



Atlantic Richfield Company  
(a BP affiliated company)

P.O. Box 1257  
San Ramon, CA 94583  
Phone: (925) 275-3801  
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27 July 2007

Re: Second Quarter 2007 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

**RECEIVED**

2:27 pm, Jul 31, 2007

Alameda County  
Environmental Health



**Second Quarter 2007 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



1324 Mangrove Avenue, Suite 212  
Chico, California 95926  
(530) 566-1400  
[www.broadbentinc.com](http://www.broadbentinc.com)

27 July 2007

Project No. 06-08-652

27 July 2007

Project No. 06-08-652

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

Attn.: Mr. Paul Supple

Re: Second Quarter 2007 Ground-Water Monitoring Report, Former BP Station #11124,  
3315 High Street, Oakland, California; ACEH Case # RO0000239

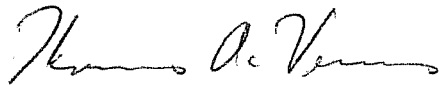
Dear Mr. Supple:

Attached is the *Second Quarter 2007 Ground-Water Monitoring Report* for Former BP Station #11124 (herein referred to as Station #11124) located at 3315 High Street, Oakland California (Site). This report presents a summary of results from ground-water monitoring and sampling during Second Quarter 2007.

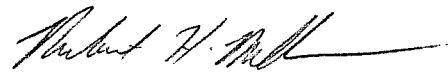
Should you have questions regarding the work performed or results obtained, please do not hesitate to contact us at (530) 566-1400.

Sincerely,

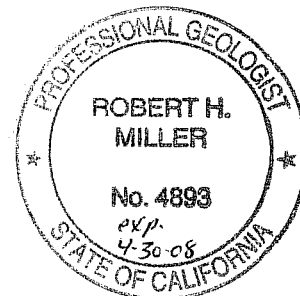
BROADBENT & ASSOCIATES, INC.



Thomas A. Venus  
Senior Engineer, P.E.



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



Enclosures

cc: Mr. Steven Plunkett, Alameda County Environmental Health (Submitted via ACEH ftp site)  
Ms. Shelby Lathrop, ConocoPhillips (Submitted via WebXtender)  
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:	NA

### WORK PERFORMED THIS QUARTER (Second Quarter 2007):

1. Submitted First Quarter 2007 Ground-Water Monitoring Report.
2. Conducted ground-water monitoring/sampling for Second Quarter 2007. Work performed by Stratus Environmental, Inc. (Stratus) on 8 May 2007.
3. Prepared and submitted Initial Site Conceptual Model Report on 15 May 2007.

### WORK PROPOSED FOR NEXT QUARTER (Third Quarter 2007):

1. Prepared and submitted Second Quarter 2007 Ground-Water Monitoring Report (contained herein).
2. Prepared and submitted Sensitive Receptor Survey on 16 July 2007.
3. Prepare and submit Preferential Pathway Analysis Report by 15 August 2007.
4. Conduct quarterly ground-water monitoring/sampling for Third Quarter 2007.

### QUARTERLY RESULTS SUMMARY:

Current phase of project:	<b>Ground-Water Monitoring/Sampling</b>
Frequency of ground-water monitoring:	<b>Quarterly: Wells MW-1, MW-2, MW-4, MW-5 and MW-6</b>
Frequency of ground-water sampling:	<b>Quarterly: Wells MW-1, MW-2, MW-4, MW-5 and MW-6</b>
Is free product (FP) present on-site:	<b>No</b>
Current remediation techniques:	<b>None</b>
Depth to ground water (below TOC):	<b>7.68 (MW-4) to 9.62 (MW-1)</b>
General ground-water flow direction:	<b>South-southwest</b>
Approximate hydraulic gradient:	<b>0.009 ft/ft</b>

### DISCUSSION:

Second quarter 2007 ground-water monitoring/sampling was conducted at Former BP Station #11124 on 8 May 2007 by Stratus personnel. No irregularities were noted during depth to water level monitoring. Recent prior measurements of total depth in well MW-2 were found to be greatly reduced from its original installed depth. During the second quarter 2007 depth to water measurement, this was found to be caused by roots that had penetrated the well casing. An accurate depth to water level can be obtained if the water level sensor lowered within tubing pushed through the section containing the roots. Consistent with the monitoring frequency proposed in the Initial Site Conceptual Model report (BAI, 15 May 2007), depths to water levels were measured at the five existing wells at the Site. Depth to water level measurements ranged from 7.68 ft at MW-4 to 9.62 ft at MW-1. Calculated ground-water elevations ranged from 147.72 ft above mean sea level at MW-1 to 146.65 ft at MW-2. Water level elevations were within the historic minimum and maximum ranges with the following exceptions: MW-

5's water level elevation was a maximum of the two measurements on record; MW-6's water level elevation was a minimum of the two measurements on record. Water level monitoring field data sheets are provided within Appendix A. Depth to water measurements and calculated water level elevations are summarized within Table 1. Calculated water level elevations yielded a potentiometric ground-water flow direction and gradient of south-southwest at 0.009 ft/ft, consistent with historical data (see Table 3). Ground-water elevation contours are provided on Drawing 1.

Consistent with the sampling schedule proposed in the Initial Site Conceptual Model report (BAI, 15 May 2007), 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 Test America Analytical Testing Corporation (Morgan Hill, California) under chain-of-custody protocol for laboratory analysis of Gasoline Range Organics (GRO, C4-C12) by LUFT GC/MS method; Diesel Range Organics (DRO, C10-C36) 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, Ethanol, 1,2-Dichloroethane, 1,2-Dibromomethane, Di-isopropyl ether, tert-Butyl alcohol (TBA), and tert-Amyl methyl ether (TAME) by EPA Method 8260B. The hydrocarbon result for GRO in wells MW-5 and MW-6 were partly due to individual peak(s) in the quantitation range. No other analytical irregularities were reported by the laboratory for the sample analyses.

Gasoline Range Organics (GRO) were detected above the laboratory reporting limit in two of the five wells sampled at concentrations up to 920 µg/L in well MW-5. MTBE was detected above the laboratory reporting limit in three of the five wells sampled at concentrations up to 1,300 µg/L in well MW-5. TAME was detected above the laboratory reporting limit in two of the wells sampled at concentrations up to 7 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: GRO concentrations in MW-5 and MW-6 were maximums on record; MTBE concentration in MW-6 was maximum on record; MTBE concentration in MW-5 was minimum on record; TAME concentrations in wells MW-5 and MW-6 were maximums on record. 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.

As hydrocarbon contaminants have not been detected to date in monitoring well MW-2 and rarely in well MW-4 (MTBE detected in one of nine quarters sampled), BAI proposes 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 discontinuing quarterly collection and analysis of samples from wells MW-2 and MW-4. At this time, no decision will be made without discussion and approval from ACEH.

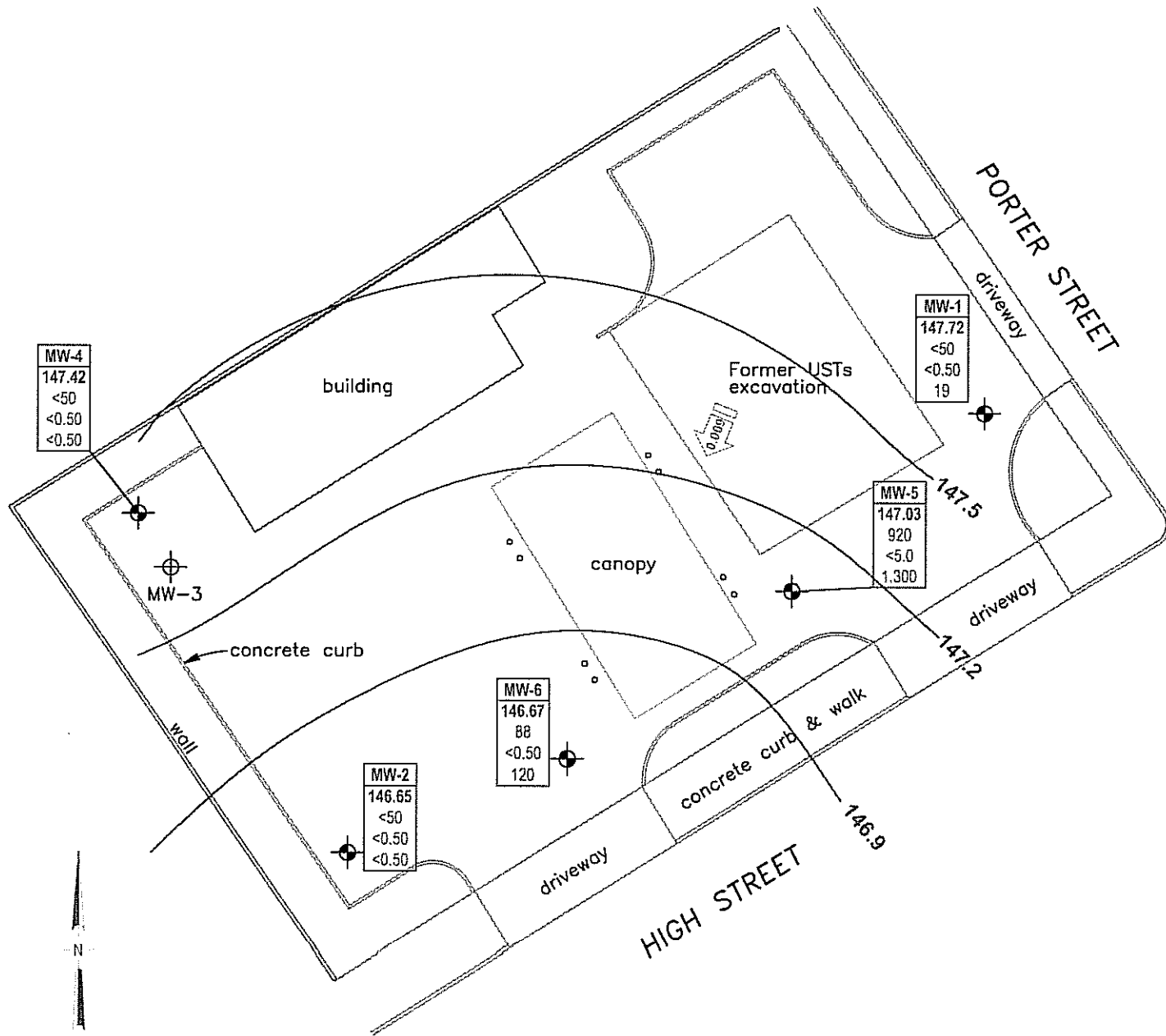
## **CLOSURE:**

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 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, 8 May 2007, 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, CA
- Table 2. Summary of Fuel Additives Analytical Data, Station #11124, 3315 High St., Oakland, CA
- Table 3. Historical Ground-Water Flow Direction and Gradient, Station #11124, 3315 High St., 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



MW-4  
147.42  
<50  
<0.50  
<0.50

MW-3

MW-2  
146.65  
<50  
<0.50  
<0.50

MW-6  
146.67  
88  
<0.50  
120

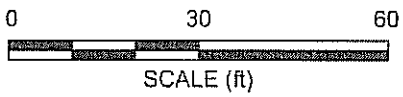
MW-5  
147.03  
920  
<5.0  
1,300

MW-1  
147.72  
<50  
<0.50  
19

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

**LEGEND**

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



**BROADBENT & ASSOCIATES, INC.**  
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL  
1324 Mangrove Ave. Suite 212 Chico, CA  
Project No.: 06-08-652 Date: 6/15/07

Former Station #11124  
3315 High Street  
Oakland, California

Ground-Water Elevation Contours  
and Analytical Summary Map  
8 May 2007

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					
<b>MW-1</b>																	
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	--
<b>MW-2</b>																	
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	--
<b>MW-4</b>																	
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	--	--
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	--



**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
<b>MW-5</b>																	
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	—
<b>MW-6</b>																	
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	—

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.

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	
<b>MW-1</b>									
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	
<b>MW-2</b>									
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	
<b>MW-4</b>									
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	
<b>MW-5</b>									
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	
<b>MW-6</b>									
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	

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  
 $\mu\text{g/L}$  = 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.

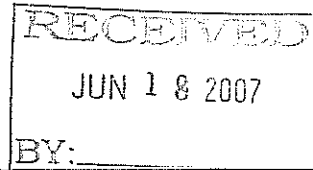
**Table 3. Historical Ground-Water Flow Direction and Gradient**  
**Station #11124, 3315 High St., Oakland, CA**

<b>Date Sampled</b>	<b>Approximate Flow Direction</b>	<b>Approximate Hydraulic Gradient</b>
1/12/1990		
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

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

June 8, 2007

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 (Quarterly Monitoring performed on May 8, 2007)

**General Information**

*Data Submittal Prepared / Reviewed by:* Sandy Hayes / Jay Johnson  
*Phone Number:* (530) 676-6000  
*On-Site Supplier Representative:* Jerry Gonzales  
*Date:* May 8, 2007  
*Arrival:* 9:30      *Departure:* 12:10  
*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 bill of lading, 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



**Attachments:**

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

CC: Mr. Paul Supple, BP/ARCO



BP GEM OIL COMPANY

TYPE **A** BILL OF LADING

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

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

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

11124

Station #

Oakland - 3315 High Street

Station Address

Total Gallons Collected From Groundwater Monitoring Wells:

60

Added Equipment  
Rinse Water 5

Any Other  
Adjustments 0

**TOTAL GALS.  
RECOVERED** 65

loaded onto  
Doulos vehicle # \_\_\_\_\_

Stratus Project # \_\_\_\_\_

time 1230 date 5/8/07

Signature Jerry G.

\*\*\*\*\*  
RECEIVED AT \_\_\_\_\_

time \_\_\_\_\_ date \_\_\_\_\_

Unloaded by  
Signature \_\_\_\_\_



**BP ALAMEDA PORTFOLIO**  
**WATER SAMPLE FIELD DATA SHEET**

PROJECT #: 11124 PURGED BY: Jc WELL I.D.: MW-1  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: F SAMPLE I.D.: MW-1  
 LOCATION: Oakland - 3315 High Street QA SAMPLES: \_\_\_\_\_

DATE PURGED 5-8-07 START (2400hr) 10:10 END (2400hr) 10:13  
 DATE SAMPLED 5-8-07 SAMPLE TIME (2400hr) 10:20  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

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

DEPTH TO BOTTOM (feet) = 34.47 CASING VOLUME (gal) = 4.2  
 DEPTH TO WATER (feet) = 9.62 CALCULATED PURGE (gal) = 126  
 WATER COLUMN HEIGHT (feet) = 24.8 ACTUAL PURGE (gal) = 130

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>5-8-07</u>	<u>10:11</u>	<u>4.3</u>	<u>22.8</u>	<u>399.3</u>	<u>7.37</u>	<u>clear</u>	_____
<u>/</u>	<u>10:12</u>	<u>8.9</u>	<u>22.6</u>	<u>332.9</u>	<u>7.25</u>	<u>clear</u>	_____
<u>/</u>	<u>10:13</u>	<u>13.0</u>	<u>21.8</u>	<u>315.0</u>	<u>7.01</u>	<u>1</u>	_____

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 11.49 SAMPLE TURBIDITY: clear

80% RECHARGE:  YES  NO ANALYSES: see work order  
 ODOR: No SAMPLE VESSEL / PRESERVATIVE: 3 Vol-HCl 1-LT Np

PURGING EQUIPMENT

Bladder Pump \_\_\_\_\_ Bailer (Teflon) \_\_\_\_\_  
 Centrifugal Pump \_\_\_\_\_ Bailer (PVC) \_\_\_\_\_  
 Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel) \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: 25

SAMPLING EQUIPMENT

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

WELL INTEGRITY: good LOCK#: MW-1

REMARKS: DO-265

SIGNATURE: [Signature] Page \_\_\_\_\_ of \_\_\_\_\_

# BP ALAMEDA PORTFOLIO

## WATER SAMPLE FIELD DATA SHEET

PROJECT #: 11124 PURGED BY: Jc WELL I.D.: MW-2  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: Jc SAMPLE I.D.: MW-2  
 LOCATION: Oakland - 3315 High Street QA SAMPLES: \_\_\_\_\_

DATE PURGED 5-8-07 START (2400hr) 11:15 END (2400hr) 11:18  
 DATE SAMPLED 5-8-07 SAMPLE TIME (2400hr) 11:25  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

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

DEPTH TO BOTTOM (feet) = 2880 CASING VOLUME (gal) = 3.5  
 DEPTH TO WATER (feet) = 7.20 CALCULATED PURGE (gal) = 10.9  
 WATER COLUMN HEIGHT (feet) = 21.1 ACTUAL PURGE (gal) = 11.0

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>5-8-07</u>	<u>11:18</u>	<u>3.5</u>	<u>24.2</u>	<u>636</u>	<u>7.28</u>	<u>cloudy</u>	_____
<u>/</u>	<u>11:19</u>	<u>7.3</u>	<u>23.3</u>	<u>651</u>	<u>7.15</u>	<u>/</u>	_____
<u>/</u>	<u>11:18</u>	<u>10.0</u>	<u>23.1</u>	<u>590</u>	<u>7.12</u>	<u>/</u>	_____

SAMPLE DEPTH TO WATER: 7.63 SAMPLE INFORMATION SAMPLE TURBIDITY: clear

80% RECHARGE:  YES  NO ANALYSES: see work order  
 ODOR: NO SAMPLE VESSEL / PRESERVATIVE: 3 Vol-HCL - 1.6L NP

#### PURGING EQUIPMENT

Bladder Pump       Bailer (Teflon)  
 Centrifugal Pump       Bailer (PVC)  
 Submersible Pump       Bailer (Stainless Steel)  
 Peristaltic Pump       Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: 25

#### SAMPLING EQUIPMENT

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

WELL INTEGRITY: good LOCK#: Masta  
 REMARKS: DO 240

SIGNATURE: [Signature] Page    of

# BP ALAMEDA PORTFOLIO

## WATER SAMPLE FIELD DATA SHEET

PROJECT #: 11124 PURGED BY: Je WELL I.D.: MW-4  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: Je SAMPLE I.D.: MW-4  
 LOCATION: Oakland - 3315 High Street QA SAMPLES: \_\_\_\_\_

DATE PURGED 5-8-07 START (2400hr) 11:33 END (2400hr) 11:36  
 DATE SAMPLED 5-8-07 SAMPLE TIME (2400hr) 11:42  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

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

DEPTH TO BOTTOM (feet) = 30.18 CASING VOLUME (gal) = 3.9  
 DEPTH TO WATER (feet) = 7.68 CALCULATED PURGE (gal) = 11.7  
 WATER COLUMN HEIGHT (feet) = 23.6 ACTUAL PURGE (gal) = 120

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>5-8-07</u>	<u>11:34</u>	<u>4</u>	<u>21.2</u>	<u>474.2</u>	<u>7.30</u>	<u>clear</u>	
	<u>11:35</u>	<u>8</u>	<u>21.1</u>	<u>472.6</u>	<u>7.30</u>		
	<u>11:36</u>	<u>12</u>	<u>20.2</u>	<u>464.6</u>	<u>7.28</u>		

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 7.83 SAMPLE TURBIDITY: clear

80% RECHARGE:  YES  NO ANALYSES: see work order  
 ODOR: No SAMPLE VESSEL / PRESERVATIVE: 3 Vol-HCl 1-LT NP

#### PURGING EQUIPMENT

Bladder Pump  Bailer (Teflon)  
 Centrifugal Pump  Bailer (PVC)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: 25

#### SAMPLING EQUIPMENT

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

WELL INTEGRITY: good LOCK#: none  
 REMARKS: DO 2.78

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# BP ALAMEDA PORTFOLIO

## WATER SAMPLE FIELD DATA SHEET

PROJECT #: 11124 PURGED BY: Jc WELL I.D.: MW-5  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: Jc SAMPLE I.D.: MW-5  
 LOCATION: Oakland - 3315 High Street QA SAMPLES: \_\_\_\_\_

DATE PURGED 5-8-07 START (2400hr) 10:30 END (2400hr) 10:33  
 DATE SAMPLED 5-8-07 SAMPLE TIME (2400hr) 10:45  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

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

DEPTH TO BOTTOM (feet) = 29.82 CASING VOLUME (gal) = 3.6  
 DEPTH TO WATER (feet) = 8.42 CALCULATED PURGE (gal) = 10.8  
 WATER COLUMN HEIGHT (feet) = 21.4 ACTUAL PURGE (gal) = 12.0

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>5-8-07</u>	<u>10:31</u>	<u>4</u>	<u>25.3</u>	<u>519</u>	<u>7.02</u>	<u>clear</u>	_____
<u>/</u>	<u>10:32</u>	<u>8</u>	<u>24.3</u>	<u>571</u>	<u>7.45</u>	<u>/</u>	_____
<u>/</u>	<u>10:33</u>	<u>17</u>	<u>24.1</u>	<u>585</u>	<u>7.50</u>	<u>/</u>	_____

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 12.81 SAMPLE TURBIDITY: clear  
 80% RECHARGE:  YES  NO ANALYSES: See work order  
 ODOR: NP SAMPLE VESSEL / PRESERVATIVE: 3 Usa Hcc - 1 LT NP

#### PURGING EQUIPMENT

Bladder Pump       Bailer (Teflon)  
 Centrifugal Pump       Bailer (PVC)  
 Submersible Pump       Bailer (Stainless Steel)  
 Peristaltic Pump       Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: 25

#### SAMPLING EQUIPMENT

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

WELL INTEGRITY: 5000' LOCK#: Jc/Plu  
 REMARKS: DO-326

SIGNATURE: [Signature] Page \_\_\_\_\_ of \_\_\_\_\_

**BP ALAMEDA PORTFOLIO**  
**WATER SAMPLE FIELD DATA SHEET**

PROJECT #: 11124 PURGED BY: JG WELL I.D.: NW 6  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: JG SAMPLE I.D.: NW 6  
 LOCATION: Oakland - 3315 High Street QA SAMPLES: \_\_\_\_\_

DATE PURGED 5-8-07 START (2400hr) 10:56 END (2400hr) 10:59  
 DATE SAMPLED 5-8-07 SAMPLE TIME (2400hr) 11:10  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

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

DEPTH TO BOTTOM (feet) = 29.55 CASING VOLUME (gal) = 3.6  
 DEPTH TO WATER (feet) = 7.92 CALCULATED PURGE (gal) = 11.0  
 WATER COLUMN HEIGHT (feet) = 21.6 ACTUAL PURGE (gal) = 12.6

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>5-8-07</u>	<u>10:59</u>	<u>4</u>	<u>25.3</u>	<u>638</u>	<u>7.49</u>	<u>clear</u>	
<u>/</u>	<u>10:59</u>	<u>8</u>	<u>25.1</u>	<u>619</u>	<u>7.59</u>		
<u>/</u>	<u>10:59</u>	<u>12</u>	<u>24.6</u>	<u>608</u>	<u>7.50</u>	<u>/</u>	

SAMPLE DEPTH TO WATER: 10.49 SAMPLE INFORMATION SAMPLE TURBIDITY: clear

80% RECHARGE:  YES  NO ANALYSES: See work order  
 ODOR: no SAMPLE VESSEL / PRESERVATIVE: 3 Van-Hell 1.6L NP

**PURGING EQUIPMENT**  
 Bladder Pump  Bailer (Teflon)  
 Centrifugal Pump  Bailer (PVC)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: 25

**SAMPLING EQUIPMENT**  
 Bladder Pump  Bailer (Teflon)  
 Centrifugal Pump  Bailer (  PVC or  disposable)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

WELL INTEGRITY: good LOCK#: 120116  
 REMARKS: DO. 1.87

SIGNATURE: [Signature] Page    of







# 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: <u>9:30</u>	Temp: <u>70</u>
Off-site Time: <u>12:10</u>	Temp: <u>77</u>
Sky Conditions: <u>Clear</u>	
Meteorological Events: <u>None</u>	
Wind Speed: <u>0</u>	Direction: _____

Lab Name: <u>TestAmerica</u>	BP/AR Facility No.: <u>11124</u>	Consultant/Contractor: <u>Stratus Environmental, Inc.</u>
Address: <u>885 Jarvis Drive</u>	BP/AR Facility Address: <u>3315 High Street, Oakland</u>	Address: <u>3330 Cameron Park Drive, Suite 550</u>
<u>Morgan Hill, CA 95937</u>	Site Lat/Long: _____	<u>Cameron Park, CA 95682</u>
Lab PM: <u>Lisa Race</u>	California Global ID #: <u>T06001001919</u>	Consultant/Contractor Project No.: <u>E11124-04</u>
Tele/Fax: <u>408-782-8156 408-782-6308 (fax)</u>	Enfos Project No.: <u>G099D-0012</u>	Consultant/Contractor PM: <u>Jay Johnson</u>
BP/AR PM Contact: <u>Paul Supple</u>	Provision or RCOP (circle one) <u>Provision</u>	Tele/Fax: <u>(530) 676-6000 / (530) 676-6005</u>
Address: <u>2010 Crow Canyon Place, Suite 150</u>	Phase/WBS: <u>04-Monitoring</u>	Report Type & QC Level: <u>Level 1 with EDF</u>
<u>San Ramon, CA</u>	Sub Phase/Task: <u>03-Analytical</u>	E-mail EDD To: <u>shayes@stratusinc.net</u>
Tele/Fax: <u>925-275-3506</u>	Cost Element: <u>01-Contractor labor</u>	Invoice to: <u>Atlantic Richfield Co.</u>

Item No.	Sample Description	Time	Date	Matrix			Laboratory No.	No. of Containers	Preservative					Requested Analysis					Sample Point Lat/Long and Comments *Oxy = MTBD, TAME, ETBE, DIPE, TBA					
				Soil/Solid	Water/Liquid	Air			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	Methanol	GRO/BTEX/Oxy*	1,2-DCA	EDB	Ethanol by 8260	DRO by 8015M						
1	MW-1	1020	5-8-07	X				4						X	X	X	X	X						
2	MW-2	1125	/	X				4						X	X	X	X	X						
3	MW-4	1142	/	X				4						X	X	X	X	X						
4	MW-5	1045	/	X				4						X	X	X	X	X						
5	MW-6	1110	/	X				4						X	X	X	X	X						
6	TB 11124 5407	500	/	X				2						X	X	X	X	X						HOLD
7																								
8																								
9																								
10																								

Sampler's Name: <u>Jerry Gonzalez</u>	Relinquished By / Affiliation: _____	Date: <u>5/9/07</u>	Time: <u>1315</u>	Accepted By / Affiliation: _____	Date: <u>5/9/07</u>	Time: <u>1315</u>
Sampler's Company: <u>Douglas ENV</u>						
Shipment Date: _____						
Shipment Method: _____						
Shipment Tracking No: _____						

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
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8 June, 2007

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

RE: BP Heritage #11124, Oakland ,CA  
Work Order: MQE0363

Enclosed are the results of analyses for samples received by the laboratory on 05/09/07 20:45. 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]  
3330 Cameron Park Dr., Suite 550  
Cameron Park CA, 95682

Project: BP Heritage #11124, Oakland ,CA  
Project Number: G099D-0012  
Project Manager: Jay Johnson

MQE0363  
Reported:  
06/08/07 13:23

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MQE0363-01	Water	05/08/07 10:20	05/09/07 20:45
MW-2	MQE0363-02	Water	05/08/07 11:25	05/09/07 20:45
MW-4	MQE0363-03	Water	05/08/07 11:42	05/09/07 20:45
MW-5	MQE0363-04	Water	05/08/07 10:45	05/09/07 20:45
MW-6	MQE0363-05	Water	05/08/07 11:10	05/09/07 20:45
TB 11124 5807	MQE0363-06	Water	05/08/07 05:00	05/09/07 20:45

The carbon range for the TPH-GRO has been changed from C6-C10 to C4-C12. The carbon range for TPH-DRO has been changed from C10-C28 to C10-C36. EPA 8015B has been modified to better meet the requirements of California regulatory agencies.

These samples were received with no custody seals.

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

Project: BP Heritage #11124, Oakland, CA  
Project Number: G099D-0012  
Project Manager: Jay Johnson

MQE0363  
Reported:  
06/08/07 13:23

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (MQE0363-01) Water</b> Sampled: 05/08/07 10:20 Received: 05/09/07 20:45									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	7E17004	05/17/07	05/17/07	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		107 %	60-125		"	"	"	"	
Surrogate: Dibromofluoromethane		107 %	75-120		"	"	"	"	
Surrogate: Toluene-d8		104 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98 %	60-135		"	"	"	"	
<b>MW-2 (MQE0363-02) Water</b> Sampled: 05/08/07 11:25 Received: 05/09/07 20:45									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	7E18018	05/17/07	05/18/07	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		101 %	60-125		"	"	"	"	
Surrogate: Dibromofluoromethane		97 %	75-120		"	"	"	"	
Surrogate: Toluene-d8		91 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96 %	60-135		"	"	"	"	
<b>MW-4 (MQE0363-03) Water</b> Sampled: 05/08/07 11:42 Received: 05/09/07 20:45									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	7E17004	05/17/07	05/17/07	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		102 %	60-125		"	"	"	"	
Surrogate: Dibromofluoromethane		110 %	75-120		"	"	"	"	
Surrogate: Toluene-d8		104 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	60-135		"	"	"	"	
<b>MW-5 (MQE0363-04) Water</b> Sampled: 05/08/07 10:45 Received: 05/09/07 20:45									
Gasoline Range Organics (C4-C12)	920	500	ug/l	10	7E17004	05/17/07	05/17/07	LUFT GCMS	PV
Surrogate: 1,2-Dichloroethane-d4		100 %	60-125		"	"	"	"	
Surrogate: Dibromofluoromethane		105 %	75-120		"	"	"	"	
Surrogate: Toluene-d8		103 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98 %	60-135		"	"	"	"	

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

Project: BP Heritage #11124, Oakland, CA  
Project Number: G099D-0012  
Project Manager: Jay Johnson

MQE0363  
Reported:  
06/08/07 13:23

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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MW-6 (MQE0363-05) Water Sampled: 05/08/07 11:10 Received: 05/09/07 20:45

Gasoline Range Organics (C4-C12)	88	50	ug/l	1	7E17004	05/17/07	05/17/07	LUFT GCMS	PV
Surrogate: 1,2-Dichloroethane-d4	108 %	60-125	"	"	"	"	"	"	"
Surrogate: Dibromofluoromethane	107 %	75-120	"	"	"	"	"	"	"
Surrogate: Toluene-d8	103 %	80-120	"	"	"	"	"	"	"
Surrogate: 4-Bromofluorobenzene	97 %	60-135	"	"	"	"	"	"	"

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Project Manager: Jay Johnson

MQE0363  
Reported:  
06/08/07 13:23

**Extractable Hydrocarbons with Silica Gel cleanup by EPA 8015B**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (MQE0363-01) Water</b> Sampled: 05/08/07 10:20 Received: 05/09/07 20:45									
Diesel Range Organics (C10-C36)	ND	49	ug/l	1	7E14021	05/14/07	06/06/07	EPA 8015B-SVOA	
<i>Surrogate: n-Octacosane</i>		85 %	30-115		"	"	"	"	
<b>MW-2 (MQE0363-02) Water</b> Sampled: 05/08/07 11:25 Received: 05/09/07 20:45									
Diesel Range Organics (C10-C36)	ND	48	ug/l	1	7E14021	05/14/07	06/06/07	EPA 8015B-SVOA	
<i>Surrogate: n-Octacosane</i>		82 %	30-115		"	"	"	"	
<b>MW-4 (MQE0363-03) Water</b> Sampled: 05/08/07 11:42 Received: 05/09/07 20:45									
Diesel Range Organics (C10-C36)	ND	48	ug/l	1	7E14021	05/14/07	06/06/07	EPA 8015B-SVOA	
<i>Surrogate: n-Octacosane</i>		81 %	30-115		"	"	"	"	
<b>MW-5 (MQE0363-04) Water</b> Sampled: 05/08/07 10:45 Received: 05/09/07 20:45									
Diesel Range Organics (C10-C36)	ND	48	ug/l	1	7E14021	05/14/07	06/06/07	EPA 8015B-SVOA	
<i>Surrogate: n-Octacosane</i>		88 %	30-115		"	"	"	"	
<b>MW-6 (MQE0363-05) Water</b> Sampled: 05/08/07 11:10 Received: 05/09/07 20:45									
Diesel Range Organics (C10-C36)	ND	48	ug/l	1	7E14021	05/14/07	06/06/07	EPA 8015B-SVOA	
<i>Surrogate: n-Octacosane</i>		86 %	30-115		"	"	"	"	

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Project Manager: Jay Johnson

MQE0363  
Reported:  
06/08/07 13:23

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**MW-1 (MQE0363-01) Water** Sampled: 05/08/07 10:20 Received: 05/09/07 20:45

tert-Amyl methyl ether	ND	0.50	ug/l	1	7E17004	05/17/07	05/17/07	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	300	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>19</b>	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	

*Surrogate: Dibromofluoromethane*

107 % 75-120

" " " "

*Surrogate: 1,2-Dichloroethane-d4*

107 % 60-125

" " " "

*Surrogate: Toluene-d8*

104 % 80-120

" " " "

*Surrogate: 4-Bromofluorobenzene*

98 % 60-135

" " " "

**MW-2 (MQE0363-02) Water** Sampled: 05/08/07 11:25 Received: 05/09/07 20:45

tert-Amyl methyl ether	ND	0.50	ug/l	1	7E17004	05/17/07	05/17/07	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	300	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	

*Surrogate: Dibromofluoromethane*

106 % 75-120

" " " "

*Surrogate: 1,2-Dichloroethane-d4*

103 % 60-125

" " " "

*Surrogate: Toluene-d8*

105 % 80-120

" " " "

*Surrogate: 4-Bromofluorobenzene*

102 % 60-135

" " " "

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MQE0363  
Reported:  
06/08/07 13:23

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**MW-4 (MQE0363-03) Water** Sampled: 05/08/07 11:42 Received: 05/09/07 20:45

tert-Amyl methyl ether	ND	0.50	ug/l	1	7E17004	05/17/07	05/17/07	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	300	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	

Surrogate: Dibromofluoromethane

110 % 75-120

"

"

"

"

"

Surrogate: 1,2-Dichloroethane-d4

102 % 60-125

"

"

"

"

"

Surrogate: Toluene-d8

104 % 80-120

"

"

"

"

"

Surrogate: 4-Bromofluorobenzene

104 % 60-135

"

"

"

"

"

**MW-5 (MQE0363-04) Water** Sampled: 05/08/07 10:45 Received: 05/09/07 20:45

tert-Amyl methyl ether	7.0	5.0	ug/l	10	7E17004	05/17/07	05/17/07	EPA 8260B	
Benzene	ND	5.0	"	"	"	"	"	"	
tert-Butyl alcohol	ND	200	"	"	"	"	"	"	
Di-isopropyl ether	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
Ethanol	ND	3000	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	1300	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	5.0	"	"	"	"	"	"	

Surrogate: Dibromofluoromethane

105 % 75-120

"

"

"

"

"

Surrogate: 1,2-Dichloroethane-d4

100 % 60-125

"

"

"

"

"

Surrogate: Toluene-d8

103 % 80-120

"

"

"

"

"

Surrogate: 4-Bromofluorobenzene

98 % 60-135

"

"

"

"

"



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Project Manager: Jay Johnson

MQE0363  
Reported:  
06/08/07 13:23

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-6 (MQE0363-05) Water</b> <b>Sampled: 05/08/07 11:10</b> <b>Received: 05/09/07 20:45</b>									
tert-Amyl methyl ether	0.61	0.50	ug/l	1	7E17004	05/17/07	05/17/07	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	300	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	120	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		107 %	75-120		"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		108 %	60-125		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		103 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		97 %	60-135		"	"	"	"	

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Project: BP Heritage #11124, Oakland, CA  
Project Number: G099D-0012  
Project Manager: Jay Johnson

MQE0363  
Reported:  
06/08/07 13:23

**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
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**Batch 7E17004 - EPA 5030B P/T / LUFT GCMS**

**Blank (7E17004-BLK1)**

Prepared & Analyzed: 05/17/07

Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Surrogate: 1,2-Dichloroethane-d4	2.53		"	2.50		101	60-125			
Surrogate: Dibromofluoromethane	2.47		"	2.50		99	75-120			
Surrogate: Toluene-d8	2.58		"	2.50		103	80-120			
Surrogate: 4-Bromofluorobenzene	2.58		"	2.50		103	60-135			

**Laboratory Control Sample (7E17004-BS2)**

Prepared & Analyzed: 05/17/07

Gasoline Range Organics (C4-C12)	526	50	ug/l	500		105	65-120			
Surrogate: 1,2-Dichloroethane-d4	2.49		"	2.50		100	60-125			
Surrogate: Dibromofluoromethane	2.52		"	2.50		101	75-120			
Surrogate: Toluene-d8	2.56		"	2.50		102	80-120			
Surrogate: 4-Bromofluorobenzene	2.70		"	2.50		108	60-135			

**Laboratory Control Sample Dup (7E17004-BSD2)**

Prepared & Analyzed: 05/17/07

Gasoline Range Organics (C4-C12)	551	50	ug/l	500		110	65-120	5	20	
Surrogate: 1,2-Dichloroethane-d4	2.54		"	2.50		102	60-125			
Surrogate: Dibromofluoromethane	2.54		"	2.50		102	75-120			
Surrogate: Toluene-d8	2.63		"	2.50		105	80-120			
Surrogate: 4-Bromofluorobenzene	2.68		"	2.50		107	60-135			

**Batch 7E18018 - EPA 5030B P/T / LUFT GCMS**

**Blank (7E18018-BLK1)**

Prepared & Analyzed: 05/18/07

Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Surrogate: 1,2-Dichloroethane-d4	2.47		"	2.50		99	60-125			
Surrogate: Dibromofluoromethane	2.36		"	2.50		94	75-120			
Surrogate: Toluene-d8	2.31		"	2.50		92	80-120			
Surrogate: 4-Bromofluorobenzene	2.37		"	2.50		95	60-135			

Stratus Environmental Inc. [Arco]  
3330 Cameron Park Dr., Suite 550  
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Project: BP Heritage #11124, Oakland, CA  
Project Number: G099D-0012  
Project Manager: Jay Johnson

MQE0363  
Reported:  
06/08/07 13:23

**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
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**Batch 7E18018 - EPA 5030B P/T / LUFT GCMS**

**Laboratory Control Sample (7E18018-BS2)**

Prepared & Analyzed: 05/18/07

Gasoline Range Organics (C4-C12)	386	50	ug/l	500		77	65-120			
Surrogate: 1,2-Dichloroethane-d4	2.70		"	2.50		108	60-125			
Surrogate: Dibromofluoromethane	2.49		"	2.50		100	75-120			
Surrogate: Toluene-d8	2.28		"	2.50		91	80-120			
Surrogate: 4-Bromofluorobenzene	2.40		"	2.50		96	60-135			

**Laboratory Control Sample Dup (7E18018-BSD2)**

Prepared & Analyzed: 05/18/07

Gasoline Range Organics (C4-C12)	405	50	ug/l	500		81	65-120	5	20	
Surrogate: 1,2-Dichloroethane-d4	2.51		"	2.50		100	60-125			
Surrogate: Dibromofluoromethane	2.51		"	2.50		100	75-120			
Surrogate: Toluene-d8	2.32		"	2.50		93	80-120			
Surrogate: 4-Bromofluorobenzene	2.49		"	2.50		100	60-135			

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MQE0363  
Reported:  
06/08/07 13:23

**Extractable Hydrocarbons with Silica Gel cleanup by EPA 8015B - Quality Control**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 7E14021 - EPA 3510C / EPA 8015B-SVOA**

**Blank (7E14021-BLK1)**

Prepared: 05/14/07 Analyzed: 06/06/07

Diesel Range Organics (C10-C36)	ND	50	ug/l							
<i>Surrogate: n-Octacosane</i>	<i>42.2</i>		<i>"</i>	<i>50.0</i>		<i>84</i>	<i>30-115</i>			

**Laboratory Control Sample (7E14021-BS1)**

Prepared: 05/14/07 Analyzed: 06/06/07

Diesel Range Organics (C10-C36)	372	50	ug/l	500		74	40-115			
<i>Surrogate: n-Octacosane</i>	<i>42.9</i>		<i>"</i>	<i>50.0</i>		<i>86</i>	<i>30-115</i>			

**Laboratory Control Sample Dup (7E14021-BSD1)**

Prepared: 05/14/07 Analyzed: 06/06/07

Diesel Range Organics (C10-C36)	366	50	ug/l	500		73	40-115	2	25	
<i>Surrogate: n-Octacosane</i>	<i>42.3</i>		<i>"</i>	<i>50.0</i>		<i>85</i>	<i>30-115</i>			

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Project Manager: Jay Johnson

MQE0363  
Reported:  
06/08/07 13:23

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 7E17004 - EPA 5030B P/T / EPA 8260B**

**Blank (7E17004-BLK1)**

Prepared & Analyzed: 05/17/07

tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	"							
tert-Butyl alcohol	ND	20	"							
Di-isopropyl ether	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
Ethanol	ND	300	"							
Ethyl tert-butyl ether	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
<i>Surrogate: Dibromofluoromethane</i>	2.47		"	2.50		99	75-120			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.53		"	2.50		101	60-125			
<i>Surrogate: Toluene-d8</i>	2.58		"	2.50		103	80-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.58		"	2.50		103	60-135			

**Laboratory Control Sample (7E17004-BS1)**

Prepared & Analyzed: 05/17/07

tert-Amyl methyl ether	12.2	0.50	ug/l	10.0		122	65-135			
Benzene	11.8	0.50	"	10.0		118	75-120			
tert-Butyl alcohol	227	20	"	200		114	60-135			
Di-isopropyl ether	11.8	0.50	"	10.0		118	70-130			
1,2-Dibromoethane (EDB)	11.9	0.50	"	10.0		119	80-135			
1,2-Dichloroethane	12.0	0.50	"	10.0		120	70-125			
Ethanol	203	300	"	200		102	15-150			
Ethyl tert-butyl ether	11.8	0.50	"	10.0		118	65-130			
Ethylbenzene	11.8	0.50	"	10.0		118	75-120			
Methyl tert-butyl ether	11.7	0.50	"	10.0		117	50-140			
Toluene	12.0	0.50	"	10.0		120	75-120			
Xylenes (total)	35.9	0.50	"	30.0		120	75-120			
<i>Surrogate: Dibromofluoromethane</i>	2.53		"	2.50		101	75-120			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.62		"	2.50		105	60-125			
<i>Surrogate: Toluene-d8</i>	2.64		"	2.50		106	80-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.56		"	2.50		102	60-135			

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

Project: BP Heritage #11124, Oakland, CA  
Project Number: G099D-0012  
Project Manager: Jay Johnson

MQE0363  
Reported:  
06/08/07 13:23

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 7E17004 - EPA 5030B P/T / EPA 8260B**

<b>Matrix Spike (7E17004-MS1)</b>		<b>Source: MQE0363-01</b>			<b>Prepared &amp; Analyzed: 05/17/07</b>					
tert-Amyl methyl ether	13.0	0.50	ug/l	10.0	ND	130	65-135			
Benzene	12.4	0.50	"	10.0	ND	124	75-120			LM
tert-Butyl alcohol	237	20	"	200	ND	118	60-135			
Di-isopropyl ether	12.5	0.50	"	10.0	ND	125	70-130			
1,2-Dibromoethane (EDB)	13.4	0.50	"	10.0	ND	134	80-135			
1,2-Dichloroethane	12.5	0.50	"	10.0	ND	125	70-125			
Ethanol	182	300	"	200	ND	91	15-150			
Ethyl tert-butyl ether	12.4	0.50	"	10.0	ND	124	65-130			
Ethylbenzene	12.2	0.50	"	10.0	ND	122	75-120			LM
Methyl tert-butyl ether	32.6	0.50	"	10.0	19	136	50-140			
Toluene	12.4	0.50	"	10.0	ND	124	75-120			LM
Xylenes (total)	37.1	0.50	"	30.0	ND	124	75-120			LM
<i>Surrogate: Dibromofluoromethane</i>	2.60		"	2.50		104	75-120			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.62		"	2.50		105	60-125			
<i>Surrogate: Toluene-d8</i>	2.62		"	2.50		105	80-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.49		"	2.50		100	60-135			

<b>Matrix Spike Dup (7E17004-MSD1)</b>		<b>Source: MQE0363-01</b>			<b>Prepared &amp; Analyzed: 05/17/07</b>					
tert-Amyl methyl ether	12.0	0.50	ug/l	10.0	ND	120	65-135	8	25	
Benzene	11.4	0.50	"	10.0	ND	114	75-120	8	20	
tert-Butyl alcohol	217	20	"	200	ND	108	60-135	9	25	
Di-isopropyl ether	11.8	0.50	"	10.0	ND	118	70-130	6	25	
1,2-Dibromoethane (EDB)	11.9	0.50	"	10.0	ND	119	80-135	12	30	
1,2-Dichloroethane	11.7	0.50	"	10.0	ND	117	70-125	7	25	
Ethanol	182	300	"	200	ND	91	15-150	0	25	
Ethyl tert-butyl ether	11.5	0.50	"	10.0	ND	115	65-130	8	25	
Ethylbenzene	11.0	0.50	"	10.0	ND	110	75-120	10	20	
Methyl tert-butyl ether	31.8	0.50	"	10.0	19	128	50-140	2	25	
Toluene	11.4	0.50	"	10.0	ND	114	75-120	8	25	
Xylenes (total)	33.7	0.50	"	30.0	ND	112	75-120	10	20	
<i>Surrogate: Dibromofluoromethane</i>	2.65		"	2.50		106	75-120			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.53		"	2.50		101	60-125			
<i>Surrogate: Toluene-d8</i>	2.56		"	2.50		102	80-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.50		"	2.50		100	60-135			

Stratus Environmental Inc. [Arco]  
3330 Cameron Park Dr., Suite 550  
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Project: BP Heritage #11124, Oakland ,CA  
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Project Manager: Jay Johnson

MQE0363  
Reported:  
06/08/07 13:23

**Notes and Definitions**

SG A silica gel cleanup procedure was performed.

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

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

DET Analyte DETECTED

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

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

**Lisa Race**

---

**From:** Sandy Hayes [shayes@stratusinc.net]  
**Sent:** Monday, May 14, 2007 11:56 AM  
**To:** Lisa Race  
**Subject:** RE: possible problem COC for BP#11124 - MQE0363  
**Attachments:** Revised COC 11124.pdf

Hi Lisa,

The correct number is T0600100919, I've attached a revised COC.

Thank you.

**REVISED**

Sandy Hayes  
Stratus Environmental, Inc.  
3330 Cameron Park Drive, Suite 550  
Cameron Park, CA 95682  
shayes@stratusinc.net  
Phone: 530-676-6004  
Fax: 530.676.6005

-----Original Message-----

**From:** Lisa Race [mailto:lrace@testamericainc.com]  
**Sent:** Monday, May 14, 2007 9:48 AM  
**To:** knagaraju@stratusinc.net; scarter@stratusinc.net; Sandy Hayes; Sonia Nandi  
**Subject:** possible problem COC for BP#11124 - MQE0363

Please check the global ID on this COC. It has 12 digits. Let me know if it is correct.

Lisa Race  
Senior Project Manager, Morgan Hill, CA  
TestAmerica Analytical Testing Corporation  
Tel.: 408-776-9600  
Direct: 408-782-8156  
Fax: 408-782-6308

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e-mail: [lrace@testamericainc.com](mailto:lrace@testamericainc.com)  
NOTE NEW E-MAIL ADDRESS

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







## TEST AMERICA SAMPLE RECEIPT LOG

CLIENT NAME: Arco 1124  
 REC. BY (PRINT) A.M.  
 WORKORDER: MOE0363

DATE REC'D AT LAB: 5/19/07  
 TIME REC'D AT LAB: 2645  
 DATE LOGGED IN: 5/11/07

For Regulatory Purposes?  
 DRINKING WATER YES / NO  
 WASTE WATER YES / NO

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present / <input checked="" type="radio"/> Absent Intact / Broken*		MW-1 ↓	3 VOA 1(L) Amber	HCl	~	L	5/18/07	
2. Chain-of-Custody Present / <input checked="" type="radio"/> Absent*		MW-2	SAME	SAME	↓	↓	↓	
3. Traffic Reports or Packing List: Present / <input checked="" type="radio"/> Absent		MW-4 <del>3</del> MW-5 <del>4</del>	↓	↓	↓	↓	↓	
4. Airbill: Airbill / Sticker Present / <input checked="" type="radio"/> Absent		MW-6 TB 1124	↓ 2 VOA	↓ HCl	↓	↓	↓	
5. Airbill #:								
6. Sample Labels: Present / <input checked="" type="radio"/> Absent								
7. Sample IDs: Listed / <input checked="" type="radio"/> Not Listed on Chain-of-Custody								
8. Sample Condition: Intact / <input checked="" type="radio"/> Broken* / Leaking*								
9. Does information on chain-of-custody, traffic reports and sample labels agree? <input checked="" type="radio"/> Yes / No*								
10. Sample received within hold time? <input checked="" type="radio"/> Yes / No*								
11. Adequate sample volume received? <input checked="" type="radio"/> Yes / No*								
12. Proper preservatives used? <input checked="" type="radio"/> Yes / No*								
13. Trip Blank / Temp Blank Received? (circle which, if yes) <input checked="" type="radio"/> Yes / No*								
14. Read Temp: <u>4.2°C</u> Corrected Temp: <u>4.2°C</u> Is corrected temp 4 +/-2°C? <input checked="" type="radio"/> Yes / No**								

5/19/07  
A.M.

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

**APPENDIX B**

GEOTRACKER UPLOAD CONFIRMATION

# Electronic Submittal Information

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## UPLOADING A GEO\_WELL FILE

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

**Submittal Title:** 2Q07 GEO\_WELL 11124  
**Facility Global ID:** T0600100919  
**Facility Name:** BP #11124  
**Submittal Date/Time:** 7/2/2007 4:46:19 PM  
**Confirmation Number:** 4960754215

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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:** 4332924187

**Date/Time of Submittal:** 7/2/2007 4:43:38 PM

**Facility Global ID:** T0600100919

**Facility Name:** BP #11124

**Submittal Title:** 2Q07 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 - (SP)

<u>CONF #</u>	<u>TITLE</u>	<u>QUARTER</u>
4332924187	2Q07 GW Monitoring	Q2 2007
<u>SUBMITTED BY</u>	<u>SUBMIT DATE</u>	<u>STATUS</u>
Broadbent & Associates, Inc.	7/2/2007	PENDING REVIEW

## SAMPLE DETECTIONS REPORT

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

## METHOD QA/QC REPORT

METHODS USED	8260FA,8260TPH,SW8015B
TESTED FOR REQUIRED ANALYTES?	Y
LAB NOTE DATA QUALIFIERS	Y

## QA/QC FOR 8021/8260 SERIES SAMPLES

TECHNICAL HOLDING TIME VIOLATIONS	10
METHOD HOLDING TIME VIOLATIONS	10
LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT	0
LAB BLANK DETECTIONS	0
DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING?	
- LAB METHOD BLANK	Y
- MATRIX SPIKE	N
- MATRIX SPIKE DUPLICATE	N
- BLANK SPIKE	Y
- SURROGATE SPIKE - NON-STANDARD SURROGATE USED	Y

## WATER SAMPLES FOR 8021/8260 SERIES

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

**SOIL SAMPLES FOR 8021/8260 SERIES**

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

**FIELD QC SAMPLES**

<u>SAMPLE</u>	<u>COLLECTED</u>	<u>DETECTIONS &gt; REPD</u>
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

Logged in as BROADBENT-C (CONTRACTOR)

CONTACT SITE ADMINISTRATOR.