield Co.														
Lab	Bottle Order No:	7/	7		Matri	X .	4		⊩	P	rese	rvati	ve	_				Requ	este	d Ar	nalys	is								
Item No.	Sample Description	Time	Date	Soil/Solid	Water/Liquid		Laboratory No.	No. of Containers	Unpreserved	H ₂ SO ₄	HNO3	HCI	Methanol		GRO/BTEX/Oxy*	1,2 DCA	Ethanol	EDB	DRO						*Oxy = MTBD, TA	ments				
1	MW-1	1315	2/7/04)	ζ .		67	3				x			X	x	х	х			1	Π	Ī	T						
2	MW-2	1330	}	,		Τ	02	3				х			x	х	1	х						 						
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4	TB 374 020707	SUD		1	۲		04	2				х				<u> </u>		Х						<u> </u>	HOLD					
5																														
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10																														
Samj	oler's Name: Lmy	60	mal	e)			Relinq	alshe	d By	/ Affi	liatio	D.			Di	ite	ı⁄∏;	mę				Agec	pted	By / 2	Affiljation	Date	Time			
Sam	oler's Company: Duli	IJ					Denny Hung 2/9/07/2/4 16							169	5	M	nh	72	D.		17A-SAC	2/0/05								
	ment Date:						May 2/12 15.								(M	dy	,	MI	de	m	2-13-01	1655 765							
	ment Method:					_(
	ment Tracking No:]												
Speci	Special Instructions: Please cc results to: rmiller@broadbentinc.com																													
. `\ -	Custody Seals In Place: Yes / No Temp Blank: Yes / No Cooler Temp on Receipt: C °F/C Trip Blank: Yes / No MS/MSD Sample Submitted: Yes / No																													

TEST AMERICA SAMPLE RECEIPT LOG

GLIENT NAME: REC. BY (PRINT) WORKORDER:	BP A.M. Maboais		DATE REC'D AT LAB: TIME REC'D AT LAB: DATE LOGGED IN:	2-13- 7: 211				For Regula DRINKING WASTE WA	<u>√</u>
CIRCLE THE APPRO	OPRIATE RESPONSE	LAB SAMPLE#	. CLIENT ID	CONTAINER DESCRIPTION		рН	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s)	Present / Absent								
	. (Intact / Broken*								
2. Chain-of-Custody	(Present / Absent*								
3. Traffic Reports or									
Packing List:	Present Absent								
4. Airbill:	Airbill Sticker	•							
	(Present) Absent								
5. Airbill #: See 1	Attached			pt.					
6. Sample Labels:	Present / Absent		*					0//	
7. Sample IDs:	Listed / Not Listed						, , ,		
	on Chain-of-Custody						54		
8. Sample Condition:	(ntadi / Broken* /			*		.			
	Leaking*				- 1				
9. Does information or	p. 7 '				1 7				
traffic reports and s	•		•	, 0	_				•
agree?	(Yes / No*		,	15					
10. Sample received with	in ດ			1/2/					
hold time?	(Yes) / No*								
11. Adequate sample vol									•
received?	(Yes / No*		,						
12. Proper preservatives									
13. (rip Blank / Cemp Bla									
(circle which, if yes)	(es)/No*						-		
14. Read Temp:	10°C								
Corrected Temp:	60								
Is corrected temp 4 4	+/-2°C? (eg) / No**								
(Acceptance range for samples r			<u></u>						rico y
**Exception (if any): ME	TALS / DFF ON ICE								
or Problem COC	·		·						
THE RESERVE OF THE PERSON NAMED IN COLUMN TWO		'IF CIRC	LED, CONTACT PROJEC	T MANAGER	AND ATT	ACH F	ECORD (F RESOLU	TION.

SRL Revision 8 viaces Rev 7 (07/19/05) California Overnight Shipping Label



Date Printed 2/12/2007

Shipped From:

TEST AMERICA - SACRAMENTO 819 STRIKER AVENUE 8 SACRAMENTO, CA 95834 D10010120563667

Tracking#D10010120563667

Sent By: TIM ALBRIGHT Phone#: (916)921-9600

wgt(lbs): 60

Reference: Decl. Value: \$0,00

Ship To Company:

TESTAMERICA - MORGAN HILL 885 JARVIS DR MORGAN HILL, CA 95037 SAMPLE CONTROL (408)776-9600 Service: S

Sort Code: SJC

Special Services:

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:

1Q07 GEO_WELL 374

Submittal Date/Time:

4/4/2007 2:13:04 PM

Confirmation Number:

7836842417

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: 1566884875

Date/Time of Submittal: 4/4/2007 2:15:11 PM

Facility Global ID: T0600100106 Facility Name: ARCO #0374

Submittal Title: 1007 GW Monitoring Submittal Type: GW Monitoring Report

Click here to view the detections report for this upload.

ARCO #0374 6407 TELEGRAPH OAKLAND, CA 94609 Regional Board - Case #: 01-0114

SAN FRANCISCO BAY RWQCB (REGION 2) - (CM) Local Agency (lead agency) - Case #: RO0000078

ALAMEDA COUNTY LOP - (SP)

CONF# 1566884875 TITLE 1Q07 GW Monitoring QUARTER Q1 2007

SUBMITTED BY Broadbent & Associates, Inc. SUBMIT DATE 4/4/2007

STATUS PENDING REVIEW

SAMPLE DETECTIONS REPORT

FIELD POINTS SAMPLED # FIELD POINTS WITH DETECTIONS

3 2 WATER

3

SAMPLE MATRIX TYPES

METHOD QA/QC REPORT

METHODS USED TESTED FOR REQUIRED ANALYTES? LAB NOTE DATA QUALIFIERS

8260FA,8260TPH

Υ

QA/QC FOR 8021/8260 SERIES SAMPLES

FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL

TECHNICAL HOLDING TIME VIOLATIONS METHOD HOLDING TIME VIOLATIONS LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT LAB BLANK DETECTIONS

DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING?

- LAB METHOD BLANK - MATRIX SPIKE

- SURROGATE SPIKE

- BLANK SPIKE

- MATRIX SPIKE DUPLICATE

N Υ γ

Υ

Ν

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% Υ BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%

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 > REPUL
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

Logged in as BROADBENT-C (CONTRACTOR)

CONTACT SITE ADMINISTRATOR.