Atlantic Richfield Company
(a BP affiliated company)

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

10 April 2008

Re: First Quarter 2008 Ground-Water Monitoring Report
Former BP Station # 11124
3315 High Street
Oakland, California
ACEH Case # RO0000239

"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

First Quarter 2008 Ground-Water Monitoring Report
Former BP Station #11124
3315 High Street
Oakland, California

Prepared for

Mr. Paul Supple
Environmental Business Manager
Atlantic Richfield Company
P.O. Box 1257
San Ramon, California 94583

Prepared by

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL

1324 Mangrove Avenue, Suite 212
Chico, California 95926
(530) 566-1400
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10 April 2008

Project No. 06-08-652

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

10 April 2008 Project No. 06-08-652

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

Attn.: Mr. Paul Supple

Re: First Quarter 2008 Ground-Water Monitoring Report, Former BP Station #11124, 3315 High Street, Oakland, California; ACEH Case # RO0000239

Dear Mr. Supple:

Attached is the *First Quarter 2008 Ground-Water Monitoring Report* for Former BP Station #11124 located at 3315 High Street, Oakland California (Site). This report presents a summary of results from ground-water monitoring and sampling conducted at the Site during the First Quarter of 2008.

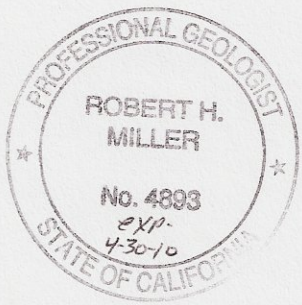
Should you have questions regarding the work performed or results obtained, please do not hesitate to contact us at (530) 566-1400.

Sincerely,

BROADBENT & ASSOCIATES, INC.

Thomas A. Venus, P.E.
Senior Engineer

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



Enclosures

cc: Mr. Paresh Khatri, Alameda County Environmental Health (Submitted via ACEH ftp site)
Ms. Shelby Lathrop, ConocoPhillips, 76 Broadway, Sacramento, California 95818
Electronic copy uploaded to GeoTracker

STATION #11124 QUARTERLY GROUND-WATER MONITORING REPORT

Facility: #11124 Address:	3315 High Street, Oakland, California
Environmental Business Manager:	Mr. Paul Supple
Consulting Co./Contact Persons:	Broadbent & Associates, Inc.(BAI)/Rob Miller & Tom Venus (530) 566-1400
Primary Agency/Regulatory ID No.:	Alameda County Environmental Health (ACEH) ACEH Case # RO0000239
Consultant Project No.:	06-08-652
Facility Permits/Permitting Agency:	None

WORK PERFORMED THIS QUARTER (First Quarter 2008):

1. Submitted Fourth Quarter 2007 Ground-Water Monitoring Report.
2. Conducted ground-water monitoring/sampling for First Quarter 2008. Work performed by Stratus Environmental, Inc. (Stratus) on 29 February 2008.

WORK PROPOSED FOR NEXT QUARTER (Second Quarter 2008):

1. Prepare and submit First Quarter 2008 Ground-Water Monitoring Report (contained herein).
2. Conduct quarterly ground-water monitoring/sampling for Second Quarter 2008.

QUARTERLY RESULTS SUMMARY:

Current phase of project:	**Ground-Water Monitoring/Sampling**
Frequency of ground-water monitoring:	**Quarterly: Wells MW-1, MW-2, MW-4, MW-5 and MW-6**
Frequency of ground-water sampling:	**Quarterly: Wells MW-1, MW-2, MW-4, MW-5 and MW-6**
Is free product (FP) present on-site:	**No**
Current remediation techniques:	**NA**
Depth to ground water (below TOC):	**7.27 ft (MW-4) to 9.32 ft (MW-1)**
General ground-water flow direction:	**Southwest**
Approximate hydraulic gradient:	**0.009 ft/ft**

DISCUSSION:

First quarter 2008 ground-water monitoring/sampling was conducted at Former BP Station #11124 on 29 February 2008 by Stratus personnel. No irregularities were noted during water level gauging. Depth-to-water level measurements ranged from 7.27 ft at MW-4 to 9.32 ft at MW-1. Resulting ground-water surface elevations ranged from 148.02 ft above mean sea level (msl) at well MW-1 to 145.73 ft above msl at well MW-6. Water level elevations reached historic maximum values for each well, as summarized in Table 1, with the exception of well MW-6, which was within the historic minimum and maximum range. Water level elevations yielded a potentiometric ground-water flow direction and gradient to the southwest at approximately 0.009 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. 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, MW-4, MW-5, and MW-6. No irregularities were reported during sampling. Samples were submitted to Calscience Environmental Laboratories, Inc. (Garden Grove, California)

under chain-of-custody protocol for laboratory analysis of Gasoline Range Organics (GRO, C6-C12) by EPA Method 8015B; Diesel Range Organics (DRO, C10-C28) by EPA Method 8015B; Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) by EPA Method 8260B; and Methyl tert-butyl ether (MTBE), Ethyl tert-butyl ether (ETBE), Ethanol, 1,2-Dichloroethane (1,2-DCA), 1,2-Dibromomethane (EDB), Di-isopropyl ether (DIPE), tert-Butyl alcohol (TBA), and tert-Amyl methyl ether (TAME) by EPA Method 8260B. The laboratory noted that the hydrocarbon pattern for DRO in the sample collected from well MW-2 does not match that of the diesel standard used to calculate results. No other significant irregularities were encountered during laboratory analysis of the samples. Ground-water sampling field data sheets and the laboratory analytical report, including chain-of-custody documentation, are provided in Appendix A.

Diesel Range Organics (DRO) were detected above the laboratory reporting limit in one of the five wells sampled at a concentration of 64 micrograms per liter (µg/L) in well MW-2 (with the laboratory caveat noted above). TAME was detected above the laboratory reporting limit in two of the five wells sampled at concentrations up to 4.9 µg/L in well MW-5. TBA was detected above the laboratory reporting limit in one of the five wells sampled at a concentration of 42 µg/L in well MW-5. MTBE was detected above the laboratory reporting limit in four of the five wells sampled at concentrations up to 1,100 µg/L in well MW-5. The remaining fuel additives and oxygenates were not detected above their respective 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: the noted 'DRO' concentration for the sample collected from well MW-2 reached a historic maximum value of 64 µg/L; the TAME concentration for the sample collected from well MW-6 reached a historic maximum value of 0.71 µg/L; the TBA concentration for the sample collected from well MW-5 reached a historic maximum value of 42 µg/L; the MTBE concentration for the sample collected from well MW-5 reached a historic minimum value of 1,100 µg/L; and the MTBE concentration for the sample collected from well MW-6 reached a historic maximum value of 130 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.

With this First Quarter 2008 report, BAI proposes for ACEH consideration and approval the modification of the future monitoring and sampling schedule. BAI proposes continued quarterly monitoring of depths to ground-water from the five on-site wells. However, BAI proposes to discontinue quarterly collection and analysis of samples from wells MW-2 and MW-4 as hydrocarbon contaminants have not been detected to date in monitoring well MW-2 and rarely in well MW-4 (MTBE detected in two of ten quarters sampled). Furthermore, BAI proposes to discontinue the analysis of samples for DRO in the future as DRO has not been detected in onsite wells (with the exception of 13 March 2007 and 29 February 2008 in well MW-2 just above the reporting limit and with the laboratory noting that the chromatogram profiles were inconsistent with the patterns of the DRO fuel standard). At this time, no decision will be made regarding these proposals without discussion and approval from ACEH.

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 Calscience Environmental Laboratories, Inc. (Garden Grove, California). Our services were performed in accordance with the generally accepted standard of practice at the time this report was written. No other

warranty, expressed or implied was made. This report has been prepared for the exclusive use of Atlantic Richfield Company. It is possible that variations in soil or ground-water conditions could exist beyond points explored in this investigation. Also, changes in site conditions could occur in the future due to variations in rainfall, temperature, regional water usage, or other factors.

ATTACHMENTS:

Drawing 1. Ground-Water Elevation Contours and Analytical Summary Map, 29 February 2008, Former BP Service Station #11124, 3315 High Street, Oakland, California

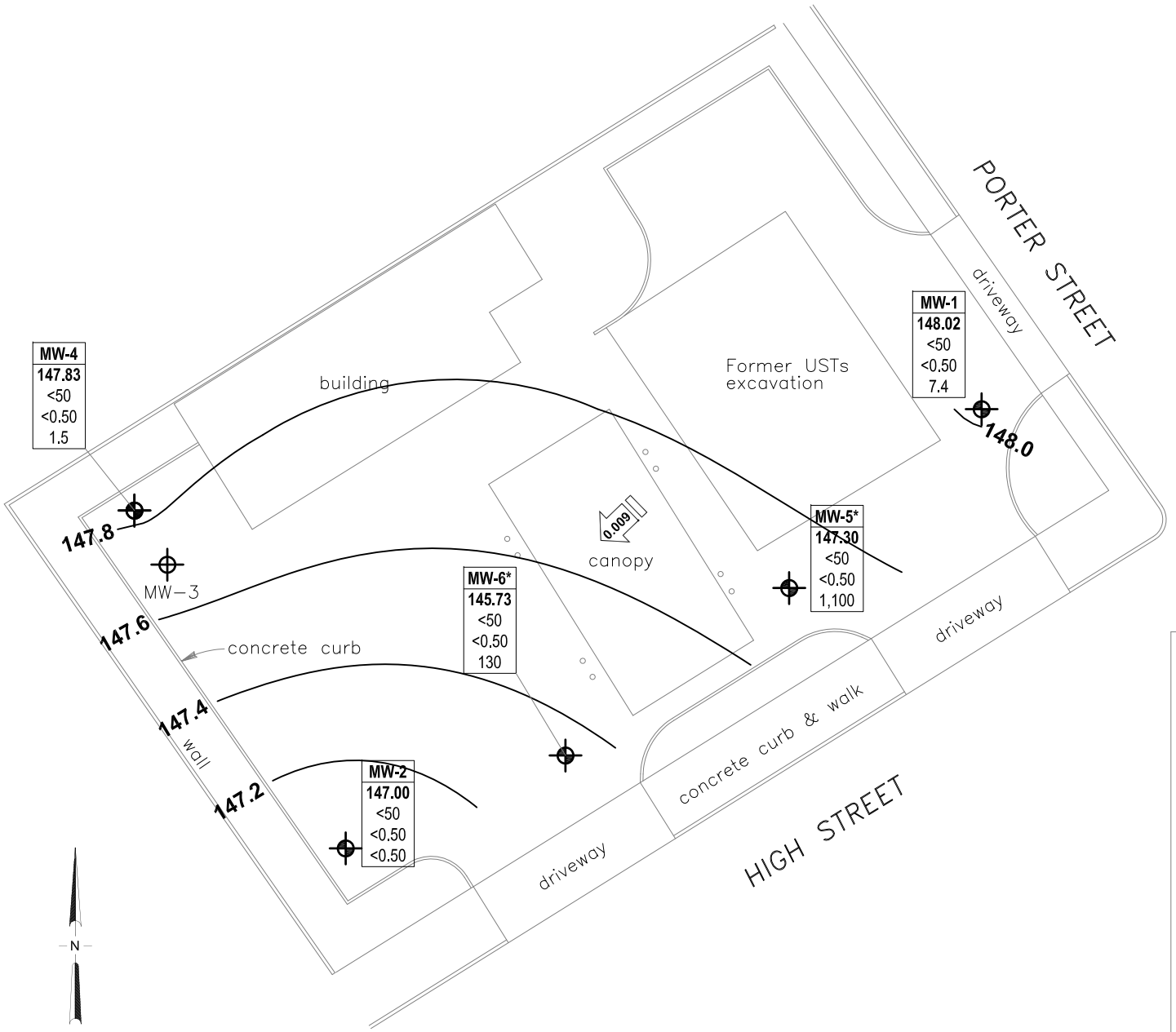
Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses, Station #11124, 3315 High St., Oakland, California

Table 2. Summary of Fuel Additives Analytical Data, Station #11124, 3315 High St., Oakland, California

Table 3. Historical Ground-Water Flow Direction and Gradient, Station #11124, 3315 High St., Oakland, California

Appendix A. Stratus Ground-Water Sampling Data Package (Includes Field Data Sheets, Laboratory Analytical Report with Chain-of-Custody Documentation, and Field Procedures)

Appendix B. GeoTracker Upload Confirmations



LEGEND

- Ground-water monitoring well
- Abandoned monitoring well
- Well / ELEV / GRO / Benzene / MTBE — Well Designation; Ground-water elevation (ft MSL); GRO, Benzene & MTBE concentrations (µg/L)
- — 148.0 Ground-water elevation (ft MSL)
- * Elevation not used in contours
- < Not detected at or above laboratory reporting limits
- 0.009 Ground-water flow direction and gradient (ft/ft)

NOTE: SITE MAP ADAPTED FROM STRATUS ENVIRONMENTAL, INC FIGURES. SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.

0 30 60
SCALE (ft)

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave. Suite 212 Chico, CA
Project No.: 06-08-652 Date: 3/19/08

Former Station #11124
3315 High Street
Oakland, California

Ground-Water Elevation Contours and Analytical Summary Map
29 February 2008

Drawing
1

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

Station #11124, 3315 High St., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet msl)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE					
MW-1																	
10/19/2004	P		154.99	10.50	--	144.49	<50	<0.50	<0.50	<0.50	<0.50	14	0.96	SEQM	6.9	--	--
01/13/2005	P		154.99	9.00	--	145.99	<50	<0.50	<0.50	<0.50	<0.50	33	2.5	SEQM	6.4	--	--
02/24/2006	P	c	154.99	10.42	--	144.57	55	<0.50	<0.50	<0.50	<0.50	51	--	SEQM	6.8	--	--
5/30/2006	P		154.99	10.94	--	144.05	50	<0.50	<0.50	<0.50	<0.50	58	--	SEQM	6.6	--	--
8/28/2006	P		154.99	10.61	--	144.38	50	<0.50	<0.50	<0.50	<0.50	<0.50	--	TAMC	7.0	--	--
11/2/2006	P		154.99	10.83	--	144.16	<50	<0.50	<0.50	<0.50	<0.50	9.8	1.40	TAMC	6.99	--	--
2/6/2007	P	d	157.34	9.88	--	147.46	<50	<0.50	<0.50	<0.50	<0.50	1.1	2.76	TAMC	7.10	--	--
3/13/2007	P		157.34	9.62	--	147.72	--	--	--	--	--	--	2.63	TAMC	7.30	<48	--
5/8/2007	P		157.34	9.62	--	147.72	<50	<0.50	<0.50	<0.50	<0.50	19	2.65	TAMC	7.01	<49	--
8/7/2007	P		157.34	10.82	--	146.52	<50	<0.50	<0.50	<0.50	<0.50	5.0	3.15	TAMC	7.33	<49	--
11/13/2007	--		157.34	10.52	--	146.82	--	--	--	--	--	--	4.79	TAMC	6.58	<48	--
12/20/2007	NP	e	157.34	10.47	--	146.87	<50	<0.50	<0.50	<0.50	<0.50	10	1.14	TAMC	6.97	--	--
2/29/2008	**P**		**157.34**	**9.32**	**--**	**148.02**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**7.4**	**3.14**	**CEL**	**7.64**	**<50**	**--**
MW-2																	
10/19/2004	--	b	152.02	9.45	--	142.57	--	--	--	--	--	--	--	--	--	--	--
01/13/2005	P		152.02	6.43	--	145.59	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.47	SEQM	6.4	--	--
02/24/2006	P		152.02	7.88	--	144.14	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	6.7	--	--
5/30/2006	P		152.02	7.98	--	144.04	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	6.7	--	--
8/28/2006	P		152.02	9.38	--	142.64	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	TAMC	6.7	--	--
11/2/2006	--		152.02	9.85	--	142.17	--	--	--	--	--	--	--	--	--	--	--
2/6/2007	P	d	154.35	8.40	--	145.95	<50	<0.50	<0.50	<0.50	<0.50	<0.50	5.10	TAMC	7.02	--	--
3/13/2007	P		154.35	7.55	--	146.80	--	--	--	--	--	--	4.83	TAMC	7.17	52	--
5/8/2007	P		154.35	7.70	--	146.65	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.40	TAMC	7.12	<48	--
8/7/2007	P		154.35	9.77	--	144.58	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.47	TAMC	7.19	<47	--
11/13/2007	--		154.35	9.30	--	145.05	--	--	--	--	--	--	4.90	TAMC	7.02	<48	--
12/20/2007	NP	e	154.35	9.34	--	145.01	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.62	TAMC	7.44	--	--
2/29/2008	**P**	**f**	**154.35**	**7.35**	**--**	**147.00**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**4.39**	**CEL**	**7.76**	**64**	**--**
MW-4																	
10/19/2004	P		152.77	9.55	--	143.22	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.82	SEQM	7.0	--	--

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

Station #11124, 3315 High St., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet msl)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE					
MW-4 Cont.																	
01/13/2005	--	a	152.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/24/2006	P		152.77	7.86	--	144.91	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.1	--	--
5/30/2006	P		152.77	8.04	--	144.73	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	6.9	--	--
8/28/2006	P		152.77	9.36	--	143.41	<50	<0.50	<0.50	<0.50	<0.50	16	--	TAMC	6.5	--	--
11/2/2006	P		152.77	9.92	--	142.85	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.23	TAMC	6.79	--	--
2/6/2007	P	d	155.10	8.40	--	146.70	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.43	TAMC	7.10	--	--
3/13/2007	P		155.10	7.56	--	147.54	--	--	--	--	--	--	2.53	TAMC	7.18	<49	--
5/8/2007	P		155.10	7.68	--	147.42	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.78	TAMC	7.28	<48	--
8/7/2007	P		155.10	9.83	--	145.27	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.70	TAMC	7.13	<48	--
11/13/2007	--		155.10	9.28	--	145.82	--	--	--	--	--	--	5.71	TAMC	7.11	<48	--
12/20/2007	NP	e	155.10	9.23	--	145.87	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.13	TAMC	7.16	--	--
2/29/2008	**P**		**155.10**	**7.27**	**--**	**147.83**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**1.5**	**4.26**	**CEL**	**8.03**	**<50**	**--**
MW-5																	
3/13/2007	P	d	155.45	8.72	--	146.73	880	<0.50	<0.50	<0.50	<0.50	1,400	1.84	TAMC	7.36	<48	--
5/8/2007	P	c	155.45	8.42	--	147.03	920	<5.0	<5.0	<5.0	<5.0	1,300	3.26	TAMC	7.50	<48	--
8/7/2007	P	c	155.45	9.88	--	145.57	1,300	<10	<10	<10	<10	1,600	3.54	TAMC	7.34	<48	--
11/13/2007	P	c	155.45	9.68	--	145.77	950	<10	<10	<10	<10	1,400	4.68	TAMC	6.99	<48	--
2/29/2008	**P**		**155.45**	**8.15**	**--**	**147.30**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**1,100**	**4.84**	**CEL**	**7.93**	**<50**	**--**
MW-6																	
3/13/2007	P	d	154.59	7.82	--	146.77	86	<0.50	<0.50	<0.50	<0.50	88	1.92	TAMC	7.21	<48	--
5/8/2007	P	c	154.59	7.92	--	146.67	88	<0.50	<0.50	<0.50	<0.50	120	1.87	TAMC	7.50	<48	--
8/7/2007	P	c	154.59	9.85	--	144.74	67	<0.50	<0.50	<0.50	<0.50	85	3.60	TAMC	7.25	<47	--
11/13/2007	P	c	154.59	9.71	--	144.88	67	<1.0	<1.0	<1.0	<1.0	98	4.44	TAMC	7.16	<48	--
2/29/2008	**P**		**154.59**	**8.86**	**--**	**145.73**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**130**	**4.35**	**CEL**	**7.82**	**<50**	**--**

ABBREVIATIONS AND SYMBOLS:
--- = Not analyzed/measured/applicable
< = Not detected at or above laboratory reporting limit
DO = Dissolved oxygen
ft bgs = Feet below ground surface
ft MSL = Feet above mean sea level
DTW = Depth to water in ft bgs
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 in ft MSL
TPH-g = Total petroleum hydrocarbons as gasoline
µg/L = Micrograms per liter
SEQM = Sequoia Analytical Morgan Hill (Laboratory)

FOOTNOTES:
a = Well inaccessible.
b = Well is dry.
c = Hydrocarbon result for GRO partly due to individual peak(s) in quantitative range.
d = Well survey by Morrow Surveying on 12/27/2006.
e = Well re-sampled due to insufficient laboratory analysis of previous sampling event on 11/13/2007. The depth to water and resulting water level elevation from 11/13/2007 will be used for reporting purposes for Fourth Quarter 2007.
f = The hydrocarbon pattern for DRO in the sample does not match that of the diesel standard used to calculate results.

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.

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 #11124, 3315 High St., Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-1									
10/19/2004	<100	<20	14	<0.50	<0.50	<0.50	<0.50	<0.50	
01/13/2005	<100	<20	33	<0.50	<0.50	<0.50	<0.50	<0.50	
02/24/2006	<300	<20	51	<0.50	<0.50	<0.50	<0.50	<0.50	
5/30/2006	<300	<20	58	<0.50	<0.50	<0.50	<0.50	<0.50	
8/28/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
11/2/2006	<300	<20	9.8	<0.50	<0.50	<0.50	<0.50	<0.50	
2/6/2007	<300	<20	1.1	<0.50	<0.50	<0.50	<0.50	<0.50	
5/8/2007	<300	<20	19	<0.50	<0.50	<0.50	<0.50	<0.50	
8/7/2007	<300	<20	5.0	<0.50	<0.50	<0.50	<0.50	<0.50	
12/20/2007	<300	<20	10	<0.50	<0.50	<0.50	<0.50	<0.50	
2/29/2008	**<300**	**<10**	**7.4**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-2									
01/13/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
02/24/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
5/30/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/28/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
2/6/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
5/8/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/7/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
12/20/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
2/29/2008	**<300**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-4									
10/19/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
02/24/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
5/30/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/28/2006	<300	<20	16	<0.50	<0.50	<0.50	<0.50	<0.50	
11/2/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
2/6/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
5/8/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/7/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 2. Summary of Fuel Additives Analytical Data

Station #11124, 3315 High St., Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-4 Cont.									
12/20/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
2/29/2008	**<300**	**<10**	**1.5**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-5									
3/13/2007	<3,000	<200	1,400	<5.0	<5.0	6.5	<5.0	<5.0	
5/8/2007	<3,000	<200	1,300	<0.50	<0.50	7.0	<0.50	<0.50	
8/7/2007	<6,000	<400	1,600	<10	<10	<10	<10	<10	
11/13/2007	<6,000	<400	1,400	<10	<10	<10	<10	<10	
2/29/2008	**<300**	**42**	**1,100**	**<0.50**	**<0.50**	**4.9**	**<0.50**	**<0.50**	
MW-6									
3/13/2007	<300	<20	88	<0.50	<0.50	<0.50	<0.50	<0.50	
5/8/2007	<300	<20	120	<0.50	<0.50	0.61	<0.50	<0.50	
8/7/2007	<300	<20	85	<0.50	<0.50	<0.50	<0.50	<0.50	
11/13/2007	<600	<40	98	<1.0	<1.0	<1.0	<1.0	<1.0	
2/29/2008	**<300**	**<10**	**130**	**<0.50**	**<0.50**	**0.71**	**<0.50**	**<0.50**	

ABBREVIATIONS AND SYMBOLS:
TBA = tert-Butyl alcohol
MTBE = Methyl tert-butyl ether
DIPE = Di-isopropyl ether
ETBE = Ethyl tert-butyl ether
TAME = tert-Amyl methyl ether
1,2-DCA = 1,2-Dichloroethane
EDB = 1,2-Dibromomethane
µg/L = micrograms per liter
< = Not detected at or above laboratory reporting limit

NOTES:
All fuel oxygenate compounds are 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 #11124, 3315 High St., Oakland, CA

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
11/12/1990	--	--
7/15/1991	Southwest	0.0174
10/15/1991	Southwest	0.0182
1/15/1992	South-Southwest	0.014
4/17/1992	South	0.014
9/30/1992	South-Southwest	0.018
12/17/1992	North	0.01
3/15/1993	South	0.007
10/19/2004	South-Southwest	0.022
1/13/2005	--	--
2/24/2006	Southeast	0.01
5/30/2006	East-Southeast	0.007
8/28/2006	South	0.012
11/2/2006	South	0.013
3/13/2007	Southwest	0.006
5/8/2007	South-Southwest	0.009
8/7/2007	Southwest	0.01
11/13/2007	Southwest	0.01
12/17/2007	Southwest	0.01
2/29/2008	**Southwest**	**0.009**

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, LABORATORY ANALYTICAL REPORT WITH CHAIN-OF-CUSTODY DOCUMENTATION, AND FIELD PROCEDURES)

STRATUS
ENVIRONMENTAL, INC.

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

March 18, 2008

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

Re: Groundwater Sampling Data Package, BP Service Station No. 11124, located at 3315 High Street, Oakland, California

General Information

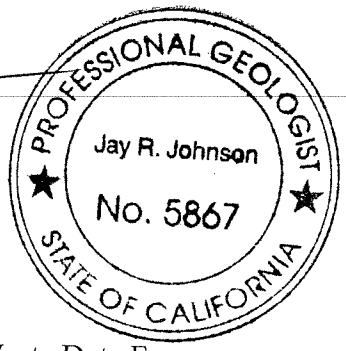
Data Submittal Prepared / Reviewed by: Becky Carroll / Jay Johnson
Phone Number: (530) 676-6000
On-Site Supplier Representative: Roberto Heimlich

Sampling Date: February 29, 2008
Arrival: 12:15 *Departure:* 14:40
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, non-hazardous waste data form, chain of custody documentation, certified analytical results, and field procedures for groundwater sampling documentation. The information is being provided to BP-ARCO's Scoping Supplier for use in preparing a report for regulatory submittal. This submittal is limited to presentation of collected data and does not include data interpretation or conclusions or recommendations. Any questions concerning this submittal should be addressed to the Preparer/Reviewer identified above.

Sincerely,

STRATUS ENVIRONMENTAL, INC.



Jay R. Johnson, P.G.
Project Manager

Attachments:

- Field Data Sheets
- Non-Hazardous Waste Data Form
- Chain of Custody Documentation
- Certified Analytical Results
- Field Procedures for Groundwater Sampling

cc: Mr. Paul Supple, BP/ARCO

BP ALAMEDA PORTFOLIO

HYDROLOGIC DATA SHEET

Gauge Date: 2/29/08

Project Name: *Oakland - 3315 High Street*

Field Technician: ROBERTO

Project Number: *11124*

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

WELL OR LOCATION	TIME	MEASUREMENT						PURGE & SAMPLE	SHEEN CONFIRMATION (w/bailer)	COMMENTS
		TOC	DTP	DTW	DTB	DIA	ELEV			
MW-1	12:20			9.32	34.47	2"				
MW-2	12:33			7.35	28.80	2"				
MW-4	12:38			7.27	30.18	2"				
MW-5	12:24			8.15	29.82	2"				
MW-6	12:28			8.86	29.55	2"				

cal E1413 637 2-29-08
PH 700

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 11124 | PURGED BY: RH | WELL I.D.: MW-1

CLIENT NAME: | SAMPLED BY: RH | SAMPLE I.D.: MW-1

LOCATION: Oakland - 3315 High Street | QA SAMPLES:

DATE PURGED 2/29/08 | START (2400hr) 14:08 | END (2400hr) 14:25

DATE SAMPLED 2/29/08 | SAMPLE TIME (2400hr) 14:23

SAMPLE TYPE: Groundwater x | Surface Water ___ | Treatment Effluent ___ | Other ___

CASING DIAMETER: Casing Volume: (gallons per foot) 2" X (0.17) | 3" ___ (0.38) | 4" ___ (0.67) | 5" ___ (1.02) | 6" ___ (1.50) | 8" ___ (2.60) | Other ___ ( )

DEPTH TO BOTTOM (feet) = 34.47

DEPTH TO WATER (feet) = 9.32

WATER COLUMN HEIGHT (feet) = 25.15

CASING VOLUME (gal) = 4.2

CALCULATED PURGE (gal) = 12.8

ACTUAL PURGE (gal) = 13

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
2/29/08	14:10	4	22.3	308.6	8.12	clear	
"	14:12	8	22.6	294.5	7.81	"	
"	14:14	13	23.5	296.5	7.64	"	

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 11.52

SAMPLE TURBIDITY: clear

80% RECHARGE: Y YES ___ NO

ANALYSES: 5 WO

ODOR: NO

SAMPLE VESSEL / PRESERVATIVE: 6 VOAS / HCL - 2 AMBER / HCL

PURGING EQUIPMENT

___ Bladder Pump
Y Centrifugal Pump
___ Submersible Pump
___ Peristaltic Pump
___ Bailer (Teflon)
___ Bailer (PVC)
___ Bailer (Stainless Steel)
___ Dedicated ___

Other: ___

Pump Depth: 34

SAMPLING EQUIPMENT

___ Bladder Pump
___ Centrifugal Pump
___ Submersible Pump
___ Peristaltic Pump
___ Bailer (Teflon)
Y Bailer (___ PVC or Y disposable)
___ Bailer (Stainless Steel)
___ Dedicated ___

Other: ___

WELL INTEGRITY: GOOD

LOCK#: MASTER

REMARKS: DO 3.14

SIGNATURE: [signature]

Page ___ of ___

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 11124 | PURGED BY: RH | WELL I.D.: MW-2

CLIENT NAME: | SAMPLED BY: RH | SAMPLE I.D.: MW-2

LOCATION: Oakland - 3315 High Street | QA SAMPLES:

DATE PURGED 2/29/08 | START (2400hr) 13:05 | END (2400hr) 13:21

DATE SAMPLED 2/29/08 | SAMPLE TIME (2400hr) 13:19

SAMPLE TYPE: Groundwater x | Surface Water ___ | Treatment Effluent ___ | Other ___

CASING DIAMETER: | 2" ✓ (0.17) | 3" ___ (0.38) | 4" ___ (0.67) | 5" ___ (1.02) | 6" ___ (1.50) | 8" ___ (2.60) | Other ___ ( )

Casing Volume: (gallons per foot)

DEPTH TO BOTTOM (feet) = 28.80

DEPTH TO WATER (feet) = 7.35

WATER COLUMN HEIGHT (feet) = 21.45

CASING VOLUME (gal) = 3.6

CALCULATED PURGE (gal) = 10.9

ACTUAL PURGE (gal) = 11

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
2/29/08	13:07	4	23.6	552	8.00	clear	
↓	13:09	8	25.5	575	7.84	↓	
	13:11	11	26.8	566	7.76		

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 9.01

SAMPLE TURBIDITY: clear

80% RECHARGE: ✓ YES ___ NO

ANALYSES: SWD

ODOR: NO

SAMPLE VESSEL / PRESERVATIVE: 6 VOAs / HCL - 2 AMBER / NA

PURGING EQUIPMENT

___ Bladder Pump
✓ Centrifugal Pump
___ Submersible Pump
___ Peristalic Pump
___ Bailer (Teflon)
___ Bailer (PVC)
___ Bailer (Stainless Steel)
___ Dedicated ___

Other: ___

Pump Depth: 28

SAMPLING EQUIPMENT

___ Bladder Pump
___ Centrifugal Pump
___ Submersible Pump
___ Peristalic Pump
___ Bailer (Teflon)
✓ Bailer (___ PVC or ✓ disposable)
___ Bailer (Stainless Steel)
___ Dedicated ___

Other: ___

WELL INTEGRITY: GOOD

LOCK#: MASTER

REMARKS: DO 4.39

SIGNATURE: [signature]

Page ___ of ___

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 11124 | PURGED BY: RH | WELL I.D.: MW-4

CLIENT NAME: | SAMPLED BY: RH | SAMPLE I.D.: MW-4

LOCATION: Oakland - 3315 High Street | QA SAMPLES:

DATE PURGED 2/29/08 | START (2400hr) 12:43 | END (2400hr) 13:00

DATE SAMPLED 2/29/08 | SAMPLE TIME (2400hr) 12:57

SAMPLE TYPE: Groundwater x | Surface Water ___ | Treatment Effluent ___ | Other ___

CASING DIAMETER: 2" x (0.17) | 3" ___ (0.38) | 4" ___ (0.67) | 5" ___ (1.02) | 6" ___ (1.50) | 8" ___ (2.60) | Other ___ ( )

Casing Volume: (gallons per foot)

DEPTH TO BOTTOM (feet) = 30.18

DEPTH TO WATER (feet) = 7.27

WATER COLUMN HEIGHT (feet) = 22.9

CASING VOLUME (gal) = 3.8

CALCULATED PURGE (gal) = 11.6

ACTUAL PURGE (gal) = 12

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
2/29/08	12:44	4	18.7	599	8.33	clear	
"	12:45	8	19.0	507	8.16	"	
"	12:46	12	19.7	504	8.03	"	

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 9.01

SAMPLE TURBIDITY: clear

80% RECHARGE: x YES ___ NO

ANALYSES: SVOC

ODOR: NO

SAMPLE VESSEL / PRESERVATIVE: 6 VOAS/HCL - 2 AMBER UA

PURGING EQUIPMENT

___ Bladder Pump
x Centrifugal Pump
___ Submersible Pump
___ Peristalic Pump
___ Bailer (Teflon)
___ Bailer (PVC)
___ Bailer (Stainless Steel)
___ Dedicated ___

Other: ___

Pump Depth: 30

SAMPLING EQUIPMENT

___ Bladder Pump
___ Centrifugal Pump
___ Submersible Pump
___ Peristalic Pump
___ Bailer (Teflon)
x Bailer (___ PVC or x disposable)
___ Bailer (Stainless Steel)
___ Dedicated ___

Other: ___

WELL INTEGRITY: GOOD

LOCK#: MASTER

REMARKS: DO 4.26

SIGNATURE: [signature]

Page ___ of ___

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 11124 PURGED BY: RH WELL I.D.: MW-5

CLIENT NAME: SAMPLED BY: RH SAMPLE I.D.: MW-5

LOCATION: Oakland - 3315 High Street QA SAMPLES:

DATE PURGED 2/29/08 START (2400hr) 13:49 END (2400hr) 14:02

DATE SAMPLED 2/29/08 SAMPLE TIME (2400hr) 13:59

SAMPLE TYPE: Groundwater x Surface Water ____ Treatment Effluent ____ Other ____

CASING DIAMETER: 2" ✓ (0.17) 3" ____ (0.38) 4" ____ (0.67) 5" ____ (1.02) 6" ____ (1.50) 8" ____ (2.60) Other ____ ( )
Casing Volume: (gallons per foot)

DEPTH TO BOTTOM (feet) = 29.92 CASING VOLUME (gal) = 3.6

DEPTH TO WATER (feet) = 8.15 CALCULATED PURGE (gal) = 11.0

WATER COLUMN HEIGHT (feet) = 21.06 ACTUAL PURGE (gal) = 11.5

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
2/29/08	13:51	4	22.4	579	7.91	clear	
✓	13:53	8	23.5	583	7.92	✓	
✓	13:55	11.5	24.0	595	7.93	✓	

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 9.49 SAMPLE TURBIDITY: clear

80% RECHARGE: ✓ YES ____ NO ANALYSES: SWO

ODOR: NO SAMPLE VESSEL / PRESERVATIVE: 6 VOAs / HCL - 2 AMBER/NP

PURGING EQUIPMENT

____ Bladder Pump
✓ Centrifugal Pump
____ Submersible Pump
____ Peristaltic Pump
____ Bailer (Teflon)
____ Bailer (PVC)
____ Bailer (Stainless Steel)
____ Dedicated ____
Other: ____
Pump Depth: 29

SAMPLING EQUIPMENT

____ Bladder Pump
____ Centrifugal Pump
____ Submersible Pump
____ Peristaltic Pump
____ Bailer (Teflon)
✓ Bailer (____ PVC or ✓ disposable)
____ Bailer (Stainless Steel)
____ Dedicated ____
Other: ____

WELL INTEGRITY: GOOD LOCK#: MASTER

REMARKS: DO 4.84

SIGNATURE: [signature]

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 11124 | PURGED BY: RH | WELL I.D.: MW-6

CLIENT NAME: | SAMPLED BY: RH | SAMPLE I.D.: MW-6

LOCATION: Oakland - 3315 High Street | QA SAMPLES:

DATE PURGED 2/29/08 | START (2400hr) 13:26 | END (2400hr) 13:43

DATE SAMPLED 2/29/08 | SAMPLE TIME (2400hr) 13:41

SAMPLE TYPE: Groundwater x | Surface Water ___ | Treatment Effluent ___ | Other ___

CASING DIAMETER: Casing Volume: (gallons per foot) 2" 1 (0.17) | 3" ___ (0.38) | 4" ___ (0.67) | 5" ___ (1.02) | 6" ___ (1.50) | 8" ___ (2.60) | Other ___ ( )

DEPTH TO BOTTOM (feet) = 29.55 | CASING VOLUME (gal) = 3.5

DEPTH TO WATER (feet) = 8.86 | CALCULATED PURGE (gal) = 10.5

WATER COLUMN HEIGHT (feet) = 20.6 | ACTUAL PURGE (gal) = 11

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
2/29/08	13:28	3.5	23.3	610	8.01	clear	
"	13:30	7	25.9	601	7.92	"	
"	13:32	11	27.7	605	7.92	"	

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: ___ | SAMPLE TURBIDITY: clear

80% RECHARGE: x YES ___ NO | ANALYSES: SWD

ODOR: no | SAMPLE VESSEL / PRESERVATIVE: 6 VOAs/HCL - 2 AMBER/NA

PURGING EQUIPMENT

___ Bladder Pump
x Centrifugal Pump
___ Submersible Pump
___ Peristaltic Pump
___ Bailer (Teflon)
___ Bailer (PVC)
___ Bailer (Stainless Steel)
___ Dedicated ___
Other: ___
Pump Depth: 29

SAMPLING EQUIPMENT

___ Bladder Pump
___ Centrifugal Pump
___ Submersible Pump
___ Peristaltic Pump
___ Bailer (Teflon)
x Bailer (___ PVC or x disposable)
___ Bailer (Stainless Steel)
___ Dedicated ___
Other: ___

WELL INTEGRITY: GOOD | LOCK#: MASTER

REMARKS: DO 4.35

SIGNATURE: [signature]

Wellhead Observation Form

Account: _____

Sampled by: Roberto Date: 2/29/08

Well ID	Box in good condition	Lock Missing (Replaced with new)	Water in Box	Bolts Missing	Bolts Stripped	Bolt-Holes Stripped	Cracked or Broken Lid	Cracked Box and/or Bolt - Holes	Misc.	Add'l – Notes and Other Stuff
MW-1	Y	N	Y	N	N	N	N	N		
MW-2	Y	N	N	N	Y	N	N	N		
MW-4	Y	N	N	Y	N	N	N	N		
MW-5	Y	N	N	N	N	N	N	N		
MW-6	Y	N	N	N	N	N	N	N		

NO. 668562

NON-HAZARDOUS WASTE DATA FORM

TO BE COMPLETED BY GENERATOR

SITE:

NAME BP WEST COAST PRODUCTS LLC ARCO # 1124 — EPA I.D. NO. NOT REQUIRED

ADDRESS P.O. BOX 80249 3315 HIGH ST OAKLAND — PROFILE NO.

CITY, STATE, ZIP RANCHO SANTA MARGARITA CA 92688 — PHONE NO. ( )

CONTAINERS: No. _____ VOLUME 58.5 WEIGHT _____

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

WASTE DESCRIPTION NON-HAZARDOUS WATER — GENERATING PROCESS WELL PURGING/DECON WATER

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

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

HANDLING INSTRUCTIONS: WEAR ALL APPROPRIATE PROTECTIVE CLOTHING

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

Larry Montbart REST for BP — TYPED OR PRINTED FULL NAME & SIGNATURE — DATE 2/21/08

TRANSPORTER

Transporter #1 — Transporter #2

NAME STRATUS ENVIRONMENTAL — EPA I.D. NO.

ADDRESS 3330 CAMERON PARK DR — SERVICE ORDER NO. _____

CITY, STATE, ZIP CAMERON PARK, CA 95682 — PICK UP DATE _____

PHONE NO. 530-676-2031

TRUCK, UNIT, I.D. NO. — Roberto Herrera — TYPED OR PRINTED FULL NAME & SIGNATURE — DATE 2/21/08

TSD FACILITY

NAME INSTRAT, INC. — EPA I.D. NO.

ADDRESS 1105 AIRPORT RD #C — DISPOSAL METHOD

CITY, STATE, ZIP RIO VISTA, CA 94571 — ☐ LANDFILL ☐ OTHER _____

PHONE NO. 530-778-1529

TYPED OR PRINTED FULL NAME & SIGNATURE — DATE

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

Atlantic Richfield Company
bp
A BP affiliated company

Chain of Custody Record

Project Name: BP 11124
BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > CA > Alameda>11124
State or Lead Regulatory Agency:
Requested Due Date (mm/dd/yy):

On-site Time:	12:15	Temp:	68
Off-site Time:	14:40	Temp:	68
Sky Conditions:	clear		
Meteorological Events:	NA		
Wind Speed:	0	Direction:	0 NA

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

BP/AR Facility No.:	11124
BP/AR Facility Address:	3315 High Street, Oakland
Site Lat/Long:	
California Global ID #:	T06001001919
Enfos Project No.:	G099D-0022
Provision or RCOP (circle one)	Provision
Phase/WBS:	04-Monitoring
Sub Phase/Task:	03-Analytical
Cost Element:	01-Contractor labor

Consultant/Contractor:	Stratus Environmental, Inc.
Address:	3330 Cameron Park Drive, Suite 550
	Cameron Park, CA 95682
Consultant/Contractor Project No.:	E11124-04
Consultant/Contractor PM:	Jay Johnson
Tele/Fax:	(530) 676-6000 / (530) 676-6005
Report Type & QC Level:	Level 1 with EDF
E-mail EDD To:	shayes@stratusinc.net
Invoice to:	Atlantic Richfield Co.

Lab Bottle Order No:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: BTEX/Oxy* by 8260	Requested Analysis: 1,2 DCA	Requested Analysis: EDB	Requested Analysis: Ethanol by 8260	Requested Analysis: DRO by 8015M	Requested Analysis: GRO by 8015m	Sample Point Lat/Long and Comments *Oxy = MTBD, TAME, ETBE, DIPE, TBA
1	MW-1	14:23	2/19/08		X			8				X		X	X	X	X	X	X	
2	MW-2	13:19	"		X			8				X		X	X	X	X	X	X	
3	MW-4	12:57	"		X			8				X		X	X	X	X	X	X	
4	MW-5	13:59	"		X			8				X		X	X	X	X	X	X	
5	MW-6	13:41	"		X			8				X		X	X	X	X	X	X	
6	TB 11124	6:00	"		X			3				X								HOLD
7																				
8																				
9																				
10																				

Sampler's Name:	ROBERTO HEIMLICH
Sampler's Company:	DOULOS ENV.
Shipment Date:	
Shipment Method:	
Shipment Tracking No:	

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time

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

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

Calscience
Environmental
Laboratories, Inc.

March 13, 2008

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

Subject: **Calscience Work Order No.: 08-03-0139**
Client Reference: BP 11124

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 3/4/2008 and analyzed in accordance with the attached chain-of-custody.

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

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

Sincerely,

Linda Scharpenberg

Calscience Environmental
Laboratories, Inc.
Linda Scharpenberg
Project Manager

Calscience
Environmental
Laboratories, Inc.

CASE NARRATIVE – 08-03-0139

Data Qualifiers - EPA 8260:

Batch 080311S01:

The % recovery for ethanol was bias high and the RPD was outside acceptance criteria in the MS/MSD. The % recoveries were within acceptance criteria in the LCS/LCSD. The MS/MSD has been flagged "3,4" within the report.

"3" = LM, AY
"4" = BA, AY

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

Data Qualifiers - EPA 8015 Diesel:

Sample 2: The hydrocarbon pattern in the sample does not match that of the diesel standard used to calculate results. The data has been flagged "LX".

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 03/04/08
Work Order No: 08-03-0139
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: BP 11124

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-1	**08-03-0139-1-D**	**02/29/08 14:23**	**Aqueous**	**GC 29**	**03/05/08**	**03/06/08 07:55**	**080305B02**

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

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	62	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-2	**08-03-0139-2-D**	**02/29/08 13:19**	**Aqueous**	**GC 29**	**03/05/08**	**03/06/08 08:37**	**080305B02**

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

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	68	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-4	**08-03-0139-3-D**	**02/29/08 12:57**	**Aqueous**	**GC 29**	**03/05/08**	**03/06/08 09:16**	**080305B02**

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

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	69	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-5	**08-03-0139-4-D**	**02/29/08 13:59**	**Aqueous**	**GC 29**	**03/05/08**	**03/06/08 09:51**	**080305B02**

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

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	56	38-134	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 03/04/08
Work Order No: 08-03-0139
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: BP 11124

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-6	**08-03-0139-5-D**	**02/29/08 13:41**	**Aqueous**	**GC 29**	**03/05/08**	**03/06/08 10:25**	**080305B02**

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

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	65	38-134	

Method Blank	099-12-695-47	N/A	Aqueous	GC 29	03/05/08	03/06/08 04:20	080305B02

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

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	68	38-134	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 03/04/08
Work Order No: 08-03-0139
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: BP 11124

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-1	**08-03-0139-1-A**	**02/29/08 14:23**	**Aqueous**	**GC 23**	**03/05/08**	**03/06/08 18:43**	**080305B11**

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics (C10-C28)	ND	50	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	103	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-2	**08-03-0139-2-A**	**02/29/08 13:19**	**Aqueous**	**GC 23**	**03/05/08**	**03/06/08 18:51**	**080305B11**

Comment(s): -LX = Quantitation of unknown hydrocarbon(s) in sample based on diesel.

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics (C10-C28)	64	50	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	99	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-4	**08-03-0139-3-A**	**02/29/08 12:57**	**Aqueous**	**GC 23**	**03/05/08**	**03/06/08 19:01**	**080305B11**

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics (C10-C28)	ND	50	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	102	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-5	**08-03-0139-4-A**	**02/29/08 13:59**	**Aqueous**	**GC 23**	**03/05/08**	**03/06/08 19:11**	**080305B11**

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics (C10-C28)	ND	50	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	108	68-140			

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 03/04/08
Work Order No: 08-03-0139
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: BP 11124

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-6	**08-03-0139-5-A**	**02/29/08 13:41**	**Aqueous**	**GC 23**	**03/05/08**	**03/06/08 19:20**	**080305B11**

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics (C10-C28)	ND	50	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	106	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-699-17**	**N/A**	**Aqueous**	**GC 23**	**03/05/08**	**03/06/08 18:14**	**080305B11**

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics (C10-C28)	ND	50	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	111	68-140	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 03/04/08
Work Order No: 08-03-0139
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BP 11124

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-1	**08-03-0139-1-F**	**02/29/08 14:23**	**Aqueous**	**GC/MS Z**	**03/08/08**	**03/09/08 04:03**	**080308L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	7.4	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	122	73-157			Dibromofluoromethane	127	82-142		
Toluene-d8	97	82-112			1,4-Bromofluorobenzene	85	75-105		

MW-2	**08-03-0139-2-F**	**02/29/08 13:19**	**Aqueous**	**GC/MS Z**	**03/08/08**	**03/09/08 04:33**	**080308L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	119	73-157			Dibromofluoromethane	123	82-142		
Toluene-d8	96	82-112			1,4-Bromofluorobenzene	84	75-105		

MW-4	**08-03-0139-3-F**	**02/29/08 12:57**	**Aqueous**	**GC/MS Z**	**03/08/08**	**03/09/08 05:04**	**080308L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	1.5	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	120	73-157			Dibromofluoromethane	125	82-142		
Toluene-d8	96	82-112			1,4-Bromofluorobenzene	84	75-105		

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 03/04/08
Work Order No: 08-03-0139
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BP 11124

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-5	**08-03-0139-4-F**	**02/29/08 13:59**	**Aqueous**	**GC/MS Z**	**03/08/08**	**03/09/08 05:34**	**080308L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	1100	50	100	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	42	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	4.9	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	119	73-157			Dibromofluoromethane	122	82-142		
Toluene-d8	90	82-112			1,4-Bromofluorobenzene	84	75-105		

MW-6	**08-03-0139-5-F**	**02/29/08 13:41**	**Aqueous**	**GC/MS Z**	**03/08/08**	**03/09/08 06:04**	**080308L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	130	10	20	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	0.71	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	116	73-157			Dibromofluoromethane	124	82-142		
Toluene-d8	94	82-112			1,4-Bromofluorobenzene	84	75-105		

Method Blank	**099-12-703-81**	**N/A**	**Aqueous**	**GC/MS Z**	**03/08/08**	**03/09/08 00:02**	**080308L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	122	73-157			Dibromofluoromethane	124	82-142		
Toluene-d8	95	82-112			1,4-Bromofluorobenzene	85	75-105		

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 03/04/08
Work Order No: 08-03-0139
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BP 11124

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-84**	**N/A**	**Aqueous**	**GC/MS Z**	**03/11/08**	**03/11/08 17:16**	**080311L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	106	73-157			Dibromofluoromethane	103	82-142		
Toluene-d8	99	82-112			1,4-Bromofluorobenzene	97	75-105		

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

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	03/04/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-03-0139
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project BP 11124

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-03-0007-2	**Aqueous**	**GC 29**	**03/05/08**	**03/06/08**	**080305S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	102	106	38-134	4	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 03/04/08
Work Order No: 08-03-0139
Preparation: EPA 5030B
Method: EPA 8260B

Project BP 11124

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-03-0130-2	**Aqueous**	**GC/MS Z**	**03/08/08**	**03/09/08**	**080308S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	93	97	86-122	3	0-8	
Carbon Tetrachloride	92	92	78-138	0	0-9	
Chlorobenzene	100	101	90-120	2	0-9	
1,2-Dibromoethane	95	94	70-130	1	0-30	
1,2-Dichlorobenzene	94	97	89-119	3	0-10	
1,1-Dichloroethene	104	105	52-142	1	0-23	
Ethylbenzene	98	101	70-130	3	0-30	
Toluene	96	98	85-127	2	0-12	
Trichloroethene	91	94	78-126	3	0-10	
Vinyl Chloride	80	77	56-140	4	0-21	
Methyl-t-Butyl Ether (MTBE)	88	90	64-136	2	0-28	
Tert-Butyl Alcohol (TBA)	103	109	27-183	3	0-60	
Diisopropyl Ether (DIPE)	95	94	78-126	1	0-16	
Ethyl-t-Butyl Ether (ETBE)	90	91	67-133	2	0-21	
Tert-Amyl-Methyl Ether (TAME)	92	94	63-141	1	0-21	
Ethanol	92	93	11-167	0	0-64	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	03/04/08
3330 Cameron Park Drive, Suite 550		Work Order No:	08-03-0139
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project BP 11124

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-03-0143-9	**Aqueous**	**GC/MS Z**	**03/11/08**	**03/11/08**	**080311S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	92	95	86-122	4	0-8	
Carbon Tetrachloride	92	95	78-138	3	0-9	
Chlorobenzene	92	95	90-120	3	0-9	
1,2-Dibromoethane	86	89	70-130	3	0-30	
1,2-Dichlorobenzene	91	95	89-119	4	0-10	
1,1-Dichloroethene	88	89	52-142	1	0-23	
Ethylbenzene	92	92	70-130	1	0-30	
Toluene	92	96	85-127	4	0-12	
Trichloroethene	90	92	78-126	3	0-10	
Vinyl Chloride	99	107	56-140	8	0-21	
Methyl-t-Butyl Ether (MTBE)	93	102	64-136	10	0-28	
Tert-Butyl Alcohol (TBA)	128	145	27-183	13	0-60	
Diisopropyl Ether (DIPE)	98	109	78-126	11	0-16	
Ethyl-t-Butyl Ether (ETBE)	92	103	67-133	11	0-21	
Tert-Amyl-Methyl Ether (TAME)	88	93	63-141	6	0-21	
Ethanol	270	128	11-167	72	0-64	3,4

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.	Date Received: N/A
3330 Cameron Park Drive, Suite 550	Work Order No: 08-03-0139
Cameron Park, CA 95682-8861	Preparation: EPA 5030B
	Method: EPA 8015B (M)

Project: BP 11124

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-47	**Aqueous**	**GC 29**	**03/05/08**	**03/06/08**	**080305B02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	82	89	78-120	8	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.		Date Received:	N/A
3330 Cameron Park Drive, Suite 550		Work Order No:	08-03-0139
Cameron Park, CA 95682-8861		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)

Project: BP 11124

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-699-17	**Aqueous**	**GC 23**	**03/05/08**	**03/06/08**	**080305B11**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Diesel Range Organics (C10-C28)	96	100	75-117	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.		Date Received:	N/A
3330 Cameron Park Drive, Suite 550		Work Order No:	08-03-0139
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project: BP 11124

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-81	**Aqueous**	**GC/MS Z**	**03/08/08**	**03/08/08**	**080308L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	98	97	87-117	1	0-7	
Carbon Tetrachloride	93	95	78-132	2	0-8	
Chlorobenzene	101	99	88-118	1	0-8	
1,2-Dibromoethane	100	103	80-120	2	0-20	
1,2-Dichlorobenzene	97	99	88-118	2	0-8	
1,1-Dichloroethene	92	86	71-131	6	0-14	
Ethylbenzene	100	100	80-120	0	0-20	
Toluene	97	97	85-127	0	0-7	
Trichloroethene	96	99	85-121	4	0-11	
Vinyl Chloride	78	80	64-136	1	0-10	
Methyl-t-Butyl Ether (MTBE)	96	95	67-133	1	0-16	
Tert-Butyl Alcohol (TBA)	96	94	34-154	2	0-19	
Diisopropyl Ether (DIPE)	94	94	80-122	0	0-8	
Ethyl-t-Butyl Ether (ETBE)	93	92	73-127	0	0-11	
Tert-Amyl-Methyl Ether (TAME)	98	100	69-135	1	0-12	
Ethanol	97	89	34-124	8	0-44	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 08-03-0139
Preparation: EPA 5030B
Method: EPA 8260B

Project: BP 11124

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-84	**Aqueous**	**GC/MS Z**	**03/11/08**	**03/11/08**	**080311L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	89	88	87-117	2	0-7	
Carbon Tetrachloride	94	90	78-132	4	0-8	
Chlorobenzene	92	90	88-118	2	0-8	
1,2-Dibromoethane	93	91	80-120	2	0-20	
1,2-Dichlorobenzene	93	90	88-118	4	0-8	
1,1-Dichloroethene	87	84	71-131	4	0-14	
Ethylbenzene	93	90	80-120	3	0-20	
Toluene	90	89	85-127	1	0-7	
Trichloroethene	93	89	85-121	4	0-11	
Vinyl Chloride	99	98	64-136	1	0-10	
Methyl-t-Butyl Ether (MTBE)	88	89	67-133	0	0-16	
Tert-Butyl Alcohol (TBA)	111	118	34-154	6	0-19	
Diisopropyl Ether (DIPE)	88	87	80-122	1	0-8	
Ethyl-t-Butyl Ether (ETBE)	87	89	73-127	1	0-11	
Tert-Amyl-Methyl Ether (TAME)	89	88	69-135	2	0-12	
Ethanol	100	86	34-124	15	0-44	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-03-0139

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

Atlantic Richfield Company
bp
A BP affiliated company

Chain of Custody Record

0139

Page 1 of 1

Project Name: BP 11124
BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > CA > Alameda>11124
State or Lead Regulatory Agency:
Requested Due Date (mm/dd/yy):

On-site Time:	12:15	Temp:	68
Off-site Time:	14:40	Temp:	68
Sky Conditions:	clear		
Meteorological Events:	NA		
Wind Speed:	0	Direction:	0 NA

Lab Name: Calscience	BP/AR Facility No.: 11124	Consultant/Contractor: Stratus Environmental, Inc.
Address: 7440 Lincoln Way	BP/AR Facility Address: 3315 High Street, Oakland	Address: 3330 Cameron Park Drive, Suite 550
Garden Grove, CA 92841	Site Lat/Long:	Cameron Park, CA 95682
Lab PM: Linda Scharpenberg	California Global ID #: T06001001919	Consultant/Contractor Project No.: E11124-04
Tele/Fax: 714-895-5494 714-895-7501(fax)	Enfos Project No.: G099D-0022	Consultant/Contractor PM: Jay Johnson
BP/AR PM Contact: Paul Supple	Provision or RCOP (circle one) Provision	Tele/Fax: (530) 676-6000 / (530) 676-6005
Address: 2010 Crow Canyon Place, Suite 150	Phase/WBS: 04-Monitoring	Report Type & QC Level: Level 1 with EDF
San Ramon, CA	Sub Phase/Task: 03-Analytical	E-mail EDD To: shayes@stratusinc.net
Tele/Fax: 925-275-3506	Cost Element: 01-Contractor labor	Invoice to: Atlantic Richfield Co.

Lab Bottle Order No:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: BTEX/Oxy*by 8260	Requested Analysis: 1,2 DCA	Requested Analysis: EDB	Requested Analysis: Ethanol by 8260	Requested Analysis: DRO by 8015M	Requested Analysis: GRO by 8015m	Sample Point Lat/Long and Comments *Oxy = MTBD, TAME, ETBE, DIPE, TBA
1	MW-1	14:23	2/29/08		X			8				X		X	X	X	X	X	X	
2	MW-2	13:19	"		X			8				X		X	X	X	X	X	X	
3	MW-4	12:57	"		X			8				X		X	X	X	X	X	X	
4	MW-5	13:59	"		X			8				X		X	X	X	X	X	X	
5	MW-6	13:41	"		X			8				X		X	X	X	X	X	X	
6	TB 11124 2/29/08-6:00	6:00	"		X			3				X								HOLD
7																				
8																				
9																				
10																				

Sampler's Name: ROBERTO HEIMLICH	**Relinquished By / Affiliation**	**Date**	**Time**	**Accepted By / Affiliation**	**Date**	**Time**
Sampler's Company: DOULOS ENV.						
Shipment Date: 690105748845						
Shipment Method:						
Shipment Tracking No:					3/4/08	1030

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

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

BP COC Rev. 5 10/11/2006

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 03 - 0139

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Stratus DATE: 3/4/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.
_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

3.4 °C Temperature blank.
_____ °C IR thermometer.
_____ Ambient temperature.

Initial: JP

CUSTODY SEAL INTACT:

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

Initial: JP

SAMPLE CONDITION:

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

Initial: JP

COMMENTS:

ATTACHMENT

FIELD PROCEDURES FOR GROUNDWATER SAMPLING

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

Equipment Calibration

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

Groundwater and Liquid-Phase Petroleum Hydrocarbon Depth Assessment

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

Subjective Analysis of Groundwater

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

Monitoring Well Sampling

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

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

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

Groundwater Sample Labeling and Preservation

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

Sample Identification and Chain-of-Custody Procedures

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

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

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

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

Equipment Cleaning

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

APPENDIX B

GEOTRACKER UPLOAD CONFIRMATIONS

Electronic Submittal Information

UPLOADING A GEO_WELL FILE

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

Submittal Title:	**1Q08 GEO_WELL 11124**
Facility Global ID:	**T0600100919**
Facility Name:	**BP #11124**
Submittal Date/Time:	**3/31/2008 11:36:21 AM**
Confirmation Number:	**3309925913**

Back to Main Menu

Electronic Submittal Information

Your EDF file has been successfully uploaded!

Confirmation Number: 5746827065
Date/Time of Submittal: 3/31/2008 11:38:54 AM
Facility Global ID: T0600100919
Facility Name: BP #11124
Submittal Title: 1Q08 GW Monitoring
Submittal Type: GW Monitoring Report

Click here to view the detections report for this upload.

BP #11124
3315 HIGH
OAKLAND, CA 94619

Regional Board - Case #: 01-0996
SAN FRANCISCO BAY RWQCB (REGION 2)
Local Agency (lead agency) - Case #: RO0000239
ALAMEDA COUNTY LOP - **(PK)**

CONF #	TITLE	QUARTER
5746827065	1Q08 GW Monitoring	Q1 2008

SUBMITTED BY	SUBMIT DATE	STATUS
Broadbent & Associates, Inc.	3/31/2008	PENDING REVIEW

SAMPLE DETECTIONS REPORT

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

METHOD QA/QC REPORT

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

QA/QC FOR 8021/8260 SERIES SAMPLES

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

WATER SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	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	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0