## **RECEIVED**

By dehloptoxic at 3:22 pm, Oct 31, 2006





Atlantic Richfield Company (a BP affiliated company)

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

23 October 2006

Re: Third Quarter 2006 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 Manager** 

## Third Quarter 2006 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

23 October 2006

Project No. 06-08-652

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



23 October 2006

Project No. 06-08-652

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

Attn.: Mr. Paul Supple

Re: Third Quarter 2006 Ground-Water Monitoring Report, Former BP Station #11124,

3315 High Street, Oakland, California. ACEH Case # RO0000239.

Dear Mr. Supple:

Attached is the *Third Quarter 2006 Ground-Water Monitoring Report* for Former BP Station #11124 (herein referred to as Station #11124) located at 3315 High Street, Oakland California (Property). This report presents a summary of results from ground-water monitoring and sampling during Third Quarter 2006.

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

Sincerely,

BROADBENT & ASSOCIATES, INC.

Thomas A. Venus 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)

ARIZONA CALIFORNIA

NEVADA

**TEXAS** 

ROBERT H. MILLER

### 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 (Third Quarter 2006):**

- 1. Submitted Second Quarter 2006 Report.
- 2. Conducted ground-water monitoring/sampling for Third Quarter 2006. Work performed by URS on 28 August 2006.

### WORK PROPOSED FOR NEXT QUARTER (Fourth Quarter 2006):

- 1. Submitted Third Quarter 2006 Report (contained herein).
- 2. Conduct quarterly ground-water monitoring/sampling for Fourth Quarter 2006.
- 3. Install two on-site monitoring wells along border with High Street.

#### QUARTERLY RESULTS SUMMARY:

Current phase of project:	Ground-water monitoring/sampling
Frequency of ground-water sampling:	Wells MW-1, MW-2, and MW-4: Quarterly
Frequency of ground-water	Quarterly
monitoring:	
Is free product (FP) present on-site:	No
FP recovered this quarter:	None
Cumulative FP recovered:	None
Current remediation techniques:	None
Depth to ground water (below TOC):	9.36 (MW-4) to 10.61 (MW-1)
General ground-water flow direction:	South
Approximate hydraulic gradient:	0.012 ft/ft

#### DISCUSSION:

Third quarter 2006 ground-water monitoring/sampling was conducted at Former BP Station #11124 on 28 August 2006 by Blaine Tech Services, Inc. for URS. No irregularities were noted during depth to water level monitoring. Depths to water levels were measured at the three existing wells at the Site. Depth to water level measurements ranged from 9.36 ft at MW-4 to 10.61 ft at MW-1. Calculated ground-water elevations ranged from 144.38 ft above mean sea level at MW-1 to 142.64 ft at MW-2. Water level elevations were within the historic minimum and maximum ranges for each well. 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 at 0.0012 ft/ft. Ground-water elevation contours are provided on Drawing 1.

Page 2

Quarterly ground-water samples were collected from the three onsite wells without problems. Samples were submitted to Test America Analytical Testing Corporation (Morgan Hill, California) under chain of custody documentation for laboratory analysis of Gasoline Range Organics (GRO, C4-C12) by LUFT GC/MS method; 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. No analytical irregularities were reported by the laboratory for the samples.

Gasoline Range Organics were detected at the laboratory reporting limit in one of the three wells sampled this quarter: GRO was detected in well MW-1 at a concentration of 50 micrograms per liter ( $\mu$ g/L). Methyl tert-butyl ether (MTBE) was detected above the laboratory reporting limit in well MW-4 at a concentration of 16  $\mu$ g/L. No other fuel components were detected at or above their respective laboratory reporting limits. The laboratory analytical report, including chain of custody documentation, is provided in Appendix A. Drawing 1 depicts ground-water elevation contours and an analytical summary of concentrations as observed during the Third Quarter, 2006. Laboratory analytical results are summarized in Table 1 and Table 2.

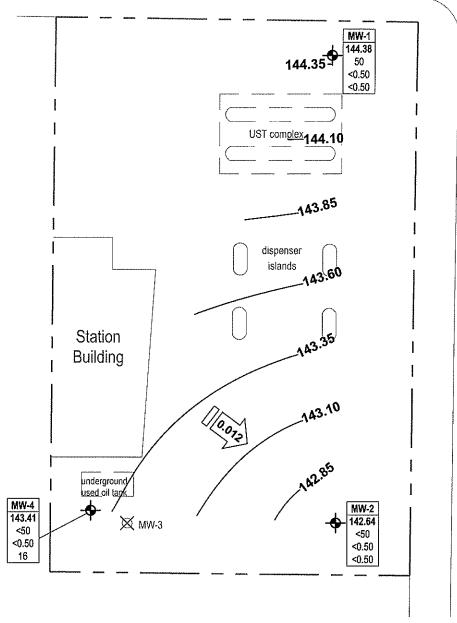
#### **CLOSURE:**

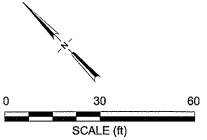
The findings presented in this report are based upon: observations of URS field personnel (see Appendix A), the points investigated, and results of laboratory tests performed by Test America (Morgan Hill, California). Our services were performed in accordance with the generally accepted standard of practice 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, 28 August 2006, 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
- Appendix A. URS Groundwater Sampling Data Package (Includes Laboratory Report and Chain of Custody Documentation, Field and Laboratory Procedures, and Field Data Sheets)
- Appendix B. GeoTracker Upload Confirmation

## PORTER STREET





NOTE: SITE MAP ADAPTED FROM ALISTO ENGINEERING FIGURES. SITE DIMENSIONS AND FIGURES FACILITY LOCATIONS NOT VERIFIED.



Abandoned monitoring well

**LEGEND** 

Ground-water monitoring well -- 143.1 Ground-water elevation (ft MSL)

Well Well Designation **ELEV** Ground-water elevation (ft MSL) GRO GRO, Benzene & MTBE Benzene concentrations (µg/L) MTBE

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, California 95926 Date: 10/20/06 Project No.: 06-08-652

Former BP Service Station #11124 3315 High Street Oakland, California

**Ground-Water Elevation Contours** and Analytical Summary Map 28 August 2006

Drawing

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

	!	тос	Depth to	Product	Water Level			Concentra	utions in (µ	g/L)					
Well and Sample Date	P/NP	Elevation (feet msl)	Water (feet bgs)	Thickness (feet)	Elevation (feet msl)	GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	мтве	(mg/L) DO	Lab	pН	Comments
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	154.99	10.42		144.57	55	<0.50	<0.50	<0.50	<0.50	51		SEQM	6.8	c
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	
MW-2															
10/19/2004		152.02	9.45		142.57	••									ь
01/13/2005	р	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	
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	
01/13/2005		152.77													a
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	

#### 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.

#### 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				Concentration	ons in (µg/L)				
Sample Date	Ethanol	TBA	мтве	DIPE	ЕТВЕ	TAME	1,2-DCA	EDB	Comments
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	
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	
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	

#### 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.

### APPENDIX A

URS GROUND-WATER SAMPLING DATA PACKAGE (INCLUDES LABORATORY REPORT AND CHAIN OF CUSTODY DOCUMENTATION, FIELD AND LABORATORY PROCEDURES, AND FIELD DATA SHEETS)



September 28, 2006

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

Groundwater Sampling Data Package

Former BP Service Station #11124
3315 High Street
Oakland, CA
Field Work Performed: 08/28/06

#### General Information

Data Submittal Prepared/Reviewed by: Alok Kolekar

Phone Number: 510-874-3152

On-Site Supplier Representative: Blaine Tech

Scope of Work Performed: Groundwater Monitoring in accordance with 3rd Quarter 2006 protocols as identified in the Quarterly Monitoring Program Table in the Field and Laboratory Procedures

Attachment.

Variations from Work Scope: None

This submittal presents the tabulation of data collected in association with routine groundwater monitoring. The attachments include, at a minimum, sampling procedures, field data collected, laboratory results, chain of custody documentation, and waste management activities. 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.

Alok D. Kolekar, P.E.

Project Manager

cc:

Paul Supple, Atlantic Richfield Company (RM), electronic copy uploaded to ENFOS

## UIRS

### Attachments

Field and Laboratory Procedures
Laboratory Report
Chain of Custody Documentation
Field Data Sheets
Well Gauging Data
Well Monitoring Data Sheets

#### FIELD & LABORATORY PROCEDURES

#### **Sampling Procedures**

The sampling procedure for each well consists first of measuring the water level and depth to bottom, and checking for the presence of free phase petroleum product (free product), using either an electronic indicator and a clear Teflon<sup>TM</sup> bailer or an oil-water interface probe. Wells not containing free product are purged approximately three casing volumes of water (or until dewatered) using a centrifugal pump, gas displacement pump, or bailer. Equipment and purging method used for the current sampling event is noted on the attached field data sheets. During purging, temperature, pH, and electrical conductivity are monitored to document that these parameters are stable prior to collecting samples. After purging, water levels are allowed to partially (approximately 80%) recover. Groundwater samples (both purge and no purge) are collected using a Teflon bailer, placed into appropriate Environmental Protection Agency- (EPA) approved containers, labeled, logged onto chain-of-custody records, and transported on ice to a California State-certified laboratory. Wells with free product are not sampled and free product is removed according to California Code of Regulation, Title 23, Div. 3, Chap. 16, Section 2655, UST Regulations.

#### **Laboratory Procedures**

The groundwater samples were analyzed for the presence of the chemicals mentioned in the chain of custody using standard EPA methods. The methods of analysis for the groundwater samples are documented in the certified analytical report. The certified analytical reports and chain-of-custody record are presented in this attachment. The analytical data provided by the laboratory approved by RM have been reviewed and verified by that laboratory.



21 September, 2006

Alok Kolekar URS Corporation [Arco] 1333 Broadway, Suite 800 Oakland, CA 94612

RE: BP Heritage #11124, Oakland ,CA

Work Order: MPH1002

Enclosed are the results of analyses for samples received by the laboratory on 08/29/06 10:02. 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.





104 O-111 O4
124, Oakland ,CA MPH1002
Reported:
09/21/06 16:58

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-I	MPH1002-01	Water	08/28/06 13:30	08/29/06 10:02
MW-2	MPH1002-02	Water	08/28/06 14:15	08/29/06 10:02
MW-4	MPH1002-03	Water	08/28/06 14:05	08/29/06 10:02
TB-11124-08282006	MPH1002-04	Water	08/28/06 00:00	08/29/06 10:02

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





Project: BP Heritage #11124, Oakland ,CA

Project Number: G099D-0008 Project Manager: Alok Kolekar MPH1002 Reported: 09/21/06 16:58

## Total Purgeable Hydrocarbons by GC/MS (CA LUFT)

### TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MPH1002-01) Water Sampled:	08/28/06 13:30	Received:	08/29/0	5 10:02					
Gasoline Range Organics (C4-C12)	50	50	ug/l	1	6107022	09/07/06	09/08/06	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		94 %	60-	145	**	n	"	"	
MW-2 (MPH1002-02) Water Sampled:	08/28/06 14:15	Received:	08/29/00	5 10:02					
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	6107022	09/07/06	09/08/06	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		96 %	60-	145	***	"	"	,,	
MW-4 (MPH1002-03) Water Sampled:	08/28/06 14:05	Received:	08/29/06	5 10:02					
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	6107022	09/07/06	09/08/06	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		96 %	60-	145	"	"	n	"	





Project: BP Heritage #11124, Oakland ,CA

Project Number: G099D-0008 Project Manager: Alok Kolekar MPH1002 Reported: 09/21/06 16:58

## Volatile Organic Compounds by EPA Method 8260B

### TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-1 (MPH1002-01) Water	Sampled: 08/28/06 13:30	Received:	08/29/06 1	0:02					·
tert-Amyl methyl ether	ND	0.50	ug/l	I	6107022	09/07/06	09/08/06	EPA 8260B	
Benzene	ND	0.50	U	79	u	111	II	n	
tert-Butyl alcohol	ND	20	tı	17	D	n	11	II.	
Di-isopropyl ether	ND	0.50	**	U	**	11	"	11	
1,2-Dibromoethane (EDB)	ND	0.50	+1	"	**	11	**	**	
1,2-Dichloroethane	ND	0.50	U .	D	Ħ	**	Iŧ	tr	
Ethanol	ND	300	(t	II	u	tt	п	u	
Ethyl tert-butyl ether	ND	0.50	U	17	н	II.	11	IJ	
Ethylbenzene	ND	0.50	"	17	1)	ly .	n	II .	
Methyl tert-butyl ether	ND	0.50	11	**	11	п	11	U	
Toluene	ND	0.50	11	17	11	п	11	17	
Xylenes (total)	ND	0.50	n	(1	17	11	"	**	
Surrogate: Dibromofluorometha.	ne	92 %	75-13	0	"	"	n	n	
Surrogate: 1,2-Dichloroethane-a	14	94 %	60-14	5	"	"	n	n	
Surrogate: Toluene-d8		90 %	70-13	0	"	"	"	n .	
Surrogate: 4-Bromofluorobenzen	ne e	93 %	60-12	0	n	ıı	n	u	
MW-2 (MPH1002-02) Water	Sampled: 08/28/06 14:15	Received:	08/29/06 1	0:02					
tert-Amyl methyl ether	ND	0.50	ug/l	1	6107022	09/07/06	09/08/06	EPA 8260B	
Benzene	ND	0.50	11	II .	t)	72	It	U	
tert-Butyl alcohol	ND	20	**	ш	Į į	£F.	"	п	
Di-isopropyl ether	ND	0.50	**	11	u	"	n .	u	
1,2-Dibromoethane (EDB)	ND	0.50	Ħ	11	II	п	u	n	
1,2-Dichloroethane	ND	0.50	II	U	u	11	11	n	
Ethanol	ND	300	n	91	n	31	\$1	11	
Ethyl tert-butyl ether	ND	0.50	II	**	11	11	**	tr	
Ethylbenzene	ND	0.50	u	**	11	11	re	n	
Methyl tert-butyl ether	ND	0.50	и	U	tr	27	IJ	u	
Toluene	ND	0.50	n	U	tt.	Ħ	11	н	
Xylenes (total)	ND	0.50	"		U		"	n	
Surrogate: Dibromofluorometha	пе	93 %	75-13	0	n	n	"	и	
Surrogate: 1,2-Dichloroethane-d	14	96 %	60-14	5	"	"	"	"	
Surrogate: Toluene-d8		92 %	70-13	0	n	"	"	tr.	
Surrogate: 4-Bromofluorobenzen	ne	93 %	60-12	0	"	"	'n	n	





Project: BP Heritage #11124, Oakland ,CA

Project Number: G099D-0008 Project Manager: Alok Kolekar MPH1002 Reported: 09/21/06 16:58

## Volatile Organic Compounds by EPA Method 8260B

### TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (MPH1002-03) Water	Sampled: 08/28/06 14:05	Received:	08/29/06 1	10:02					
tert-Amyl methyl ether	ND	0.50	ug/l	1	6107022	09/07/06	09/08/06	EPA 8260B	
Benzene	ND	0.50	lt .	11	*1	11	ir	tt.	
tert-Butyl alcohol	ND	20	lt	17	ır	"	ij	u	
Di-isopropyl ether	ND	0.50	n .	"	n	**	п	u	
1,2-Dibromoethane (EDB)	ND	0.50	D	**	If	H	11	II .	
1,2-Dichloroethane	ND	0.50	п	tr	Ŋ	u	Ħ	17	
Ethanol	ND	300	u	U	и	и	**	27	
Ethyl tert-butyl ether	ND	0.50	11	"	II	II .	*	**	
Ethylbenzene	ND	0.50	71	"	11	11	**	tt	
Methyl tert-butyl ether	16	0.50	**	**	и	11	IF	n	
Toluene	ND	0.50	ts .	11	**	17	Ŋ	ij	
Xylenes (total)	ND	0.50	r!	11	ŧŧ	17	п	U	
Surrogate: Dibromofluorometha	ne	92 %	75-1	30	"	n	n	п	
Surrogate: 1,2-Dichloroethane-a	14	96 %	60-14	45	rr r	n	"	**	
Surrogate: Toluene-d8		90 %	70-13	30	"	"	"	rr .	
Surrogate: 4-Bromofluorobenzer	1e	91 %	60-12	20	n	,,	n	n	





Project: BP Heritage #11124, Oakland ,CA

Project Number: G099D-0008 Project Manager: Alok Kolekar

MPH1002 Reported: 09/21/06 16:58

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6107022 - EPA 5030B P/T / LU	FT GCMS									
Blank (6I07022-BLK1)				Prepared:	09/07/06	Analyzec	l: 09/08/06			
Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Surrogate: 1,2-Dichloroethane-d4	2.30		***	2.50		92	60-145			
Laboratory Control Sample (6107022-BS	1)			Prepared a	& Analyze	d: 09/07/	06			
Gasoline Range Organics (C4-C12)	656	50	ug/l	700		94	75-140			
Surrogate: 1,2-Dichloroethane-d4	2.24		n	2,50		90	60-145			
Laboratory Control Sample (6107022-BS2	2)			Prepared a	& Analyze	d: 09/07/	06			
Gasoline Range Organics (C4-C12)	477	50	ug/l	440		108	75-140			
Surrogate: 1,2-Dichloroethane-d4	2.24		"	2.50		90	60-145			
Matrix Spike (6I07022-MS1)	Source: M	PH1077-08		Prepared o	& Analyze	d: 09/07/	06			
Gasoline Range Organics (C4-C12)	490	50	ug/l	440	ND	111	75-140			
Surrogate: 1,2-Dichloroethane-d4	2.29		"	2.50		92	60-145			
Matrix Spike Dup (6I07022-MSD1)	Source: M	PH1077-08		Prepared a	& Analyze	:d: 09/07/	06			
Gasoline Range Organics (C4-C12)	497	50	ug/l	440	ND	113	75-140	1	20	
Surrogate: 1,2-Dichloroethane-d4	2.20		n	2.50		88	60-145			





Project: BP Heritage #11124, Oakland ,CA

Spike

Source

%REC

MPH1002 Reported: 09/21/06 16:58

RPD

Project Number: G099D-0008
Project Manager: Alok Kolekar

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

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Note
Batch 6107022 - EPA 5030B P/T / E	CPA 8260B									···
Blank (6I07022-BLK1)				Prepared:	09/07/06	Analyzed	: 09/08/06		-	
tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	17							
tert-Butyl alcohol	ND	20	tr							
Di-isopropyl ether	ND	0.50	Ħ							
1,2-Dibromoethane (EDB)	ND	0.50	lt.							
1,2-Dichloroethane	ND	0.50	"							
Ethanol	ND	300	tj.							
Ethyl tert-butyl ether	ND	0.50	п							
Ethylbenzene	ND	0.50	n							
Methyl tert-butyl ether	ND	0.50	11							
Toluene	ND	0.50	**							
Xylenes (total)	ND	0.50	**							
Surrogate: Dibromofluoromethane	2.27		n	2.50		91	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.30		"	2.50		92	60-145			
Surrogate: Toluene-d8	2.21		n	2.50		88	70-130			
Surrogate: 4-Bromofluorobenzene	2.31		"	2.50		92	60-120			
Laboratory Control Sample (6107022-E	SS1)			Prepared a	& Analyze	d: 09/07/0	)6			
tert-Amyl methyl ether	9.75	0.50	ug/l	10.0		98	65-135			
Benzene	9.20	0.50	п	10.0		92	70-125			
tert-Butyl alcohol	187	20	11	200		94	60-135			
Di-isopropyl ether	9.98	0.50	**	10.0		100	70-130			
1,2-Dibromoethane (EDB)	9.43	0.50	п	10.0		94	80-125			
1,2-Dichloroethane	9.82	0.50	**	10.0		98	75-125			
Ethanol	264	300	**	200		132	15-150			
Ethyl tert-butyl ether	10.0	0.50	"	10.0		100	65-130			
Ethylbenzene	9.72	0.50	**	10.0		97	70-130			
Methyl tert-butyl ether	0.01	0.50	**	10.0		100	50-140			
Toluene	9.65	0.50	n	10.0		96	70-120			
Xylenes (total)	30.0	0.50	11-	30.0		100	80-125			
Surrogate: Dibromofluoromethane	2.25		"	2.50		90	75-130			
Surrogate: 1,2-Dichloroethane-d4	2,24		#	2.50		90	60-145			
Surrogate: Toluene-d8	2.24		"	2.50		90	70-130			
Surrogate: 4-Bromofluorobenzene	2.31		ri	2.50		92	60-120			





Project: BP Heritage #11124, Oakland ,CA

Spike

Source

%REC

Project Number: G099D-0008 Project Manager: Alok Kolekar MPH1002 Reported: 09/21/06 16:58

RPD

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

Reporting

l	T4 1.	Reporting		Spike	D 1	0/5-5	VOICEC	D.C.	KrD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 6107022 - EPA 5030B P/T / E	PA 8260B									
Matrix Spike (6I07022-MS1)	Source: M	PH1077-08		Prepared	& Analyz	ed: 09/07/	06			
tert-Amyl methyl ether	16.8	0.50	ug/l	15.0	ND	112	65-135			
Benzene	4.95	0.50	**	5.16	ND	96	70-125			
tert-Butyl alcohol	163	20	0	143	ND	114	60-135			
Di-isopropyl ether	16.6	0.50	IF.	15.1	ND	110	70-130			
1,2-Dibromoethane (EDB)	16.0	0.50	11	14.9	ND	107	80-125			
1,2-Dichloroethane	16.1	0.50	U	14.7	ND	110	75-125			
Ethanol	233	300	u	142	ND	164	15-150			LN
Ethyl tert-butyl ether	17.2	0.50	11	15.0	ND	115	65-130			
Ethylbenzene	7.22	0.50	*1	7.54	ND	96	70-130			
Methyl tert-butyl ether	8.07	0.50	11	7.02	ND	115	50-140			
Toluene	37.0	0.50	**	37.2	ND	99	70-120			
Xylenes (total)	41.9	0.50	tt	41.2	ND	102	80-125			
Surrogate: Dibromofluoromethane	2.24		"	2.50		90	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.29		"	2.50		92	60-145			
Surrogate: Toluene-d8	2.35		"	2.50		94	70-130			
Surrogate: 4-Bromofluorobenzene	2.36		"	2.50		94	60-120			
Matrix Spike Dup (6107022-MSD1)	Source: M	PH1077-08		Prepared	& Analyze	d: 09/07/	06			
tert-Amyl methyl ether	16.8	0.50	ug/l	15.0	ND	112	65-135	0	25	
Benzene	4.91	0.50	*1	5.16	ND	95	70-125	0.8	15	
tert-Butyl alcohol	166	20	tr	143	ND	116	60-135	2	35	
Di-isopropyl ether	16.6	0.50	tī	15.1	ND	110	70-130	0	35	
1,2-Dibromoethane (EDB)	16.1	0.50	IF	14.9	ND	108	80-125	0.6	15	
1,2-Dichloroethane	15.9	0.50	U	14.7	ND	108	75-125	1	10	
Ethanol	241	300	U	142	ND	170	15-150	3	35	LN
Ethyl tert-butyl ether	17.1	0.50	п	15.0	ND	114	65-130	0.6	35	
Ethylbenzene	7.32	0.50	11	7.54	ND	97	70-130	l	15	
Methyl tert-butyl ether	8.18	0.50	**	7.02	ND	117	50-140	1	25	
Toluene	37.5	0.50	11	37.2	ND	101	70-120	1	15	
Xylenes (total)	42.5	0.50	**	41.2	ND	103	80-125	1	15	
Surrogate: Dibromofluoromethane	2.25		"	2.50		90	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.20		"	2.50		88	60-145			
Surrogate: Toluene-d8	2.28		"	2.50		91	70-130			
Surrogate: 4-Bromofluorobenzene	2.33		"	2.50		93	60-120			





Project: BP Heritage #11124, Oakland ,CA

Project Number: G099D-0008
Project Manager: Alok Kolekar

MPH1002 Reported: 09/21/06 16:58

#### Notes and Definitions

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

	*
	hn
2.000 Marie	**

## **Chain of Custody Record**

Project Name: Analytical for SSI sampling

BP BU/AR Region/Enfos Segment:

BP > Americas > West Coast > Retail > WCBU > CA > Central > 11124 > HistoricalBL

State or Lead Regulatory Agency:

California Regional Water Quality Control Board - San Fre

Requested Due Date (mm/dd/yy):

875#060828 -SCZ

Page / of /	
Temp: טיס בע	
Temp: ラー゜	

On-site Time: /245 Off-site Time: 1430 Sky Conditions: Meteorological Events: Wind Speed: Direction:

Lab N	b Name: Sequoia BP/AR Facility No.: 11124 Consultant/Contractor: URS																											
Address: 885 Jarvis Drive						BP/AR Facility Ad				igh S	St., O	akla	nd. C	CA				Addı						vay, Sui	te 800	<del>-</del>		
Morgan Hill, CA 95037							Site Lat/Long: 37.785719 / -122.196													94612								
Lab Pl	vi: Lisa Race/ Katt Min													Consultant/Contractor Project No.: 38487131														
Tele/F	ax: 408.782.8156 / 408.782.6308			*										Cons	ulta	ıt/Coı	atrac	ctor	PM:		Alok I	Colekar						
BP/AR	PM Contact: Paul Supple						Provision or RCOP: RCOP T							Tele	Fax:	5	10.	874	.315	2/510.8	374.326	3						
Addres	ss: 4 Centerpointe Drive									Repo	ort T	/pe &	QC	Lev	vel:	Level 1	vith EDF											
	La Palma, CA 90623-1066						Sub Phase/Task:		Ana					<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>											eld@urs		<u>m</u>	
Tele/F	ex: 714.670.5303 / 714.670.5195						Cost Element:	05 -	Sub	cont	acte	l Co	sts			·							ntic	Ric	nfield Co	mpany		
Lab B	ottle Order No:			M	latr	ix				P	rese	vati	ve		<u> </u>		I	<b>cqu</b>	ested	l An	alysis							
Item No. Sample Description Time Date Discription in Solid					Air	Laboratory No.	No. of Containers	Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO3	HCI	Methanol	•	GRO/BIEX (8260)	MTBE, TAME, ETBE DIPB, TBA (8260)	EDB, 1,2-DCA (8260)	Ethanol (8250)							Saı	-	nt Lat/Lor mments	g and	
/ l	MW-11	1330	08/25/20		X		) ।	3				X			X	と		اعز										
/2	MW-7:	1415	1		X		ひン	3				X			X	X					<u> </u>						<del></del>	***************************************
<u>_</u> 3	MW-4"	1405			X		03	3				×				×		X										
4	TB-11124-08282006		V		X		оч	z				X													ONI	14.60		
5																												£
6																												
7																								-				
8																											****	
9							-		_													$\neg$						
10	_							_											$\neg$		_						H.M.A.L.	
Sample	er's Name: S. Corrach	II	<u> </u>			=	Relin <b>ģ</b> i	ishe	d By	/ Affi	liatio	n			Di	te	Tir	ne		_	A.	ccep	ted I	By / A	ffiliation		Date	Time
Sample	er's Company: Blaine Tech	Serve	60								737				08/25	106				1	办	4	Z		575		04×26/0	1640
	mpler's Company: Blaine Tech Service 1 10 40 16 40 ipment Date: 82806 1827 4 10 10 10 10 10 10 10 10 10 10 10 10 10																											
Shipm	nipment Method: The Corner mil \$1296 1602 Juliu Corner mil \$1296 1602																											
	hipment Tracking No:																											
Special	pecial Instructions: CC to rhmiller@broadbentinc.com																											
	BPEDF  ustody Seals In Place Yes No Cooler Temperature on Receipt 4-1 F/C Trip Blank Yes No																											
Custod	ly Seals In Place Yes <u>           No.</u> ≺			Ten	np E	3lan	ık Yes No					Coo			perat		n R	eceij	ot <u></u>	**	F/C			Trip	Blank Y	<u>res</u>	No	

## SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

Corrected Temp:  Is corrected temp 4 +/-2°C? Yes// No**  (Acceptance range for samples requiring thermal pres.)	CLIENT NAME: BD/AVCO 11124 REC. BY (PRINT) FULL WORKORDER: NAPH 1002	A		DATE REC'D AT LAB: TIME REC'D AT LAB: DATE LOGGED IN:		06	-	-	For Regula DRINKING WASTE WA	
Intact / Broken*	CIRCLE THE APPROPRIATE RESPONSE	i i	4	CLIENT ID			рН	1	1	
3. Traffic Reports or Packing List: Present Absent 4. Airbill: Airbill / Sticker Present Absent 5. Airbill #: Down to Present Absent 7. Sample Labels: Present Absent 7. Sample IDs: Listed / Not Listed on Chain-of-Custody 8. Sample Condition: Intact Broken* / Leaking* 9. Does information on chain-of-custody, traffic reports and sample labels agree? 10. Sample received within hold time? 11. Adequate sample volume received? Yes / No* 112. Proper preservatives used? Yes / No* 113. Trip Blank / Temp Blank Received? (fiest within five) (fiest within five) 114. Read Temp: At 1 C C C (fiest) No* 115. corrected Temp: At 1 C C (fiest) No* 116. Read Temp: At 1 C C (fiest) No* 117. Read Temp: At 1 C C (fiest) No* 118. Received temp 4 + /-2°C? (fiest) No* 119. Received temp 4 + /-2°C? (fiest) No* 120. Received temp 4 + /-2°C? (fiest) No* 130. Trip Blank / Temps Blank Received? (fiest) No* 141. Read Temp: At 1 C C (fiest) No* 142. Received temp 4 + /-2°C? (fiest) No* 143. Trip Blank / Temps Blank Received? (fiest) No* 144. Received temp 4 + /-2°C? (fiest) No*	1					:		-		
Packing List: Present Absent  4. Airbill: Airbill / Sicker Present Absent  5. Airbill #: Dow rev  6. Sample Labels: Present Absent  7. Sample libs: Listed / Not Listed on Chain-of-Custody  8. Sample Condition: Intact/ Broken* / Leaking*  9. Does information on chain-of-custody, traffic reports and sample labels: agree?  10. Sample received within hold time? Yes / No*  11. Adequate sample volume received? Yes / No*  12. Proper preseryatives used? Yes / No*  13. Trip Blank / Temp Blank Received? (res) No*  14. Read Temp: 4:1.°C (res) No*  15. Somethin of the control of th	2. Chain-of-Custody Present-Absent*		•	•						
4. Alrbill: Alrbill: Sticker Presente Absent  5. Airbill: Sticker Presente Absent  6. Sample Labels: Presente Absent  7. Sample IDs: Listed Not Listed on Chain-of-Custody  8. Sample Condition: Intact Broken*/ Leaking*  9. Does Information on chain-of-custody, traffic reports and sample labels agree? Yes / No*  10. Sample received within hold time? Yes / No*  11. Adequate sample volume received? 12. Proper preservatives used? Yes / No* 13. Trip Blank / Temp Blank Received? (cicles white, if yes)  (res / No*  14. Read Temp: A. 1 C Corrected Temps Feroulding thermal pres.)							<del></del>			
Present Absent  5. Airbill #:( Dur Let  6. Sample Labels: Present Absent  7. Sample IDs: (Listed / Not Listed on Chain-of-Custody  8. Sample Condition: Intact Broken* / Leaking*  9. Does information on chain-of-custody, traffic reports and sample labels agree? Yes / No*  10. Sample received within hold time? Yes / No*  11. Adequate sample volume received? Yes / No*  12. Proper preservatives used? Yes / No*  13. Trip Blank / Temp Blank Received? (dicto whith, if yes) Yes / No*  14. Read Temp: A: V C Corrected Temp: A: V C Corrected Temp: A: V C (Ses / No*)  15. Corrected temp 4 +/-2°C? Yes / No*  (Acceptance range for samples requiring themal pres.)				•		i · ·				
5. Airbill #:\(\frac{1}{2}\) we we  6. Sample Labels: \(\text{Presenty Absent}\)  7. Sample IDs: \(\text{Listed}\) / Not Listed on Chain-of-Custody  8. Sample Condition: \(\text{IntagL}\) Broken*/ \(\text{Leaking*}\)  9. Does information on chain-of-custody, traffic reports and sample labels: agree? \(\text{Ves}\) / No*  10. Sample received within hold time? \(\text{Yes}\) / No*  11. Adequate sample volume received? \(\text{Ves}\) / No*  12. Proper preservatives used? \(\text{Yes}\) / No*  13. Trip Blank / Temp Blank Received? \(\text{Ves}\) / No*  14. Read Temp: \(\text{A-1}\) \(\text{C}\) \(\text{Ves}\) / No*  14. Read Temp: \(\text{A-1}\) \(\text{C}\) \(\text{Ves}\) / No*  15. corrected Temp: \(\text{A-1}\) \(\text{C}\) \(\text{Ves}\) / No*  16. corrected temp 4 +/-2*C? \(\text{Ves}\) / No*  17. (corrected temp 4 +/-2*C? \(\text{Ves}\) / No*  18. Sample Condition: \(\text{Aligner}\) \(\text{Aligner}\) \(\text{Ves}\) / No*  19. Does information on chain-of-custody, traffic reports and sample requiring themsel pres.)	·				· · · · · · · · · · · · · · · · · · ·	<u>:</u>				
6. Sample Labels: Presenty Absent 7. Sample IDs: Listed / Not Listed on Chain-of-Custody 8. Sample Condition: Intact/ Broken* / Leaking* 9. Does information on chain-of-custody, traffic reports and sample labels agree? Yes/No* 10. Sample received within hold time? Yes/No* 11. Adequate sample volume received? Yes/No* 12. Proper preservatives used? Yes/No* 13. Trip Blank / Temp Blank Received?, (dircle whith, if yes) (Yes/No*) 14. Read Temp: 4-1-10 (Yes/No*) 15. corrected Temp: 4-1-10 (Yes/No*) 16. receptaines range for samples requiring thermal pres.)		<u> </u>				,				•
7. Sample IDs: Listed / Not Listed on Chain-of-Custody 8. Sample Condition: Intact/Broken*/ Leaking* 9. Does Information on chain-of-custody, traffic reports and sample labels agree? 10. Sample received within hold time? Yes / No* 11. Adequate sample volume received? 12. Proper preservatives used? Yes / No* 13. Trip Blank / Temp Blank Received2, (dice whith, if yes) Yes / No* 14. Read Temp: A: L'C Corrected Temp: A: L'C Corrected Temp: A: L'C Corrected Temp: A: L'C (Yes) / No* 15. Corrected temp 4 +/-2°C? Yes / No* 16. Corrected temp 4 +/-2°C? Yes / No* 17. Corrected temp 4 +/-2°C? Yes / No* 18. Corrected temp 4 +/-2°C? Yes / No* 19. Corrected temp 4 +/-2°C? Yes / No* 19. Corrected temp 4 +/-2°C? Yes / No*										
on Chain-of-Custody  8. Sample Condition: IntacD Broken* / Leaking*  9. Does information on chain-of-custody, traffic reports and sample labels agree?  10. Sample received within hold time? Yes / No*  11. Adequate sample volume received? Yes / No*  12. Proper preservatives used? Yes / No*  13. Trip Blank / Temp Blank Received? (dircle whith, if yes) Yes / No*  14. Read Temp: And Corrected Temp: And Corr		<u> </u>								· ·
8. Sample Condition: Intacl Broken* / Leaking*  9. Does information on chain-of-custody, traffic reports and sample labels agree? Yes / No*  10. Sample received within hold time? Yes / No*  11. Adequate sample volume received? Yes / No*  12. Proper preservatives used? Yes / No*  13. Trip Blank / Temp Blank Received? (circle which, if yes) Yes / No*  14. Read Temp: A. I.' Corrected Temp: A. I.' (Acceptaince range for samples requiring thermal pres.)	1 ·			•		· · · · · · · · · · · · · · · · · · ·	_			· · · · · · · · · · · · · · · · · · ·
Leaking*  9. Does information on chain-of-custody, traffic reports and sample labels agree?  10. Sample received within hold time?  11. Adequate sample Volume received?  12. Proper preservatives used? Yes/No*  13. Trip Blank / Temp Blank Received?  (clircle whith, if yes)  14. Read Temp:  Corrected Temp:  Is corrected temp 4 +/-2°C? Yes/No*  (Acceptance range for samples requiring thermal pres.)					•	- 2				•
9. Does information on chain-of-custody, traffic reports and sample labels agree?  10. Sample received within hold time?  11. Adequate sample volume received? 12. Proper preservatives used? 13. Trip Blank / Temp Blank Received? (circle whith, if yes)  14. Read Temp: Corrected Temp: Is corrected temp 4 +/-2°C?  (Acceptance range for samples requiring thermal pres.)		<del></del>		- A		7	<u>.</u>			
traffic reports and sample labels agree?  10. Sample received within hold time?  11. Adequate sample volume réceived?  12. Proper preservatives used?  13. Trip Blank / Temp Blank Received? (dircle whith, if yes)  14. Read Temp: Corrected Temp: Is corrected temp 4 +/-2°C?  (Acceptance range for samples requiring thermal pres.)		<u> </u>		•	ν.	×				
agree?  10. Sample received within hold time?  11. Adequate sample volume received?  12. Proper preservatives used?  13. Trip Blank / Temp Blank Received?  (dircle whith, if yes)  14. Read Temp:  Corrected Temp:  Is corrected temp 4 +/-2°C?  (Acceptance range for samples requiring thermal pres.)	· ·									
10. Sample received within hold time?  11. Adequate sample volume réceived?  12. Proper preservatives used? Yes/No*  13. Trip Blank / Temp Blank Received? (dircle whith, if yes) Yes/No*  14. Read Temp: Corrected Temp: Is corrected temp 4 +/-2°C? Yes/No*  (Acceptance range for samples requiring thermal pres.)										• .
hold time?  11. Adequate sample volume received?  12. Proper preservatives used? Yes/No*  13. Trip Blank / Temp Blank Received? (circle whith, if yes)  14. Read Temp: Corrected Temp: Is corrected temp 4 +/-2°C? Yes/No**  (Acceptance range for samples requiring thermal pres.)	agree? Yes / No*				_/					
11. Adequate sample volume received?  12. Proper preservatives used? Yes No*  13. Trip Blank / Temp Blank Received? (circle whith, if yes)  14. Read Temp: Corrected Temp: Is corrected temp 4 +/-2°C? Yes No*  (Acceptance range for samples requiring thermal pres.)					4		• (	<u>,                                     </u>		
réceived?  12. Proper preservatives used? Yes / No*  13. Trip Blank / Temp Blank Received?  (dircle whitch, if yes)  14. Read Temp:  Corrected Temp:  Is corrected temp 4 +/-2°C? Yes / No*  (Acceptance range for samples requiring thermal pres.)	hold time? Yes / No*		-		1) / 6			بسند		
12. Proper preservatives used? Yes / No*  13. Trip Blank / Temp Blank Received? (Circle whith, if yes) (Yes / No*  14. Read Temp: Corrected Temp: Is corrected temp 4 +/-2°C? Yes / No**  (Acceptance range for samples requiring thermal pres.)					So					
13. Trip Blank / Temp Blank Received? (dircle whith, if yes)  (Ves) No*  14. Read Temp: Corrected Temp: Is corrected temp 4 +/-2°C?  (Acceptance range for samples requiring thermal pres.)		:		· /	· · ·	()				
(circle whith, if yes)  (circle whith, if yes)  (Yes) No*  14. Read Temp:  Corrected Temp:  Is corrected temp 4 +/-2°C?  (Acceptance range for samples requiring thermal pres.)	12. Proper preservatives used? Yes / No*			/ '	•			•		
14. Read Temp:  Corrected Temp:  Is corrected temp 4 +/-2°C?  (Acceptance range for samples requiring thermal pres.)	13. Trip Blank / Temp Blank Received?	· ·	,						•	
Corrected Temp:  Is corrected temp 4 +/-2°C? Yes// No**  (Acceptance range for samples requiring thermal pres.)	(circle which, if yes) (Yes) No*				,					
Corrected Temp:  Is corrected temp 4 +/-2°C? Yes// No**  (Acceptance range for samples requiring thermal pres.)	14. Read Temp: 4:1'C	·		-	<u> </u>		:			
Is corrected temp 4 +/-2°C? Yes// No**  (Acceptance range for samples requiring thermal pres.)	Corrected Temp: 4.1.0	i .								
**Exception (if any): METALS / DFF ON ICE.	(Acceptance range for samples requiring thermal pres.)	/.								
	**Exception (if any): METALS / DFF ON ICE	/ .	<u> </u>							
or Problem COC		/					- <del></del>			

SRL Revision 7 Replaces Rev 5 (07/13/04)

Page \_\_\_\_ of \_\_\_\_\_

## WELL GAUGING DATA

Projec	ci# 060828 - SC	Date _	08/28/06	_Client <u>BP ///</u>	24
Site	3315 Hish St.	Oakland	.CA		

Well ID (	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Immiscibles Removed	3	Depth to well bottom (ft.)	Survey Point: TOB or	Notes
MW-7 MW-7	1304	2								
MW-Z	1258	7					9.38	10.15		
MW-4	1753	7					10.61 9.38 9.36	20.12	V	

## ARCO / BP WELL MONITORING DATA SHEET

BTS#:	060828-	<u>Sc}</u>		Station # 3	3315 High# St.	Oakland, CA					
Sampler:	59			Date: 08/	28/06						
Well I.D.	: MW-	(		Well Diamete	er: 2 3 4	6 8					
Total We	ll Depth:	31.8	8	Depth to Water: 10.61							
Depth to	Free Produ	ct:	<u>.</u>	Thickness of Free Product (feet):							
Reference	ed to:	PVC	Grade	D.O. Meter (if req'd): YSI HACH							
Purge Metho		Bailer	0.04 0.16 0.37	Vell Diameter 4" 6"	<u>Multiplier</u> 0 65 1.47 idius <sup>2</sup> * 0.163						
	<b>火</b> <sub>Di</sub>	sposable Bail	ler		✓ Disposable Bailer						
	Positiv	e Air Displac	cement		Extraction Port						
	Elec	tric Submers	ible	Othe	er:	-					
		xtraction Pun	ıp ,								
	Other:	·									
Top of Scree	en:		If well is listed as a	no-purge, confir	m that water level is l	below the top					
			of screen. Otherwi			•					
	3.5	,	3	`	10.5						
	l Case Volu		X Specified Vo		Gals.						
	1 Case Void	inte (Gais.)		tumes C	alculated Volume						
Time	Temp (°F)	pН	Conductivity (mS or \(\mu \text{S}\))	Gals. Removed	d Observations						
1313	65-6	21	468	3.5	clear in	o ods_					
1318	65-7	7.1	475	7.0	stightlyclay						
1327	65.4	7.0	489	10.5	رد در						
				4							
		······································			····						
Did well	dewater?	Yes	No	Gallons actua	ally evacuated:	10.5					
Sampling	Time:	1330		Sampling Da	te: 08/28/06						
Sample I.	D.: Mh	<u>, -1</u>		Laboratory:	Pace Sequoia	Other 74					
Analyzed	for: G	O BTEX MI	TBE DRO Oxy's 1,2-DO	EDF Ethanol	Other:						
D.O. (if r	eq'd):		Pre-purge:	mg	Post-purge:	mg/ <sub>L</sub>					
O.R.P. (if	req'd):		Pre-purge:	m	V Post-purge:	: mV					
Blaine T	ech Servi	ces Inc	. 1680 Roger			<u> </u>					

## ARCO / BP WELL MONITORING DATA SHEET

BTS#:	060828-	362		Station # 3	3315 High St. Oakland, CA						
Sampler:	SC			Date: 08/28/06							
Well I.D.	: MW-	2		Well Diame	ter: 3 4 6 8						
Total We	ll Depth:	10.15		Depth to Water: 9.38							
Depth to	Free Produ	uct:		Thickness of Free Product (feet):							
Reference	ed to:	(Pvc)	Grade	D.O. Meter (if req'd): YSI HACH							
Purge Metho	Well Diame 1" 2" 3"	Bailer	Multiplier <u>V</u> 0.04 0.16 0.37	Vell Diameter 4" 6" Other r	<u>Multiplier</u> 0.65 1 47 radius <sup>2</sup> * 0.163						
I dige Ment	_	isposable Bail	la-	Sampling Metho	•						
		usposable Ball ve Air Displac			X Disposable Bailer						
		ectric Submers		On .	Extraction Port						
		Extraction Pur	• •	Oin	ner:						
		Actaonon 1 att	ή								
Top of Scree			If well is listed as a	i no-nurge confi	rm that water level is below the top						
·			of screen. Otherwi	se, the well must	t be purged.						
	<b>υ</b> .	2	2		0.6						
		ume (Gals.)	XSpecified Vo	<del></del>	Gais.						
	1 Case 7 01	ditte (Gata.)		iumes (	Calculated Volume						
Time	Temp (°F)	pН	Conductivity (mS or \( \mu S \)	Gals. Remove	ed Observations						
1333	70.9	6.6	546	0.2	brownish of (se)						
WU	1 devat	eru e	0-3 5211:25								
1409	71.2	6.7	541		clear brownish						
Did well	dewater?	Ves	No	Gallons actu	ally evacuated: 0.3						
Sampling	Time:	1415		Sampling Date: 08/28/06							
Sample I.	D.: M	W-Z		Laboratory:	Pace Sequoia Other 72						
Analyzed	for: (G	RO BTEX MT	BE DRO Oxy's 2-DO		Other:						
D.O. (if re	eq'd):		Pre-purge:	m	Post-purge: mg/L						
O.R.P. (if			Pre-purge:	1	nV Post-purge: mV						
<b>Blaine T</b>	ech Serv	ices. Inc	. 1680 Rogers	Ave San	Jose, CA 95112 (408) 573,0555						

## ARCO / BP WELL MONITORING DATA SHEET

BTS #: (	060828-5	SC 2		Station # 3315 His 4 59. Oakland, CA							
Sampler:	SC			Date: 08/28/06							
Well I.D.	: MW-4			Well Diameter: 2 3 4 6 8							
Total We	ll Depth:	30.12	-	Depth to Wate	r: 9.36		<u> </u>				
Depth to	Free Prod	uct:		Thickness of Free Product (feet):							
Referenc	ed to:	(PVC)	Grade	D.O. Meter (if req'd): YSI HACH							
Purge Meth	Well Diame 1" 2" 3"		0.04	Vell Diameter ( 4" 6" Other radi	Multiplier 0.65 1 47 us <sup>2</sup> * 0.163		-				
Purge Meth	Y D Positi Ele	Bailer visposable Bai ve Air Displa ectric Submere Extraction Pur	cement sible	Sampling Method: Bailer  K Disposable Bailer  Extraction Port  Other:							
Top of Screen	en:		If well is listed as a of screen. Otherwi	no-purge, confirm that water level is below the top ise, the well must be purged.							
	1 Case Vol	ume (Gals.)	X Specified Vo		Cais.						
	1 0430 7 01	dine (Gass.)	Conductivity	iumes Car	culated Volume						
Time	Temp (°F)	pН	(mS or $\mu$ S)	Gals. Removed	Observations						
1346	77.4	6.8	319	3.4	cldy brown						
1352	72-8	6.7	321	6.8	1( ((						
1358	72.4	6-5	324	10-2	(( (6						
Did well	dewater?	Yes	(No	Gallons actual	ly evacuated:	10.2					
Sampling	Time:	1405		Sampling Date: 08/28/06							
Sample I.	D.: M	W-4		Laboratory: Pace Sequoia Other 7/2							
Analyzed	for: (a	RO BTEX M	TBE DRO Oxy's .2-DO	A PDB Ethanol	Other:						
D.O. (if r	eq'd):		Pre-purge:	mg/ <sub>L</sub>	Post-purge		mg/L				
O.R.P. (if			Pre-purge:		1		mV				
Blaine T	ech Serv	ices. Inc	. 1680 Rogers	Ava San L	SCO CA DE44	2 (400)					



# WELLHEAD INSPECTION CHECKLIST BP / GEM

	1		1	
Page		of_		

	28/06	<b></b>						
Site Address	3315 His	7K57.	Oaklan	d, CA	-			
Job Number	060878-		<u></u>		hnician	<u>),(</u>	mack	
Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
						<u></u>	X	
MW-7 MW-7		\					X	
MW-4				10			X	
	:							
· • • • • • • • • • • • • • • • • • • •								
	.*							
NOTES:	MW-4=) /2	bolts/scra	us missing	MW	-2 <del>=</del> ) (	hristyle	ot	
<del> </del>			WWW		······································			
					in the state of th	<del>ulu ka da antida milak ka te da dite kiki keta</del>		
J##	·							

### APPENDIX B

GEOTRACKER UPLOAD CONFIRMATION

11124

## **Electronic Submittal Information**

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

### **UPLOADING A GEO\_WELL FILE**

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

Submittal Title:

3Q06 GEO\_WELL

Submittal Date/Time:

10/20/2006 10:12:12 AM

Confirmation Number:

6063017129

**Back to Main Menu** 

Logged in as BROADBENT-C (CONTRACTOR)

CONTACT SITE ADMINISTRATOR.

## **Electronic Submittal Information**

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

Your EDF file has been successfully uploaded!

Confirmation Number: 3137909412

Date/Time of Submittal: 10/20/2006 10:07:34 AM

Facility Global ID: T0600100919

Facility Name: BP

**Submittal Title:** 3Q06 GW Monitoring **Submittal Type:** GW Monitoring Report

#### Click here to view the detections report for this upload.

C. (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	en transfer of the contract of	
3315 HIGH ST OAKLAND, CA 94619	Regional Board - Case #: 01-0996 SAN FRANCISCO BAY RWQCB (REGION : Local Agency (lead agency) - Case #: 1075 ALAMEDA COUNTY LOP - (SP)	2)
CONF # TITLE 3006	QUARTER GW Monitoring Q3 2006	
SUBMITTED BY	SUBMIT DATE STATUS	
Broadbent & Associates, Inc.		٧
SAMPLE DETECTIONS REP	ORT	
# FIELD POINTS SAMPLED		3
# FIELD POINTS WITH DETECTION		2
# FIELD POINTS WITH WATER SA SAMPLE MATRIX TYPES	· · · - · · · · · · · · · · · · · · · ·	0
SAMPLE MATRIX TIPES	WA	NTER
METHOD QA/QC REPOR	<u>T</u>	
METHODS USED	8260FA,8260	)TPH
TESTED FOR REQUIRED ANALYTES	5?	Υ
LAB NOTE DATA QUALIFIERS		Υ
<del></del>		
QA/QC FOR 8021/8260		
TECHNICAL HOLDING TIME VIOLA		0
METHOD HOLDING TIME VIOLATION	- 1 1 -	0
LAB BLANK DETECTIONS ABOVE R	REPORTING DETECTION LIMIT	0
LAB BLANK DETECTIONS	/8260 SERIES INCLUDE THE FOLLOWING?	٥
- LAB METHOD BLANK	10200 SEKIES INCLUDE THE POLLOWING!	Y
- MATRIX SPIKE		Ϋ́
- MATRIX SPIKE DUPLICATE		Ÿ
- BLANK SPIKE		Ÿ
- SURROGATE SPIKE		Y
WATER SAMPLES FOR 802	1/8260 SERIES	
	JPLICATE(S) % RECOVERY BETWEEN 65-135%	Υ
MATRIX SPIKE / MATRIX SPIKE DI	JPLICATE(S) RPD LESS THAN 30%	Υ
SURROGATE SPIKES % RECOVERY		Υ
BLANK SPIKE / BLANK SPIKE DUP	LICATES % 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 > REPOL QCTB SAMPLES** N 0 QCEB SAMPLES N 0 **QCAB SAMPLES** N 0

Logged in as BROADBENT-C (CONTRACTOR)

CONTACT SITE ADMINISTRATOR.