

Atlantic Richfield Company

Shannon Couch
Operations Project Manager

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RECEIVED

2:56 pm, Nov 01, 2011

Alameda County
Environmental Health

October 28, 2011

Re: Third Quarter 2011 Monitoring Report
Atlantic Richfield Company Station #374
6407 Telegraph Avenue, Oakland, California
ACEH Case #RO0000078

"I declare, that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct.

Submitted by,



Shannon Couch
Operations Project Manager

Attachment

Broadbent & Associates, Inc.
875 Cotting Ln., Suite G
Vacaville, CA 95688
(707) 455-7290 Tel
(707) 455-7295 Fax



October 28, 2011

Project No. 06-88-602

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

Attn.: Ms. Shannon Couch

Re: Third Quarter 2011, Monitoring Report, Atlantic Richfield Company Station #374,
6407 Telegraph Avenue, Oakland, Alameda County, California
ACEH Case #RO0000078

Dear Ms. Couch

Attached is the Third Quarter 2011 Monitoring Report for Atlantic Richfield Company (a BP affiliated company) for Station #374 located at 6407 Telegraph Avenue, Oakland, California (Site). Should you have questions regarding the work performed or results obtained, please do not hesitate to contact us at (707) 455-7290.

Sincerely,
BROADBENT & ASSOCIATES, INC.

A handwritten signature in blue ink that reads 'Lu Damerell'.

Lu Damerell, PG
Senior Staff Geologist

A handwritten signature in blue ink that reads 'Thomas A. Sparrowe'.

Thomas A. Sparrowe, P.G. #5065
Senior Geologist



enclosures

cc: Mr. Paresh Khatri, Alameda County Environmental Health (Submitted via ACEH ftp site)
Electronic copy uploaded to GeoTracker

**THIRD QUARTER 2011
MONITORING REPORT
ATLANTIC RICHFIELD COMPANY STATION #374
OAKLAND, CALIFORNIA**

Broadbent & Associates, Inc. (BAI) is pleased to present this *Third Quarter 2011 Monitoring Report* on behalf of Atlantic Richfield Company (ARC, a BP affiliated company) for Station #374 located at 6407 Telegraph Avenue, Oakland, Alameda County, California. Monitoring activities at the site were performed in accordance with an agency directive issued by the Alameda County Environmental Health (ACEH). Details of work performed, discussion of results, and recommendations are provided below.

Facility Name / Address:	<u>Station #374 / 6407 Telegraph Avenue, Oakland, California</u>
Client Project Manager / Title:	<u>Ms. Shannon Couch / Operations Project Manager</u>
BAI Contact:	<u>Mr. Tom Sparrowe, (707) 455-7290</u>
BAI Project No.:	<u>06-88-602</u>
Primary Regulatory Agency / ID No.:	<u>ACEH / Case #RO0000078</u>
Current phase of project:	<u>Monitoring</u>
List of Acronyms / Abbreviations:	<u>See end of report text for list of acronyms/abbreviations used in report.</u>

WORK PERFORMED THIS QUARTER (Third Quarter 2011):

1. Submitted *Second Quarter 2011 Monitoring Report* on July 29, 2011.
2. On July 11, 2011 ARC issued a response letter to ACEH's June 2, 2011 directive for a Feasibility Study/Corrective Action Plan (FS/CAP).
3. ARC and Closure Solutions, Inc. submitted a *Case Evaluation & Justification for No Further Action* report to ACEH on July 27, 2011.
4. BAI conducted Third Quarter 2011 groundwater monitoring/sampling event on August 15, 2011.
5. Closure Solutions, Inc. submitted a *Request for Response- No Further Action Request* letter to ACEH on August 31, 2011.

WORK SCHEDULED FOR NEXT QUARTER (Fourth Quarter 2011):

1. Submit *Third Quarter 2011 Monitoring Report* (contained herein).
2. No sampling or environmental activities are scheduled at the Site during Fourth Quarter 2011.

QUARTERLY MONITORING PLAN SUMMARY:

Groundwater level gauging:	MW-1 through MW-9	(Quarterly through 3Q11, then Semi-Annually, 1Q & 3Q)
Groundwater sample collection:	MW-7, MW8, and MW-9	(Quarterly through 3Q11, then Semi-Annually, 1Q & 3Q)
	MW-1, MW-2, and MW-4	(Semi-Annually, 1Q & 3Q)
	MW-3, MW-5, and MW-6	(Annually, 3Q)

QUARTERLY RESULTS SUMMARY:

LNAPL

LNAPL observed this quarter:	<u>No</u>	(yes/no)
LNAPL recovered this quarter:	<u>None</u>	(gal)
Cumulative LNAPL recovered:	<u>None</u>	(gal)

Groundwater Elevation and Gradient:

Depth to groundwater:	<u>4.52 (MW-6) to 7.91 (MW-5)</u>	(ft below TOC)
Gradient direction:	<u>Southwest</u>	(compass direction)
Gradient magnitude:	<u>0.03</u>	(ft/ft)
Average change in elevation:	<u>-0.18</u>	(ft since last measurement)

Laboratory Analytical Data Summary:

GRO was detected in two wells sampled at a maximum concentration of 8,600 µg/L in MW-4. Benzene was detected in two wells sampled at a maximum concentration of 2,100 µg/L in MW-4. MTBE was detected in seven wells at a maximum concentration of 130 µg/L in MW-1.

ACTIVITIES CONDUCTED & RESULTS:

Third Quarter 2011 groundwater monitoring was conducted on August 15, 2011 in accordance with the monitoring plan summary detailed above. No irregularities were noted during water level gauging. Collected depth to water measurements ranged from 4.52 ft at MW-6 to 7.91 ft at MW-5. Resulting groundwater surface elevations ranged from 158.41 ft at MW-8 to 148.99 ft at MW-5. Groundwater elevations are summarized in Table 1. Water level elevations yielded a potentiometric groundwater gradient to the southwest at approximately 0.03 ft/ft. Historical groundwater gradient direction and magnitude data are summarized in Table 3. Drawing 1 is a site location map for Station #374. Field methods used during groundwater monitoring are provided in Appendix A. Field data sheets are included in Appendix B.

Groundwater samples collected from MW-1 through MW-9 were submitted to Calscience Environmental Laboratories, Inc. (Calscience) of Garden Grove, California for analysis of Gasoline Range Organics (GRO, C6-12) by EPA Method 8015B; Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX), Methyl Tert-Butyl Ether (MTBE), Ethyl Tert-Butyl Ether (ETBE), Tert-Amyl Methyl Ether (TAME), Di-Isopropyl Ether (DIPG), Tert-Butyl Alcohol (TBA), 1,2-Dibromomethane (EDB), 1,2-Dichloroethane (1,2-DCA), and Ethanol by EPA Method 8260B. No significant irregularities were encountered during analysis of the samples. Laboratory analytical report and chain of custody record are provided in Appendix C.

LNAPL was not observed in the wells monitored during Third Quarter 2011. GRO was detected above the laboratory reporting limit in two of the nine wells sampled at concentrations of 420 micrograms per liter (µg/L) at MW-7 and 8,600 µg/L at MW-4. Benzene was detected above the laboratory reporting limit in two wells sampled at concentrations of 5.2 µg/L at MW-8 and 2,100 µg/L at MW-4. Toluene was detected above the laboratory reporting limit in two wells sampled at concentrations of MW-4 at 86 µg/L. Total Xylenes were detected above the laboratory reporting limit in two wells sampled at concentrations of 6.7 µg/L in MW-7 and 210 µg/L in MW-4. Ethylbenzene was detected above the laboratory reporting limit in MW-4 at 250 µg/L and in MW-7 at 49 µg/L. MTBE was detected above the laboratory reporting limit in seven of the nine wells sampled at concentrations ranging from 1.2 µg/L at MW-3 to 130 µg/L at MW-1. The groundwater elevation contour and analytical summary map for August 15, 2011 is provided as Drawing 2. Groundwater monitoring data (GEO_WELL) and laboratory analytical results (EDF) were uploaded to the GeoTracker AB2886 database. Upload confirmation receipts are provided in Appendix D.

DISCUSSION:

Comparison of analytical results from the Third Quarter 2011 and the next previous quarter of sampling in 2011 indicates that GRO decreased in MW-7 (570 µg/L to 420 µg/L) and increased in MW-4 (260 µg/L to 8,600 µg/L). Benzene increased in MW-4 (<0.50 µg/L to 2,100 µg/L) and MW-8 (<2.0 µg/L to 5.2 µg/L). Total Xylenes decreased in MW-7 (25 µg/L to 6.7 µg/L), but increased in MW-4 (13 µg/L to <12 µg/L). MTBE concentrations decreased in all wells except MW-5, which remained non-detect and in MW-7 where MTBE increased from 4.6 µg/L to 14 µg/L. These fluctuations are likely related to seasonal changes in groundwater elevation.

Review of historical groundwater gradient data indicates that the gradient measured during Third Quarter 2011 monitoring is consistent with predominant measurements observed historically at the site.

During Third Quarter 2011, groundwater elevations decreased an average of -0.18 feet across the site relative to measurements collected during Second Quarter 2011.

On January 14, 2011, BAI submitted an *On-Site Soil and Groundwater Investigation Report* to ACEH wherein it was recommended that “a Feasibility Study/Corrective Action Plan (FS/CAP) should be conducted to evaluate remediation alternatives mitigating the actual or potential adverse effects of the hydrocarbon release(s).” On June 6, 2011, ARC and BAI received an ACEH directive letter requesting that a Feasibility Study/Corrective Action Plan (FS/CAP) be prepared for the site.

On July 11, 2011 ARC issued a response letter to ACEH recommending that the FS/CAP request be suspended citing that shallow groundwater in the immediate vicinity of the Site is unlikely to be used as a source of supply and according to a Area Well Survey prepared by Closure Solutions, Inc. (February 28, 2011) the nearest drinking water well is over 1,500 feet from the Site. The response letter further stated that the groundwater hydrocarbon plume does not seem to show any evidence of migration, appears to be limited in extent, and it is highly unlikely that this particular limited pocket of shallow groundwater will be used directly as a source of drinking water.

On July 27, 2011, ARC submitted a *Case Evaluation & Justification For No Further Action* report prepared by Closure Solutions indicating that the site appears to meet low-risk closure criteria since soil and groundwater investigations have adequately defined residual and dissolved-phase contaminant, and further investigation and active remediation does not appear to be warranted or necessary to protect human health and ecological receptors. Site data demonstrate that source removal and natural attenuation processes continue to diminish the residual hydrocarbons and fuel additives and Water Quality Objectives will likely be reached in a reasonable timeframe. Therefore, ARC recommended No Further Action status for the Site. To date, there has been no response from ACEH.

RECOMMENDATIONS:

Since Fourth Quarter 2010, monitor wells MW-7, MW-8 and MW-9 have been sampled on a quarterly basis. As it is now nearly a year after the well installation date, BAI recommends that the sampling frequency of wells MW-7 through MW-9 be changed from Quarterly to Semi-Annually (1Q & 3Q). This change will coincide with the established monitoring program where wells MW-1, MW-2, and MW-4 will be sampled Semi-Annually (1Q & 3Q) and wells MW-3, MW-5, and MW-6 will continue to be sampled Annually (3Q).

LIMITATIONS:

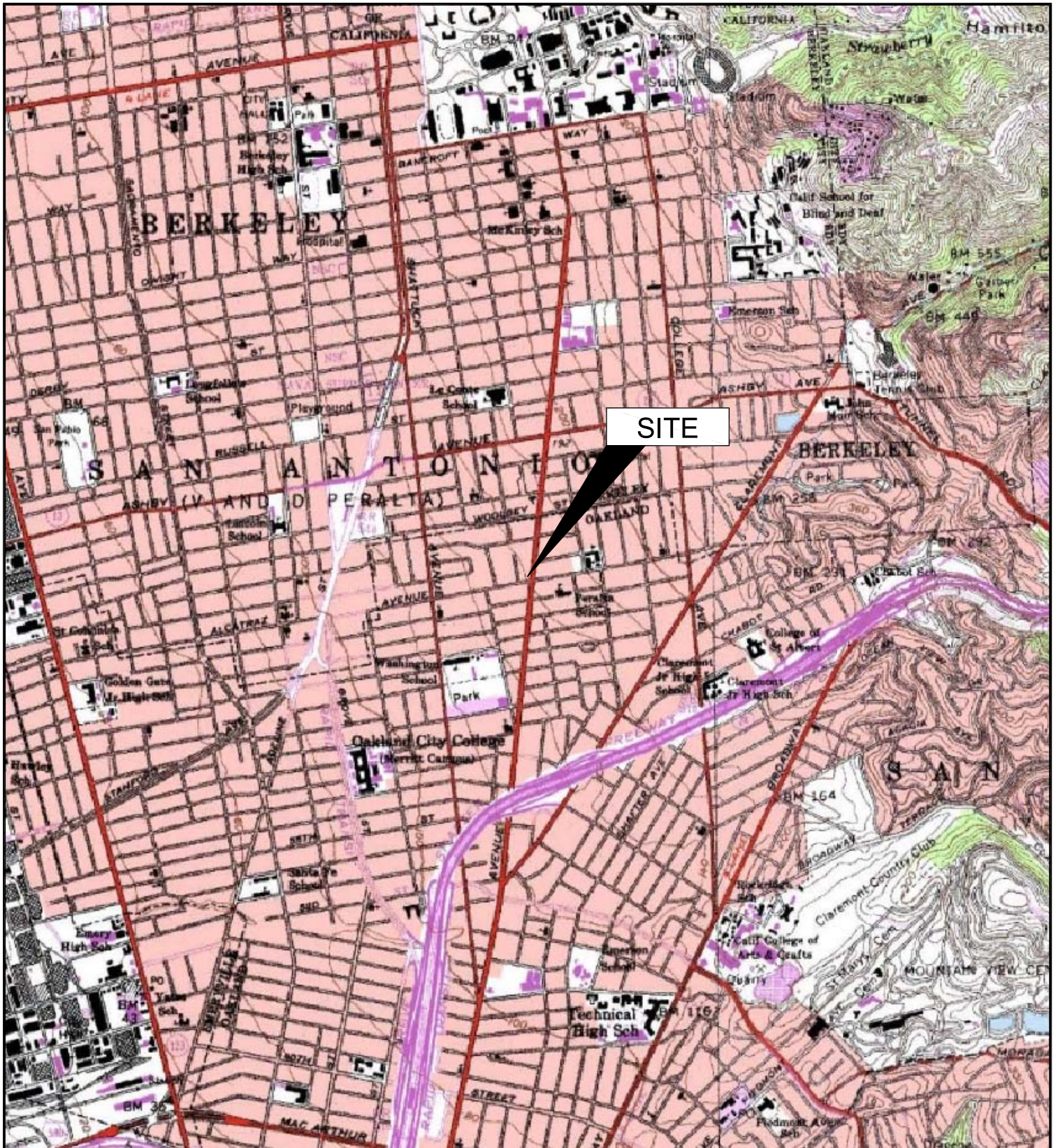
The findings presented in this report are based upon observations of field personnel, points investigated, results of laboratory tests performed by Calscience and our understanding of ACEH guidelines. Our services were performed in accordance with the generally accepted standard of practice at the time 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 (a BP affiliated company). It is possible that variations in soil or groundwater 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: Site Location Map
Drawing 2: Groundwater Elevation Contour and Analytical Summary Map
- Table 1: Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Table 2: Summary of Fuel Additives Analytical Data
Table 3: Historical Groundwater Gradient Direction and Magnitude
- Appendix A: Field Methods
Appendix B: Field Data Sheets and Non-Hazardous Waste Data Form
Appendix C: Laboratory Report and Chain-of-Custody Documentation
Appendix D: GeoTracker Upload Confirmation Receipts

LIST OF COMMONLY USED ACCRONYMS/ABBREVIATIONS:

ACEH	Alameda County Environmental Health	gal:	gallons
ARC:	Atlantic Richfield Company	GRO:	Gasoline Range Organics (C6-12)
BAI:	Broadbent & Associates, Inc.	LNAPL:	Light Non-Aqueous Phase Liquid
BTEX:	Benzene, Toluene, Ethylbenzene, Total Xylenes	MTBE:	Methyl Tertiary Butyl Ether
1,2-DCA:	1,2-Dichloroethane	TAME:	Tert-Amyl Methyl Ether
DIPE:	Di-Isopropyl Ether	TBA:	Tert-Butyl Alcohol
DO:	Dissolved Oxygen	TOC:	top of casing
EDB:	1,2-Dibromomethane	µg/L:	micrograms per liter
ft/ft:	feet per foot		



SITE

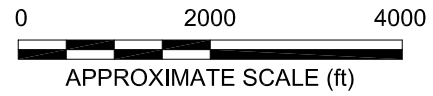
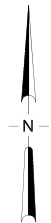
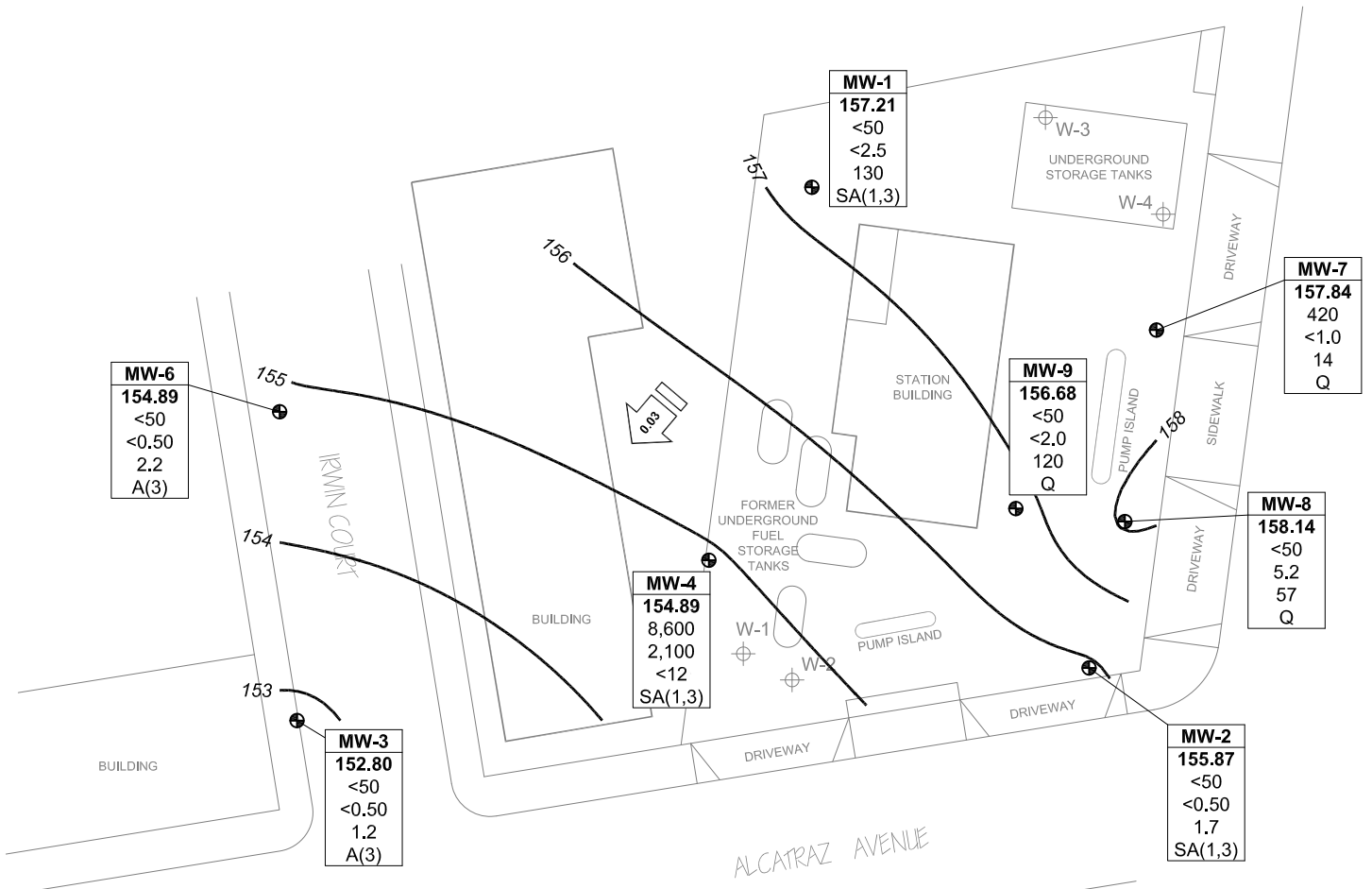


IMAGE SOURCE: USGS



MW-6
154.89
<50
<0.50
2.2
A(3)

MW-3
152.80
<50
<0.50
1.2
A(3)

MW-4
154.89
8,600
2,100
<12
SA(1,3)

MW-1
157.21
<50
<2.5
130
SA(1,3)

MW-9
156.68
<50
<2.0
120
Q

MW-8
158.14
<50
5.2
57
Q

MW-7
157.84
420
<1.0
14
Q

MW-2
155.87
<50
<0.50
1.7
SA(1,3)

MW-5
148.99*
<50
<0.50
<0.50
A(3)

LEGEND

	Monitor Well Location	A(3)	Sampled Annually - Third Quarter
	Tank Pit Monitor Well Location	SA(1,3)	Sampled Semi-Annually - First and Third Quarter
	Groundwater Elevation Contour (Feet Above Site Datum)	Q	Sampled Quarterly
	Groundwater Gradient (ft/ft)	NM	Not Monitored
		NS	Not Sampled
		*	Not used in contouring

WELL	Well Designation
ELEV	Ground-Water Elevation (ft)
GRO	GRO, Benzene and MTBE
BZ	Concentrations (µg/L)
MTBE	
A/SA/Q	Sampling Frequency

NOTE: SITE MAP ADAPTED FROM IT CORPORATION FIGURES. SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.



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

ARCO Service Station #0374, 6407 Telegraph Ave., Oakland, CA

Well ID and Date Monitored	P/NP	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
							GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
ESL - DW							100	1.0	40	30	20	5.0			
ESL - NDW							210	46	130	43	100	1,800			
MW-1															
6/20/2000	--	158.91	7.00	27.00	6.86	152.05	--	--	--	--	--	--	--	--	
9/28/2000	--		7.00	27.00	7.50	151.41	--	--	--	--	--	--	--	--	
12/17/2000	--		7.00	27.00	7.49	151.42	--	--	--	--	--	--	--	--	
3/23/2001	--		7.00	27.00	5.90	153.01	<50	<0.5	<0.5	<0.5	<0.5	2,710	--	--	
6/21/2001	--		7.00	27.00	7.45	151.46	--	--	--	--	--	--	--	--	
9/23/2001	--		7.00	27.00	8.46	150.45	--	--	--	--	--	--	--	--	
12/31/2001	--		7.00	27.00	5.50	153.41	--	--	--	--	--	--	--	--	
3/21/2002	--		7.00	27.00	4.71	154.20	<5,000	<50	<50	<50	<50	2,000	--	--	
4/17/2002	--		7.00	27.00	5.54	153.37	--	--	--	--	--	--	--	--	
8/12/2002	--		7.00	27.00	7.77	151.14	--	--	--	--	--	--	--	--	
12/6/2002	--		7.00	27.00	7.65	151.26	--	--	--	--	--	--	--	--	
1/29/2003	--		7.00	27.00	5.88	153.03	--	--	--	--	--	--	--	--	b
5/23/2003	--		7.00	27.00	5.62	153.29	<10,000	<100	<100	<100	<100	1,600	1.3	7.1	
9/4/2003	--		7.00	27.00	7.85	151.06	--	--	--	--	--	--	--	--	
11/20/2003	P		7.00	27.00	8.17	150.74	1,600	<10	<10	<10	<10	1,500	1.7	6.7	
02/02/2004	P	164.57	7.00	27.00	6.71	157.86	--	--	--	--	--	--	1.0	--	f
05/14/2004	P		7.00	27.00	7.08	157.49	<2,500	<25	<25	<25	<25	1,200	1.4	6.6	
09/02/2004	P		7.00	27.00	8.12	156.45	580	<5.0	<5.0	<5.0	<5.0	660	3.8	6.7	
11/04/2004	P		7.00	27.00	7.38	157.19	1,700	<10	<10	<10	<10	580	6.0	6.5	
02/08/2005	P		7.00	27.00	6.60	157.97	<1,000	<10	<10	<10	<10	610	0.71	6.5	
05/09/2005	P		7.00	27.00	6.84	157.73	540	<5.0	<5.0	<5.0	5.5	620	3.12	6.6	e
08/11/2005	P		7.00	27.00	7.36	157.21	540	<2.5	<2.5	<2.5	4.0	390	0.8	6.6	
11/18/2005	P		7.00	27.00	8.02	156.55	350	<2.5	<2.5	<2.5	<2.5	340	2.6	6.7	e
02/16/2006	P		7.00	27.00	6.44	158.13	350	<2.5	<2.5	<2.5	<2.5	340	1.6	6.7	e
5/30/2006	P		7.00	27.00	6.87	157.70	270	<2.5	<2.5	<2.5	<2.5	420	4.73	6.4	
8/24/2006	P		7.00	27.00	7.75	156.82	95	<5.0	<5.0	<5.0	<5.0	180	0.65	6.9	
11/1/2006	P		7.00	27.00	8.28	156.29	120	<5.0	<5.0	<5.0	<5.0	220	1.65	7.07	
2/7/2007	NP		7.00	27.00	7.40	157.17	120	<5.0	<5.0	<5.0	<5.0	190	1.88	7.45	e

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
ARCO Service Station #0374, 6407 Telegraph Ave., Oakland, CA

Well ID and Date Monitored	P/NP	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
							GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
ESL - DW							100	1.0	40	30	20	5.0			
ESL - NDW							210	46	130	43	100	1,800			
MW-1 Cont.															
5/8/2007	P	164.57	7.00	27.00	6.50	158.07	<500	<5.0	<5.0	<5.0	<5.0	420	1.21	6.94	
8/8/2007	NP		7.00	27.00	8.17	156.40	82	<0.50	<0.50	<0.50	<0.50	110	1.16	7.00	e
11/14/2007	NP		7.00	27.00	8.01	156.56	170	<2.5	<2.5	<2.5	<2.5	210	1.92	6.49	
2/22/2008	P		7.00	27.00	6.00	158.57	<50	<0.50	<0.50	<0.50	<0.50	250	2.57	6.65	
5/24/2008	NP		7.00	27.00	7.58	156.99	<50	<5.0	<5.0	<5.0	<5.0	380	2.28	6.81	
8/21/2008	NP		7.00	27.00	8.60	155.97	<50	<2.5	<2.5	<2.5	<2.5	170	2.16	6.98	
11/19/2008	NP		7.00	27.00	8.88	155.69	<50	<0.50	<0.50	<0.50	<0.50	30	2.12	7.27	
2/23/2009	P		7.00	27.00	6.40	158.17	78	<2.5	<2.5	<2.5	<2.5	240	2.19	6.03	
5/14/2009	P		7.00	27.00	6.67	157.90	53	<0.50	<0.50	<0.50	<0.50	200	1.75	6.69	
8/20/2009	NP		7.00	27.00	8.25	156.32	150	<2.0	<2.0	<2.0	<2.0	170	2.14	6.25	i (GRO)
2/19/2010	P		7.00	27.00	6.07	158.50	<50	<0.50	<0.50	<0.50	<0.50	170	0.92	6.66	
8/10/2010	NP		7.00	27.00	7.58	156.99	<50	<2.5	<2.5	<2.5	<2.5	230	3.86	7.1	
12/16/2010	P	164.45	7.00	27.00	6.64	157.81	<50	<2.0	<2.0	<2.0	<2.0	140	1.20	6.86	j
2/14/2011	NP		7.00	27.00	7.10	157.35	<50	<2.5	<2.5	<2.5	<2.5	170	1.18	6.7	
5/20/2011	--		7.00	27.00	6.38	158.07	--	--	--	--	--	--	--	--	
8/15/2011	NP		7.00	27.00	7.24	157.21	<50	<2.5	<2.5	<2.5	<2.5	130	2.54	6.9	
MW-2															
6/20/2000	--	157.92	7.00	27.00	7.67	150.25	--	--	--	--	--	--	--	--	
9/28/2000	--		7.00	27.00	8.51	149.41	--	--	--	--	--	--	--	--	
12/17/2000	--		7.00	27.00	8.14	149.78	--	--	--	--	--	--	--	--	
3/23/2001	--		7.00	27.00	7.21	150.71	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
6/21/2001	--		7.00	27.00	7.99	149.93	--	--	--	--	--	--	--	--	
9/23/2001	--		7.00	27.00	8.52	149.40	--	--	--	--	--	--	--	--	
12/31/2001	--		7.00	27.00	6.01	151.91	--	--	--	--	--	--	--	--	
3/21/2002	--		7.00	27.00	5.95	151.97	<50	<0.5	<0.5	<0.5	<0.5	45	--	--	
4/17/2002	--		7.00	27.00	6.45	151.47	--	--	--	--	--	--	--	--	
8/12/2002	--		7.00	27.00	8.08	149.84	--	--	--	--	--	--	--	--	
12/6/2002	--		7.00	27.00	8.29	149.63	--	--	--	--	--	--	--	--	

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

ARCO Service Station #0374, 6407 Telegraph Ave., Oakland, CA

Well ID and Date Monitored	P/NP	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
							GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
ESL - DW							100	1.0	40	30	20	5.0			
ESL - NDW							210	46	130	43	100	1,800			
MW-2 Cont.															
1/29/2003	--	157.92	7.00	27.00	7.22	150.70	--	--	--	--	--	--	--	--	b
5/23/2003	--		7.00	27.00	6.85	151.07	<50	<0.50	<0.50	<0.50	<0.50	55	1.4	7.2	
9/4/2003	--		7.00	27.00	7.94	149.98	--	--	--	--	--	--	--	--	
11/20/2003	--		7.00	27.00	8.05	149.87	--	--	--	--	--	--	--	--	
02/02/2004	P	163.46	7.00	27.00	7.00	156.46	74	<0.50	<0.50	<0.50	<0.50	37	1.1	8.9	f
05/14/2004	--		7.00	27.00	7.97	155.49	--	--	--	--	--	--	--	--	
09/02/2004	P		7.00	27.00	8.19	155.27	<250	<2.5	<2.5	<2.5	<2.5	67	2.7	6.9	
11/04/2004	--		7.00	27.00	7.54	155.92	--	--	--	--	--	--	--	--	
02/08/2005	P		7.00	27.00	6.72	156.74	<50	<0.50	<0.50	<0.50	<0.50	30	0.86	6.7	
05/09/2005	--		7.00	27.00	7.16	156.30	--	--	--	--	--	--	--	--	
08/11/2005	P		7.00	27.00	7.85	155.61	<50	<0.50	<0.50	<0.50	<0.50	35	1.0	6.6	
11/18/2005	--		7.00	27.00	8.23	155.23	--	--	--	--	--	--	--	--	
02/16/2006	P		7.00	27.00	6.82	156.64	<50	<0.50	<0.50	<0.50	<0.50	39	1.3	7.0	
5/30/2006	--		7.00	27.00	7.23	156.23	--	--	--	--	--	--	--	--	
8/24/2006	P		7.00	27.00	8.00	155.46	60	<0.50	<0.50	<0.50	<0.50	25	0.90	6.8	
11/1/2006	--		7.00	27.00	8.38	155.08	--	--	--	--	--	--	--	--	
2/7/2007	NP		7.00	27.00	7.88	155.58	<50	0.50	<0.50	<0.50	<0.50	7.2	0.94	7.39	
5/8/2007	--		7.00	27.00	7.28	156.18	--	--	--	--	--	--	--	--	
8/8/2007	NP		7.00	27.00	8.38	155.08	88	3.2	<0.50	<0.50	<0.50	7.2	0.94	7.75	
11/14/2007	--		7.00	27.00	8.10	155.36	--	--	--	--	--	--	--	--	
2/22/2008	P		7.00	27.00	6.75	156.71	<50	<0.50	<0.50	<0.50	<0.50	24	2.18	7.02	
5/24/2008	--		7.00	27.00	7.98	155.48	--	--	--	--	--	--	--	--	
8/21/2008	NP		7.00	27.00	8.58	154.88	<50	2.6	<0.50	<0.50	<0.50	4.9	2.20	7.11	
11/19/2008	--		7.00	27.00	8.66	154.80	--	--	--	--	--	--	--	--	
2/23/2009	P		7.00	27.00	6.67	156.79	74	1.0	<0.50	<0.50	<0.50	24	2.25	6.16	
5/14/2009	--		7.00	27.00	7.02	156.44	--	--	--	--	--	--	--	--	
8/20/2009	NP		7.00	27.00	8.41	155.05	82	2.4	<0.50	<0.50	<0.50	8.4	2.19	6.37	
2/19/2010	NP		7.00	27.00	7.36	156.10	<50	<0.50	<0.50	<0.50	<0.50	22	0.81	6.90	

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

ARCO Service Station #0374, 6407 Telegraph Ave., Oakland, CA

Well ID and Date Monitored	P/NP	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
							GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
ESL - DW							100	1.0	40	30	20	5.0			
ESL - NDW							210	46	130	43	100	1,800			
MW-2 Cont.															
8/10/2010	NP	163.46	7.00	27.00	7.69	155.77	<50	<0.50	<0.50	<0.50	<0.50	23	2.40	7.67	
12/16/2010	P	163.49	7.00	27.00	7.12	156.37	<50	<0.50	<0.50	<0.50	<0.50	17	0.69	7.06	j
2/14/2011	NP		7.00	27.00	7.35	156.14	<50	<0.50	<0.50	<0.50	<0.50	11	0.87	7.0	
5/20/2011	--		7.00	27.00	7.02	156.47	--	--	--	--	--	--	--	--	
8/15/2011	NP		7.00	27.00	7.62	155.87	<50	<0.50	<0.50	<0.50	<0.50	1.7	1.45	7.1	
MW-3															
6/20/2000	--	153.64	7.00	27.00	6.42	147.22	<50	<0.5	<0.5	<0.5	<1.0	<10	--	--	
9/28/2000	--		7.00	27.00	7.31	146.33	--	--	--	--	--	--	--	--	
12/17/2000	--		7.00	27.00	6.45	147.19	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
3/23/2001	--		7.00	27.00	6.01	147.63	--	--	--	--	--	--	--	--	
6/21/2001	--		7.00	27.00	6.80	146.84	110	5.5	<0.5	5.4	4.1	2.5	--	--	
9/23/2001	--		7.00	27.00	7.32	146.32	--	--	--	--	--	--	--	--	
12/31/2001	--		7.00	27.00	4.48	149.16	<50	<0.5	<0.5	<0.5	<0.5	4.9	--	--	
3/21/2002	--		7.00	27.00	4.36	149.28	--	--	--	--	--	--	--	--	
4/17/2002	--		7.00	27.00	5.31	148.33	<50	<0.5	<0.5	<0.5	<0.5	8.7	--	--	
8/12/2002	--		7.00	27.00	7.00	146.64	--	--	--	--	--	--	--	--	
12/6/2002	--		7.00	27.00	7.32	146.32	<50	<0.5	<0.5	<0.5	<0.5	6.2	1.4	6.7	
1/29/2003	--		7.00	27.00	6.07	147.57	--	--	--	--	--	--	--	--	b
5/23/2003	--		7.00	27.00	6.45	147.19	<50	<0.50	<0.50	<0.50	<0.50	1.6	0.9	7.7	
9/4/2003	--		7.00	27.00	6.93	146.71	--	--	--	--	--	--	--	--	c
11/20/2003	--		7.00	27.00	7.04	146.60	--	--	--	--	--	--	--	--	c
02/02/2004	--	159.21	7.00	27.00	5.92	153.29	--	--	--	--	--	--	--	--	f
05/14/2004	--		7.00	27.00	7.52	151.69	--	--	--	--	--	--	--	--	
09/02/2004	P		7.00	27.00	7.19	152.02	<50	<0.50	<0.50	<0.50	<0.50	6.5	9.3	8.9	
11/04/2004	--		7.00	27.00	6.40	152.81	--	--	--	--	--	--	--	--	
02/08/2005	--		7.00	27.00	6.01	153.20	--	--	--	--	--	--	--	--	
05/09/2005	--		7.00	27.00	6.74	152.47	--	--	--	--	--	--	--	--	
08/11/2005	P		7.00	27.00	6.77	152.44	<50	<0.50	<0.50	<0.50	<0.50	11	1.9	6.5	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
ARCO Service Station #0374, 6407 Telegraph Ave., Oakland, CA

Well ID and Date Monitored	P/NP	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
							GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
ESL - DW							100	1.0	40	30	20	5.0			
ESL - NDW							210	46	130	43	100	1,800			
MW-3 Cont.															
11/18/2005	--	159.21	7.00	27.00	7.83	151.38	--	--	--	--	--	--	--	--	
02/16/2006	--		7.00	27.00	7.26	151.95	--	--	--	--	--	--	--	--	
5/30/2006	--		7.00	27.00	5.82	153.39	--	--	--	--	--	--	--	--	
8/24/2006	P		7.00	27.00	7.00	152.21	<50	<0.50	<0.50	<0.50	<0.50	7.6	1.15	6.4	
11/1/2006	--		7.00	27.00	7.50	151.71	--	--	--	--	--	--	--	--	
2/7/2007	--		7.00	27.00	6.90	152.31	--	--	--	--	--	--	--	--	
5/8/2007	--		7.00	27.00	5.95	153.26	--	--	--	--	--	--	--	--	
8/8/2007	NP		7.00	27.00	7.47	151.74	<50	<0.50	<0.50	<0.50	<0.50	1.2	1.21	6.93	
11/14/2007	--		7.00	27.00	7.05	152.16	--	--	--	--	--	--	--	--	
2/22/2008	--		7.00	27.00	5.50	153.71	--	--	--	--	--	--	--	--	
5/24/2008	--		7.00	27.00	7.03	152.18	--	--	--	--	--	--	--	--	
8/21/2008	NP		7.00	27.00	7.80	151.41	<50	<0.50	<0.50	<0.50	<0.50	3.1	2.11	6.84	
11/19/2008	--		7.00	27.00	7.69	151.52	--	--	--	--	--	--	--	--	
2/23/2009	--		7.00	27.00	7.28	151.93	--	--	--	--	--	--	--	--	
5/14/2009	--		7.00	27.00	6.17	153.04	--	--	--	--	--	--	--	--	
8/20/2009	NP		7.00	27.00	7.38	151.83	<50	<0.50	<0.50	<0.50	<0.50	2.2	2.05	7.01	
2/19/2010	--		7.00	27.00	5.31	153.90	--	--	--	--	--	--	--	--	
8/10/2010	NP		7.00	27.00	7.12	152.09	<50	<0.50	<0.50	<0.50	<0.50	1.6	1.27	7.33	
12/16/2010	--		7.00	27.00	5.65	153.56	--	--	--	--	--	--	--	--	j
2/14/2011	--		7.00	27.00	6.20	153.01	--	--	--	--	--	--	--	--	
5/20/2011	--		7.00	27.00	5.77	153.44	--	--	--	--	--	--	--	--	
8/15/2011	P		7.00	27.00	6.41	152.80	<50	<0.50	<0.50	<0.50	<0.50	1.2	1.04	7.0	
MW-4															
6/20/2000	--	156.53	7.00	27.00	7.50	149.03	20,000	5,100	440	1,000	1,700	<250	--	--	c
9/28/2000	--		7.00	27.00	8.20	148.33	--	--	--	--	--	--	--	--	
12/17/2000	--		7.00	27.00	8.11	148.42	4,320	1,240	<20	27.2	249	<100	--	--	
3/23/2001	--		7.00	27.00	6.69	149.84	--	--	--	--	--	--	--	--	
6/21/2001	--		7.00	27.00	8.01	148.52	2,800	470	16	19	160	130	--	--	

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ARCO Service Station #0374, 6407 Telegraph Ave., Oakland, CA

Well ID and Date Monitored	P/NP	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
							GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
ESL - DW							100	1.0	40	30	20	5.0			
ESL - NDW							210	46	130	43	100	1,800			
MW-4 Cont.															
9/23/2001	--	156.53	7.00	27.00	8.91	147.62	--	--	--	--	--	--	--	--	
12/31/2001	--		7.00	27.00	4.42	152.11	4,600	1,500	<i>100</i>	160	210	<i>160</i>	--	--	
3/21/2002	--		7.00	27.00	4.98	151.55	--	--	--	--	--	--	--	--	
4/17/2002	--		7.00	27.00	6.23	150.30	7,100	2,200	<i>110</i>	290	450	<250	--	--	
8/12/2002	--		7.00	27.00	8.24	148.29	--	--	--	--	--	--	--	--	
12/6/2002	--		7.00	27.00	8.42	148.11	1,500	410	6.8	20	29	43	1.1	6.7	a
1/29/2003	--		7.00	27.00	7.20	149.33	--	--	--	--	--	--	--	--	b
5/23/2003	--		7.00	27.00	7.18	149.35	<5,000	1,300	89	210	260	<50	1.4	6.9	
9/4/2003	--		7.00	27.00	8.15	148.38	--	--	--	--	--	--	--	--	c
11/20/2003	--		7.00	27.00	8.73	147.80	--	--	--	--	--	--	--	--	c
02/02/2004	P	163.25	7.00	27.00	6.25	157.00	980	280	21	29	38	29	1.4	10.6	c, f, g
05/14/2004	--		7.00	27.00	8.38	154.87	--	--	--	--	--	--	--	--	g
09/02/2004	P		7.00	27.00	8.36	154.89	260	<i>11</i>	<1.0	5.5	14	28	2.4	7.4	g
11/04/2004	--		7.00	27.00	7.71	155.54	--	--	--	--	--	--	--	--	c, g
02/08/2005	P		7.00	27.00	6.27	156.98	7,500	1,700	320	480	920	45	0.65	6.5	g
05/09/2005	--		7.00	27.00	5.90	157.35	--	--	--	--	--	--	--	--	g
08/11/2005	P		7.00	27.00	7.96	155.29	3,100	1,100	<i>41</i>	160	110	32	0.6	6.5	g
11/18/2005	--		7.00	27.00	8.57	154.68	--	--	--	--	--	--	--	--	g
02/16/2006	P		7.00	27.00	6.28	156.97	9,400	1,800	<i>130</i>	600	420	35	0.5	6.8	g
5/30/2006	--	162.47	7.00	27.00	7.02	155.45	--	--	--	--	--	--	--	--	g
8/24/2006	P		7.00	27.00	8.26	154.21	3,600	1,400	21	110	70	39	1.00	6.8	
11/1/2006	--		7.00	27.00	8.67	153.80	--	--	--	--	--	--	--	--	
2/7/2007	NP		7.00	27.00	8.02	154.45	3,100	570	17	170	110	67	0.95	7.07	
5/8/2007	--		7.00	27.00	7.03	155.44	--	--	--	--	--	--	--	--	
8/8/2007	NP		7.00	27.00	8.60	153.87	2,900	630	22	67	57	72	0.93	6.79	
11/14/2007	--		7.00	27.00	8.53	153.94	--	--	--	--	--	--	--	--	
2/22/2008	P		7.00	27.00	6.25	156.22	3,900	880	39	180	92	70	2.31	6.87	
5/24/2008	--		7.00	27.00	--	--	--	--	--	--	--	--	--	--	d

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

ARCO Service Station #0374, 6407 Telegraph Ave., Oakland, CA

Well ID and Date Monitored	P/NP	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
							GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
ESL - DW							100	1.0	40	30	20	5.0			
ESL - NDW							210	46	130	43	100	1,800			
MW-4 Cont.															
8/21/2008	NP	162.47	7.00	27.00	8.96	153.51	3,700	1,100	26	85	130	53	2.26	6.80	
11/19/2008	--		7.00	27.00	9.20	153.27	--	--	--	--	--	--	--	--	
2/23/2009	P		7.00	27.00	6.35	156.12	3,000	220	9.1	23	19	39	2.21	6.51	
5/14/2009	--		7.00	27.00	7.00	155.47	--	--	--	--	--	--	--	--	
8/20/2009	NP		7.00	27.00	8.05	154.42	5,700	1,100	35	110	100	23	2.17	6.81	
2/19/2010	P		7.00	27.00	5.71	156.76	12,000	1,200	120	230	390	<5.0	0.81	6.70	i
8/10/2010	NP		7.00	27.00	7.59	154.88	9,700	1,500	120	400	400	<20	3.81	6.8	
12/16/2010	P	162.48	7.00	27.00	6.83	155.65	15,000	1,800	82	270	210	<25	0.49	6.81	j
2/14/2011	NP		7.00	27.00	7.33	155.15	260	<0.50	<0.50	2.7	11	13	0.80	7.10	
5/20/2011	--		7.00	27.00	6.89	155.59	--	--	--	--	--	--	--	--	
8/15/2011	P		7.00	27.00	7.59	154.89	8,600	2,100	86	250	210	<12	1.02	7.0	l
MW-5															
6/20/2000	--	151.33	10.00	23.00	7.84	143.49	<50	<0.5	<0.5	<0.5	<1.0	<10	--	--	
9/28/2000	--		10.00	23.00	8.37	142.96	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
12/17/2000	--		10.00	23.00	8.36	142.97	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
3/23/2001	--		10.00	23.00	7.55	143.78	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
6/21/2001	--		10.00	23.00	8.20	143.13	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
9/23/2001	--		10.00	23.00	8.68	142.65	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
12/31/2001	--		10.00	23.00	7.57	143.76	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
3/21/2002	--		10.00	23.00	6.12	145.21	<50	<0.5	<0.5	<0.5	<0.5	3.2	--	--	
4/17/2002	--		10.00	23.00	6.61	144.72	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
8/12/2002	--		10.00	23.00	8.14	143.19	<50	<0.5	<0.5	<0.5	<0.5	<2.5	4.1	7.6	
12/6/2002	--		10.00	23.00	8.65	142.68	<50	<0.5	<0.5	<0.5	<0.5	<2.5	1.1	6.8	
1/29/2003	--		10.00	23.00	7.22	144.11	<50	<0.5	<0.5	<0.5	<0.5	<0.50	1	6.6	b
5/23/2003	--		10.00	23.00	7.31	144.02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	6.6	
9/4/2003	--		10.00	23.00	9.50	141.83	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.2	6.7	
11/20/2003	--		10.00	23.00	8.31	143.02	--	--	--	--	--	--	--	--	
02/02/2004	--		10.00	23.00	6.92	144.41	--	--	--	--	--	--	--	--	c, f, h

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Well ID and Date Monitored	P/NP	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
							GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
ESL - DW							100	1.0	40	30	20	5.0			
ESL - NDW							210	46	130	43	100	1,800			
MW-5 Cont.															
05/14/2004	--	151.33	10.00	23.00	8.56	142.77	--	--	--	--	--	--	--	--	h
09/02/2004	P		10.00	23.00	8.79	142.54	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.5	6.8	h
11/04/2004	--		10.00	23.00	8.33	143.00	--	--	--	--	--	--	--	--	c, h
02/08/2005	--		10.00	23.00	7.28	144.05	--	--	--	--	--	--	--	--	h
05/09/2005	--		10.00	23.00	8.19	143.14	--	--	--	--	--	--	--	--	h
08/11/2005	P		10.00	23.00	8.39	142.94	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	6.6	h
11/18/2005	--		10.00	23.00	11.25	140.08	--	--	--	--	--	--	--	--	h
02/16/2006	--		10.00	23.00	9.22	142.11	--	--	--	--	--	--	--	--	h
5/30/2006	--		10.00	23.00	7.52	143.81	--	--	--	--	--	--	--	--	h
8/24/2006	P		10.00	23.00	7.95	143.38	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.60	6.6	
11/1/2006	--		10.00	23.00	8.32	143.01	--	--	--	--	--	--	--	--	
2/7/2007	--		10.00	23.00	8.25	143.08	--	--	--	--	--	--	--	--	
5/8/2007	--		10.00	23.00	7.60	143.73	--	--	--	--	--	--	--	--	
8/8/2007	P		10.00	23.00	8.12	143.21	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.26	7.31	
11/14/2007	--		10.00	23.00	9.10	142.23	--	--	--	--	--	--	--	--	
2/22/2008	--		10.00	23.00	7.48	143.85	--	--	--	--	--	--	--	--	
5/24/2008	--		10.00	23.00	8.12	143.21	--	--	--	--	--	--	--	--	
8/21/2008	P		10.00	23.00	8.65	142.68	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.14	6.54	
11/19/2008	--		10.00	23.00	11.86	139.47	--	--	--	--	--	--	--	--	
2/23/2009	--		10.00	23.00	10.20	141.13	--	--	--	--	--	--	--	--	
5/14/2009	--		10.00	23.00	9.63	141.70	--	--	--	--	--	--	--	--	
8/20/2009	P		10.00	23.00	8.52	142.81	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.01	6.47	
2/19/2010	--		10.00	23.00	--	--	--	--	--	--	--	--	--	--	d
8/10/2010	P		10.00	23.00	8.05	143.28	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.15	7.1	
12/16/2010	--	156.90	10.00	23.00	8.10	148.80	--	--	--	--	--	--	--	--	j
2/14/2011	--		10.00	23.00	--	--	--	--	--	--	--	--	--	--	d
5/20/2011	--		10.00	23.00	--	--	--	--	--	--	--	--	--	--	d
8/15/2011	P		10.00	23.00	7.91	148.99	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.46	7.4	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
ARCO Service Station #0374, 6407 Telegraph Ave., Oakland, CA

Well ID and Date Monitored	P/NP	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
							GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
ESL - DW							100	1.0	40	30	20	5.0			
ESL - NDW							210	46	130	43	100	1,800			
MW-6															
6/20/2000	--	153.84	5.00	15.00	4.79	149.05	--	--	--	--	--	--	--	--	
9/28/2000	--		5.00	15.00	5.39	148.45	--	--	--	--	--	--	--	--	
12/17/2000	--		5.00	15.00	4.71	149.13	--	--	--	--	--	--	--	--	
3/23/2001	--		5.00	15.00	4.69	149.15	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
6/21/2001	--		5.00	15.00	5.22	148.62	--	--	--	--	--	--	--	--	
9/23/2001	--		5.00	15.00	5.40	148.44	--	--	--	--	--	--	--	--	
12/31/2001	--		5.00	15.00	3.95	149.89	--	--	--	--	--	--	--	--	
3/21/2002	--		5.00	15.00	2.94	150.90	<50	<0.5	<0.5	<0.5	<0.5	5.2	--	--	
4/17/2002	--		5.00	15.00	5.11	148.73	--	--	--	--	--	--	--	--	
8/12/2002	--		5.00	15.00	5.23	148.61	--	--	--	--	--	--	--	--	
12/6/2002	--		5.00	15.00	5.29	148.55	--	--	--	--	--	--	--	--	
1/29/2003	--		5.00	15.00	4.79	149.05	--	--	--	--	--	--	--	--	b
5/23/2003	--		5.00	15.00	4.31	149.53	<50	<0.50	<0.50	<0.50	<0.50	9.4	1	6.7	
09/04/03	--		5.00	15.00	--	--	--	--	--	--	--	--	--	--	d
11/20/2003	--		5.00	15.00	6.31	147.53	--	--	--	--	--	--	--	--	
02/02/2004	--	159.41	5.00	15.00	4.78	154.63	--	--	--	--	--	--	--	--	f
05/14/2004	--		5.00	15.00	6.29	153.12	--	--	--	--	--	--	--	--	
09/02/2004	--		5.00	15.00	5.79	153.62	--	--	--	--	--	--	--	--	d
11/04/2004	--		5.00	15.00	--	--	--	--	--	--	--	--	--	--	d
02/08/2005	--		5.00	15.00	5.13	154.28	--	--	--	--	--	--	--	--	
05/09/2005	--		5.00	15.00	4.52	154.89	--	--	--	--	--	--	--	--	
08/11/2005	P		5.00	15.00	5.02	154.39	<50	<0.50	<0.50	<0.50	<0.50	7.9	2.1	6.6	
11/18/2005	--		5.00	15.00	6.31	153.10	--	--	--	--	--	--	--	--	
02/16/2006	--		5.00	15.00	4.24	155.17	--	--	--	--	--	--	--	--	
5/30/2006	--		5.00	15.00	4.45	154.96	--	--	--	--	--	--	--	--	
8/24/2006	P		5.00	15.00	5.18	154.23	<50	<0.50	<0.50	<0.50	<0.50	12	3.4	6.8	
11/1/2006	--		5.00	15.00	6.05	153.36	--	--	--	--	--	--	--	--	
2/7/2007	--		5.00	15.00	5.00	154.41	--	--	--	--	--	--	--	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
ARCO Service Station #0374, 6407 Telegraph Ave., Oakland, CA

Well ID and Date Monitored	P/NP	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
							GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
ESL - DW							100	1.0	40	30	20	5.0			
ESL - NDW							210	46	130	43	100	1,800			
MW-6 Cont.															
5/8/2007	--	159.41	5.00	15.00	4.30	155.11	--	--	--	--	--	--	--	--	
8/8/2007	NP		5.00	15.00	5.51	153.90	<50	<0.50	<0.50	<0.50	<0.50	0.57	2.94	6.87	
11/14/2007	--		5.00	15.00	5.38	154.03	--	--	--	--	--	--	--	--	
2/22/2008	--		5.00	15.00	4.70	154.71	--	--	--	--	--	--	--	--	
5/24/2008	--		5.00	15.00	5.25	154.16	--	--	--	--	--	--	--	--	
8/21/2008	NP		5.00	15.00	6.14	153.27	<50	<0.50	<0.50	<0.50	<0.50	1.9	1.99	7.13	
11/19/2008	--		5.00	15.00	5.94	153.47	--	--	--	--	--	--	--	--	
2/23/2009	--		5.00	15.00	5.00	154.41	--	--	--	--	--	--	--	--	
5/14/2009	--		5.00	15.00	4.60	154.81	--	--	--	--	--	--	--	--	
8/20/2009	NP		5.00	15.00	5.65	153.76	<50	<0.50	<0.50	<0.50	<0.50	2.0	1.98	6.81	
2/19/2010	--		5.00	15.00	7.28	152.13	--	--	--	--	--	--	--	--	
8/10/2010	NP		5.00	15.00	5.02	154.39	<50	<0.50	<0.50	<0.50	<0.50	4.3	1.99	6.93	
12/16/2010	--		5.00	15.00	4.50	154.91	--	--	--	--	--	--	--	--	j
2/14/2011	--		5.00	15.00	4.80	154.61	--	--	--	--	--	--	--	--	
5/20/2011	--		5.00	15.00	4.29	155.12	--	--	--	--	--	--	--	--	
8/15/2011	P		5.00	15.00	4.52	154.89	<50	<0.50	<0.50	<0.50	<0.50	2.2	1.55	7.1	
MW-7															
12/16/2010	P	164.80	5.00	20.00	6.52	158.28	700	<0.50	<0.50	15	32	62	--	7.08	j
2/14/2011	NP		5.00	20.00	6.77	158.03	7,100	1,700	98	260	210	<20	1.02	6.8	
5/20/2011	NP		5.00	20.00	5.84	158.96	570	<0.50	<0.50	37	25	4.6	1.66	6.7	1 (GRO)
8/15/2011	P		5.00	20.00	6.96	157.84	420	<1.0	<1.0	49	6.7	14	0.58	6.9	
MW-8															
12/16/2010	P	164.14	5.00	20.00	6.85	157.29	520	43	<0.50	4.1	21	150	0.46	7.12	j
2/14/2011	NP		5.00	20.00	7.30	156.84	<50	<2.0	<2.0	<2.0	<2.0	110	1.07	6.7	
5/20/2011	NP		5.00	20.00	6.88	157.26	<50	<2.0	<2.0	<2.0	<2.0	88	1.35	6.5	
8/15/2011	P		5.00	20.00	6.00	158.14	<50	5.2	<1.0	9.7	<1.0	57	0.51	6.7	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
ARCO Service Station #0374, 6407 Telegraph Ave., Oakland, CA

Well ID and Date Monitored	P/NP	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
							GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
ESL - DW							100	1.0	40	30	20	5.0			
ESL - NDW							210	46	130	43	100	1,800			
MW-9															
12/16/2010	P	163.77	5.00	20.00	6.63	157.14	330	18	<0.50	11	38	390	0.57	6.97	j
2/14/2011	NP		5.00	20.00	6.85	156.92	<50	<4.0	<4.0	<4.0	<4.0	270	0.98	6.9	
5/20/2011	NP		5.00	20.00	6.39	157.38	66	<4.0	<4.0	<4.0	<4.0	280	1.64	6.7	1 (GRO)
8/15/2011	NP		5.00	20.00	7.09	156.68	<50	<2.0	<2.0	<2.0	<2.0	120	0.88	7.1	

Symbols & Abbreviations:

-- = Not analyzed/applicable/measured/available
< = Not detected at or above laboratory reporting limit
DO = Dissolved oxygen
DTW = Depth to water in ft below TOC
ft bgs = Feet below ground surface
GRO = Gasoline range organics
GWE = Groundwater elevation measured in ft
mg/L = Milligrams per liter
MTBE = Methyl tert-butyl ether
NP = Well was not purged prior to sampling
P = Well was purged prior to sampling
TOC = Top of casing measured in ft
TPH-g = Total petroleum hydrocarbons as gasoline
µg/L = Micrograms per liter
BTEX = Benzene, toluene, ethylbenzene and xylenes

ESL - DW = Environmental Screening Levels (ESLs), shallow soils (<3 meters bgs), groundwater is a current or potential source of drinking water, for residential land use. Ref. California Regional Water Quality Control Board, San Francisco Bay Region (CRWQCB-SFBR), Screening for Environmental Concerns at Sites with Contaminated Soil & Groundwater, Interim Final-November 2007 (Revised May 2008).

ESL - NDW = Environmental Screening Levels (ESLs), shallow soils (<3 meters bgs), groundwater is NOT a current or potential source of drinking water, for residential land use. Ref. California Regional Water Quality Control Board, San Francisco Bay Region (CRWQCB-SFBR), Screening for Environmental Concerns at Sites with Contaminated Soil & Groundwater, Interim Final-November 2007 (Revised May 2008).

NE = ESL not established

Footnotes:

a = Chromatogram pattern: Gasoline C6-C10 for GRO/TPH-g
b = Beginning this quarter, groundwater samples were analyzed by EPA method 8260B for TPH-g, BTEX, and fuel oxygenates
c = Wells gauged with ORC sock in well
d = Well inaccessible
e = The hydrocarbon result for GRO was partly due to individual peaks in the quantitative range
f = Well resurveyed on 1/27/2004 to NAVD88
g = Upon review of survey data (1/27/2004), TOC elevation for MW-4 is actually 162.47 ft.
h = Upon review of survey data (1/27/2004), MW-5 was not surveyed from the TOC. MW-5 was surveyed from the pavement due to inaccessibility to the TOC. Therefore, survey data for MW-5 from the TOC is unavailable. Historic data prior to 5/30/2006 (change in consultant) not modified
i = Quantitation of unknown hydrocarbon(s) in sample based on gasoline
j = Surveyed 12/9/2010
k = Grab groundwater sample
l = Quantitated against gasoline

Notes:

Beginning in the fourth quarter 2003, the laboratory modified the reported analyte list. TPH-g was changed to GRO. The resulting data may be impacted by the potential of non-TPH-g analytes within the requested fuel range resulting in a higher concentration being reported

Beginning in the second quarter 2004, the carbon range for GRO was changed from C6-C10 to C4-C12

Values for DO and pH were obtained through field measurements

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

GRO analysis was completed by EPA method 8260B (C4-C12) for samples collected from the time period April 2006 through February 4, 2008. The analysis for GRO was changed to EPA method 8015B (C6-C12) for samples collected from the time period February 5, 2008 through the present

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
ARCO Service Station #0374, 6407 Telegraph Ave., Oakland, CA

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
ESL - DW	NE	12	5.0	NE	NE	NE	0.5	0.05	
ESL - NDW	NE	18,000	1,800	NE	NE	NE	200	150	
MW-1									
3/23/2001	--	--	2,710	--	--	--	--	--	
3/21/2002	--	--	2,000	--	--	--	--	--	
5/23/2003	<20,000	<4,000	1,600	<100	<100	<100	--	--	
11/20/2003	<2,000	<400	1,500	<10	<10	<10	--	--	a
05/14/2004	<5,000	<1,000	1,200	<25	<25	<25	<25	<25	
09/02/2004	<1,000	<200	660	<5.0	<5.0	<5.0	<5.0	<5.0	
11/04/2004	<2,000	<400	580	<10	<10	<10	<10	<10	
02/08/2005	<2,000	<400	610	<10	<10	<10	<10	<10	
05/09/2005	<1,000	<200	620	<5.0	<5.0	<5.0	<5.0	<5.0	a
08/11/2005	<500	250	390	<2.5	<2.5	2.6	<2.5	<2.5	a
11/18/2005	<500	<100	340	<2.5	<2.5	<2.5	<2.5	<2.5	a
02/16/2006	<1,500	<100	340	<2.5	<2.5	<2.5	<2.5	<2.5	
5/30/2006	<1,500	<100	420	<2.5	<2.5	<2.5	<2.5	<2.5	a
8/24/2006	<3,000	<200	180	<5.0	<5.0	<5.0	<5.0	<5.0	
11/1/2006	<3,000	<200	220	<5.0	<5.0	<5.0	<5.0	<5.0	a
2/7/2007	<3,000	<200	190	<5.0	<5.0	<5.0	<5.0	<5.0	
5/8/2007	<3,000	<200	420	<5.0	<5.0	<5.0	<5.0	<5.0	
8/8/2007	<300	<20	110	<0.50	<0.50	<0.50	<0.50	<0.50	
11/14/2007	<1,500	<100	210	<2.5	<2.5	<2.5	<2.5	<2.5	
2/22/2008	<300	<10	250	<0.50	<0.50	1.5	<0.50	<0.50	
5/24/2008	<3,000	<100	380	<5.0	<5.0	<5.0	<5.0	<5.0	
8/21/2008	<1,500	<50	170	<2.5	<2.5	<2.5	<2.5	<2.5	
11/19/2008	<300	<10	30	<0.50	<0.50	<0.50	<0.50	<0.50	
2/23/2009	<1,500	<50	240	<2.5	<2.5	<2.5	<2.5	<2.5	
5/14/2009	<300	<10	200	<0.50	<0.50	1.3	<0.50	<0.50	
8/20/2009	<1,200	<40	170	<2.0	<2.0	<2.0	<2.0	<2.0	
2/19/2010	<300	<10	170	<0.50	<0.50	1.2	<0.50	<0.50	
8/10/2010	<1,500	<50	230	<2.5	<2.5	<2.5	<2.5	<2.5	
12/16/2010	<1,200	<40	140	<2.0	<2.0	<2.0	<2.0	<2.0	

Table 2. Summary of Fuel Additives Analytical Data
ARCO Service Station #0374, 6407 Telegraph Ave., Oakland, CA

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
ESL - DW	NE	12	5.0	NE	NE	NE	0.5	0.05	
ESL - NDW	NE	18,000	1,800	NE	NE	NE	200	150	
MW-1 Cont.									
2/14/2011	<1,500	<50	170	<2.5	<2.5	<2.5	<2.5	<2.5	
8/15/2011	<1,500	<50	130	<2.5	<2.5	<2.5	<2.5	<2.5	
MW-2									
3/23/2001	--	--	<2.5	--	--	--	--	--	
3/21/2002	--	--	45	--	--	--	--	--	
5/23/2003	<100	<20	55	<0.50	<0.50	0.53	--	--	
02/02/2004	<100	<20	37	<0.50	<0.50	<0.50	<0.50	<0.50	
09/02/2004	<500	<100	67	<2.5	<2.5	<2.5	<2.5	<2.5	
02/08/2005	<100	<20	30	<0.50	<0.50	<0.50	<0.50	<0.50	
08/11/2005	<100	<20	35	<0.50	<0.50	<0.50	<0.50	<0.50	a
02/16/2006	<300	<20	39	<0.50	<0.50	<0.50	<0.50	<0.50	
8/24/2006	<300	<20	25	<0.50	<0.50	<0.50	<0.50	<0.50	
2/7/2007	<300	<20	7.2	<0.50	<0.50	<0.50	<0.50	<0.50	
8/8/2007	<300	<20	7.2	<0.50	<0.50	<0.50	<0.50	<0.50	
2/22/2008	<300	<10	24	<0.50	<0.50	<0.50	<0.50	<0.50	
8/21/2008	<300	<10	4.9	<0.50	<0.50	<0.50	<0.50	<0.50	
2/23/2009	<300	<10	24	<0.50	<0.50	<0.50	<0.50	<0.50	
8/20/2009	<300	<10	8.4	<0.50	<0.50	<0.50	<0.50	<0.50	
2/19/2010	<300	<10	22	<0.50	<0.50	<0.50	<0.50	<0.50	
8/10/2010	<300	<10	23	<0.50	<0.50	<0.50	<0.50	<0.50	
12/16/2010	<300	<10	17	<0.50	<0.50	<0.50	<0.50	<0.50	
2/14/2011	<300	<10	11	<0.50	<0.50	<0.50	<0.50	<0.50	
8/15/2011	<300	<10	1.7	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-3									
6/20/2000	--	--	<10	--	--	--	--	--	
12/17/2000	--	--	<2.5	--	--	--	--	--	
6/21/2001	--	--	2.5	--	--	--	--	--	
12/31/2001	--	--	4.9	--	--	--	--	--	

Table 2. Summary of Fuel Additives Analytical Data
ARCO Service Station #0374, 6407 Telegraph Ave., Oakland, CA

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
ESL - DW	NE	12	5.0	NE	NE	NE	0.5	0.05	
ESL - NDW	NE	18,000	1,800	NE	NE	NE	200	150	
MW-3 Cont.									
4/17/2002	--	--	8.7	--	--	--	--	--	
12/6/2002	--	--	6.2	--	--	--	--	--	
5/23/2003	<100	<20	1.6	<0.50	<0.50	<0.50	--	--	
09/02/2004	<100	<20	6.5	<0.50	<0.50	<0.50	<0.50	<0.50	
08/11/2005	<100	<20	11	<0.50	<0.50	<0.50	<0.50	<0.50	a
8/24/2006	<300	<20	7.6	<0.50	<0.50	<0.50	<0.50	<0.50	
8/8/2007	<300	<20	1.2	<0.50	<0.50	<0.50	<0.50	<0.50	
8/21/2008	<300	<10	3.1	<0.50	<0.50	<0.50	<0.50	<0.50	
8/20/2009	<300	<10	2.2	<0.50	<0.50	<0.50	<0.50	<0.50	
8/10/2010	<300	<10	1.6	<0.50	<0.50	<0.50	<0.50	<0.50	
8/15/2011	<300	<10	1.2	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-4									
6/20/2000	--	--	<250	--	--	--	--	--	
12/17/2000	--	--	<100	--	--	--	--	--	
6/21/2001	--	--	130	--	--	--	--	--	
12/31/2001	--	--	160	--	--	--	--	--	
4/17/2002	--	--	<250	--	--	--	--	--	
12/6/2002	--	--	43	--	--	--	--	--	
5/23/2003	<10,000	<2,000	<50	<50	<50	<50	--	--	
02/02/2004	<500	<100	29	<2.5	<2.5	2.6	<2.5	<2.5	
09/02/2004	<200	<40	28	<1.0	<1.0	<1.0	<1.0	<1.0	
02/08/2005	<5,000	<1,000	45	<25	<25	<25	<25	<25	
08/11/2005	<2,000	<400	32	<10	<10	<10	<10	<10	
02/16/2006	<6,000	<400	35	<10	<10	<10	<10	<10	
8/24/2006	<1,500	<100	39	<2.5	<2.5	<2.5	<2.5	<2.5	
2/7/2007	<6,000	<400	67	<10	<10	<10	<10	<10	
8/8/2007	<6,000	<400	72	<10	<10	<10	<10	<10	
2/22/2008	<6,000	<200	70	<10	<10	<10	<10	<10	
8/21/2008	<12,000	<400	53	<20	<20	<20	<20	<20	

Table 2. Summary of Fuel Additives Analytical Data
ARCO Service Station #0374, 6407 Telegraph Ave., Oakland, CA

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
ESL - DW	NE	12	5.0	NE	NE	NE	0.5	0.05	
ESL - NDW	NE	18,000	1,800	NE	NE	NE	200	150	
MW-4 Cont.									
2/23/2009	<3,000	<100	39	<5.0	<5.0	<5.0	<5.0	<5.0	
8/20/2009	<12,000	<400	23	<20	<20	<20	<20	<20	
2/19/2010	<3,000	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
8/10/2010	<12,000	<400	<20	<20	<20	<20	<20	<20	
12/16/2010	<15,000	<500	<25	<25	<25	<25	<25	<25	
2/14/2011	<300	<10	13	<0.50	<0.50	<0.50	<0.50	<0.50	
8/15/2011	<7,500	<250	<12	<12	<12	<12	<12	<12	
MW-5									
6/20/2000	--	--	<10	--	--	--	--	--	
9/28/2000	--	--	<2.5	--	--	--	--	--	
12/17/2000	--	--	<2.5	--	--	--	--	--	
3/23/2001	--	--	<2.5	--	--	--	--	--	
6/21/2001	--	--	<2.5	--	--	--	--	--	
9/23/2001	--	--	<2.5	--	--	--	--	--	
12/31/2001	--	--	<2.5	--	--	--	--	--	
3/21/2002	--	--	3.2	--	--	--	--	--	
4/17/2002	--	--	<2.5	--	--	--	--	--	
8/12/2002	--	--	<2.5	--	--	--	--	--	
12/6/2002	--	--	<2.5	--	--	--	--	--	
1/29/2003	<40	<20	<0.50	<0.50	<0.50	<0.50	--	--	
5/23/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
9/4/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/02/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
08/11/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/24/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/8/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/21/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/20/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/10/2010	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 2. Summary of Fuel Additives Analytical Data
ARCO Service Station #0374, 6407 Telegraph Ave., Oakland, CA

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
ESL - DW	NE	12	5.0	NE	NE	NE	0.5	0.05	
ESL - NDW	NE	18,000	1,800	NE	NE	NE	200	150	
MW-5 Cont.									
8/15/2011	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-6									
3/23/2001	--	--	<2.5	--	--	--	--	--	
3/21/2002	--	--	5.2	--	--	--	--	--	
5/23/2003	<100	<20	9.4	<0.50	<0.50	<0.50	--	--	
08/11/2005	<100	<20	7.9	<0.50	<0.50	<0.50	<0.50	<0.50	a
8/24/2006	<300	<20	12	<0.50	<0.50	<0.50	<0.50	<0.50	
8/8/2007	<300	<20	0.57	<0.50	<0.50	<0.50	<0.50	<0.50	
8/21/2008	<300	<10	1.9	<0.50	<0.50	<0.50	<0.50	<0.50	
8/20/2009	<300	<10	2.0	<0.50	<0.50	<0.50	<0.50	<0.50	
8/10/2010	<300	<10	4.3	<0.50	<0.50	<0.50	<0.50	<0.50	
8/15/2011	<300	<10	2.2	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-7									
12/16/2010	<300	<10	62	<0.50	<0.50	<0.50	<0.50	<0.50	
2/14/2011	<1,2000	<400	<20	<20	<20	<20	<20	<20	
5/20/2011	<300	<10	4.6	<0.50	<0.50	<0.50	<0.50	<0.50	
8/15/2011	<600	<20	14	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-8									
12/16/2010	<300	<10	150	<0.50	<0.50	1.7	<0.50	<0.50	
2/14/2011	<1,200	<40	110	<2.0	<2.0	<2.0	<2.0	<2.0	
5/20/2011	<1,200	<40	88	<2.0	<2.0	<2.0	<2.0	<2.0	
8/15/2011	<600	<20	57	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-9									
12/16/2010	<300	40	390	<0.50	<0.50	4.1	<0.50	<0.50	
2/14/2011	<2,400	<80	270	<4.0	<4.0	<4.0	<4.0	<4.0	
5/20/2011	<2,400	<80	280	<4.0	<4.0	<4.0	<4.0	<4.0	
8/15/2011	<1,200	<40	120	<2.0	<2.0	<2.0	<2.0	<2.0	

Symbols & Abbreviations:

-- = Not analyzed/applicable/measured/available

< = Not detected at or above the laboratory reporting limit

1,2-DCA = 1,2-Dichloroethane

DIPE = Di-isopropyl ether

EDB = 1,2-Dibromoethane

ETBE = Ethyl tert-butyl ether

MTBE = Methyl tert-butyl ether

TAME = tert-Amyl methyl ether

TBA = tert-Butyl alcohol

µg/L = Micrograms per Liter

ESL - DW = Environmental Screening Levels (ESLs), shallow soils (<3 meters bgs), groundwater is a current or potential source of drinking water, for residential land use. Ref. California Regional Water Quality Control Board, San Francisco Bay Region (CRWQCB-SFBR), Screening for Environmental Concerns at Sites with Contaminated Soil & Groundwater, Interim Final-November 2007 (Revised May 2008).

ESL - NDW = Environmental Screening Levels (ESLs), shallow soils (<3 meters bgs), groundwater is NOT a current or potential source of drinking water, for residential land use. Ref. California Regional Water Quality Control Board, San Francisco Bay Region (CRWQCB-SFBR), Screening for Environmental Concerns at Sites with Contaminated Soil & Groundwater, Interim Final-November 2007 (Revised May 2008).

NE = ESL not established

Footnotes:

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

Notes:

All volatile organic compounds analyzed using EPA Method 8260B

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 Groundwater Gradient - Direction and Magnitude
ARCO Service Station #0374, 6407 Telegraph Ave., Oakland, CA

Date Measured	Approximate Gradient Direction	Approximate Gradient Magnitude (ft/ft)
1/31/1996	Southwest	0.04
4/10/1996	Southwest	0.04
7/16/1996	Southwest	0.03
10/14/1996	Southwest	0.03
3/27/1997	Southwest	0.04
5/27/1997	Southwest	0.03
8/12/1997	Southwest	0.04
11/17/1997	Southwest	0.03
3/16/1998	Southwest	0.03
5/12/1998	Southwest	0.04
7/27/1998	Southwest	0.04
10/15/1998	Southwest	0.02
2/18/1999	Southwest	0.05
5/24/1999	Southwest	0.03
8/27/1999	Southwest	0.03
10/26/1999	Southwest	0.03
2/3/2000	Southwest	0.047
6/20/2000	Southwest	0.035
9/28/2000	Southwest	0.034
12/17/2000	Southwest	0.032
3/23/2001	Southwest	0.034
6/21/2001	Southwest	0.032
9/23/2001	Southwest	0.029
12/31/2001	Southwest	0.043
3/21/2002	Southwest	0.038
4/17/2002	Southwest	0.031
8/12/2002	Southwest	0.032
12/6/2002	Southwest	0.020
1/29/2003	Southwest	0.027
5/23/2003	Southwest	0.039
9/4/2003	Southwest	0.033
11/20/2003	Southwest	0.029
2/2/2004	Southwest	0.043 (a)
5/14/2004	Southwest	0.037 (a)
9/2/2004	Southwest	0.027 (a)
11/4/2004	Southwest	0.034 (a)
2/8/2005	Southwest	0.061 (a)
5/9/2005	Southwest	0.08 (a)
8/11/2005	Southwest	0.06 (a)
11/18/2005	Southwest	0.07 (a)
2/16/2006	Southwest	0.09 (a)
5/30/2006	Southwest	0.06 (a)

Table 3. Historical Groundwater Gradient - Direction and Magnitude
ARCO Service Station #0374, 6407 Telegraph Ave., Oakland, CA

Date Measured	Approximate Gradient Direction	Approximate Gradient Magnitude (ft/ft)
8/24/2006	Southwest	0.03
11/1/2006	Southwest	0.02
2/7/2007	Southwest	0.03
5/8/2007	Southwest	0.03
8/8/2007	Southwest	0.03
11/14/2007	Southwest	0.03
2/22/2008	Southwest	0.03
5/24/2008	Southwest	0.03
8/21/2008	Southwest	0.03
11/19/2008	Southwest	0.03
2/23/2009	Southwest	0.04
5/14/2009	Southwest	0.03
8/20/2009	Southwest	0.03
2/19/2010	West-Southwest	0.05
8/10/2010	Southwest	0.03
12/16/2010	Southwest	0.03
2/14/2011	Southwest	0.03
5/20/2011	Southwest	0.03
8/15/2011	Southwest	0.03

Footnotes:

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

Notes:

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
FIELD METHODS

BROADBENT & ASSOCIATES INC. FIELD PROCEDURES

A.1 QUALITY ASSURANCE/QUALITY CONTROL FIELD PROTOCOLS

Field protocols have been implemented to enhance the accuracy and reliability of data collection, ground-water sample collection, transportation and laboratory analysis. Discussion of these protocols is provided below.

A.1.1 Water Level & Free-Product Measurement

Prior to ground-water sample collection from each monitoring well, the presence of separate-phase hydrocarbons (SPH or free product, FP) and depth to ground water shall be measured. Depth to ground water will be measured with a standard water level indicator that has been decontaminated prior to its use in accordance with procedures discussed below. Depth to groundwater will be gauged from a saw cut notch at the top of the well casing on each well head. Where FP is suspected, the initial gauging will be done with an oil-water interface probe. Once depth to water has been measured, the first retrieval of a new disposable bailer will be scrutinized for the presence of SPH/FP.

A.1.2 Monitoring Well Purging

Subsequent to measuring depth to ground water and prior to the collection of ground-water samples, purging of standing water within the monitoring well will be performed if called for. Consistent with the American Society for Testing and Materials (ASTM) Standard D6452-99, Section 7.1, the well will be purged of approximately three wetted-casing volumes of water, or until the well is dewatered, or until monitored field parameters indicate stabilization. The well will be purged using a pre-cleaned disposable bailer or submersible pump and disposable plastic tubing dedicated to each individual well. The well will be purged at a low flow rate to minimize the possibility of purging the well dry. So that the sample collected is representative of formation water, several field parameters will be monitored during the purging process. The sample will not be collected until these parameters (i.e. temperature, pH, and conductivity) have stabilized to within 10% of the previously measured value. If a well is purged dry, the sample should not be collected until the well has recovered to a minimum 50% of its initial volume.

A.1.3 Ground-Water Sample Collection

Once the wells are satisfactorily purged, water samples will be collected from each well. Water samples for organic analyses will be collected using a pre-cleaned, new, disposable bailer and transferred into the appropriate, new, laboratory-prepared containers such that no head space or air bubbles are present in the sample container (if appropriate to the analysis). The samples will be properly labeled (i.e. sample identification, sampler initials, date/time of collection, site location, requested analyses), placed in an ice chest with bagged ice or ice substitute, and delivered to the contracted analytical laboratory.

A.1.4 Surface Water Sample Collection

Unless specified otherwise, surface water samples will be collected from mid-depth in the central area of the associated surface water body. Water samples will be collected into appropriate, new, laboratory-prepared containers by dipping the container into the surface water unless the container has a preservative present. If a sample preservative is present, a new, cleaned non-preserved surrogate container will be used to obtain the sample which will then be directly transferred into a new, laboratory-provided, preserved container. Samples will be properly labeled and transported as described above.

A.1.5 Decontamination Protocol

Prior to use in each well, re-usable ground-water sampling equipment (e.g., water level indicator, oil-interface probe, purge pump, etc.) will be decontaminated. Decontamination protocol will include thoroughly cleaning with a solution of Liquinox, rinsing with clean water, and final rinsing with control water (potable water of known quality, distilled, or de-ionized water). Pre-cleaned new disposable bailers and disposable plastic tubing will be dedicated to each individual well.

A.1.6 Chain of Custody Procedures

Sample identification documents will be carefully prepared so identification and chain of custody can be maintained and sample disposition can be controlled. The sample identification documents include Chain-of-Custody (COC) records and Daily Field Report forms. Chain of custody procedures are outlined below.

Field Custody Procedures

The field sampler is individually responsible for the care and custody of the samples collected until they are properly transferred.

Samples will have unique labels. The information on these labels will correspond to the COC which shows the identification of individual samples and the contents of the shipping container. The original COC will accompany the shipment and a copy will be retained by the field sampler.

Transfer of Custody and Shipment

A COC will accompany samples during transfer and shipment. When transferring samples, the individual relinquishing and the individual receiving the samples will each sign, date, and note the time on the COC. This documents the sample custody transfer.

Samples will be packaged properly for shipment and dispatched to the appropriate laboratory for analysis, with a separate COC accompanying each shipment. Shipments will be accompanied by the original COC. Samples will be delivered by BAI personnel to the laboratory, or shipped by responsible courier. When a shipping courier is utilized, the sample shipment number will be identified on the COC.

A.1.7 Field Records

In addition to sample identification numbers and COC records, Daily Field Report records will be maintained by field staff to provide daily records of significant events, observations, and measurements during field investigations. These documents will contain observed information such as: the personnel present, site conditions, sampling procedures, measurement procedures, calibration records, equipment used, supplies used, etc. Field measurements will be recorded on the appropriate forms. Entries on the data forms will be signed and dated. The data forms will be kept as permanent file records.

APPENDIX B
FIELD DATA SHEETS
AND
NON-HAZARDOUS WASTE DATA FORM

Project: BP/ARLO 374 Project No.: 06-88-602
Field Representative(s): SB & LD Day: Monday Date: 8/15/11
Time Onsite: From: 0750 To: 1320; From: _____ To: _____; From: _____ To: _____

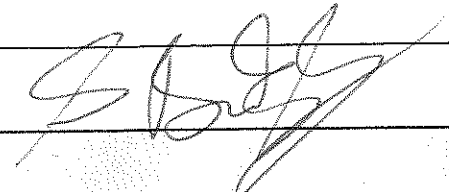
- Signed HASP
- Safety Glasses
- Hard Hat
- Steel Toe Boots
- Safety Vest
- UST Emergency System Shut-off Switches Located
- Proper Gloves
- Proper Level of Barricading
- Other PPE (describe) _____

Weather: Sunny

Equipment In Use: _____

Visitors: _____

TIME:	WORK DESCRIPTION:
<u>0750</u>	<u>on-site filling out paperwork & conducting Safety.</u>
<u>0900</u>	<u>Setup on MW-5 Sample @ 0920</u>
<u>0930</u>	<u>Setup on MW-6 Sample @ 0945</u>
<u>0940</u>	<u>Setup on MW-3 Sampler @ 1010</u>
<u>1024</u>	<u>Setup on MW-1 Sample @ 1035</u>
<u>1038</u>	<u>Setup on MW-9 Sample @ 1045</u>
<u>1056</u>	<u>Setup on MW-2 Sample @ 1105</u>
<u>1110</u>	<u>Setup on MW-8 Sample @ 1130</u>
<u>1135</u>	<u>Setup on MW-7 Sample @ 1155</u>
<u>1237</u>	<u>Setup on MW-4 Sample @ 1255</u>

Signature: 

FIELD DATA REPORT

DATE: 9/15/11
 PERSONNEL: SS & LD
 WEATHER: Sunny

PROJECT NO.: 06-88-602
 COMMENTS: BP/ARCO 324

Equip:	Geosquirt	Tubing	Bailers	DO	Wii	Ec/pH
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Well ID	Time	MEASURING POINT	DTW (FT)	PRODUCT THICKNESS	pH	Cond. (X100)	Temp. (C/F)	DO (mg/l)	Redox (mV)	Iron (mg/l)	Alk. (mg/l)	WELL HEAD CONDITION: VAULT, BOLTS, CAP, LOCK, ETC	
mw-1	1025	TOC	7.24										
mw-2	1102		7.62										
mw-3	0956		6.41										
mw-4	1237		7.59										
mw-5	9:03		7.91										
mw-6	0934		4.52										
mw-7	1137		6.96										
mw-8	1114		6.00										
mw-9	1039		7.09										

Groundwater Sampling Data Sheet

Well I.D.: MW-1
 Project Name/Location: BP/ALCO 374 Project #: 06-88-602
 Sampler's Name: SB + LD Date: 8/15/11
 Purging Equipment: _____
 Sampling Equipment: boiler

Casing Type: PVC

Casing Diameter: 4 inch

***UNIT CASING VOLUMES**

Total Well Depth: _____ feet

2" = 0.16 gal/lin ft.

Depth to Water: 7.24 feet

3" = 0.37 gal/lin ft.

Water Column Thickness: = _____ feet

4" = 0.65 gal/lin ft.

Unit Casing Volume*: x _____ gallon / foot

6" = 1.47 gal/lin ft.

Casing Water Volume: = _____ gallons

Casing Volume: x 3 each

Estimated Purge Volume: = _____ gallons

Free product measurement (if present): _____

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
<u>0</u>	<u>1030</u>	<u>254</u>	<u>55</u>	<u>—</u>	<u>768.3</u>	<u>20.4</u>	<u>6.9</u>	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: _____ gallons

Depth to Water at Sample Collection: _____ feet

Sample Collection Time: 1035

Purged Dry? (Y/N) (N)

Comments: NP@ 7'



Groundwater Sampling Data Sheet

Well I.D.: mw-2
 Project Name/Location: BP/ARCO 274 Project #: 06-88-602
 Sampler's Name: SB + LD Date: 8/15/11
 Purging Equipment: _____
 Sampling Equipment: Dueter

Casing Type: PVC

Casing Diameter: 4 inch

***UNIT CASING VOLUMES**

Total Well Depth: _____ feet

2" = 0.16 gal/lin ft.

Depth to Water: 7.67 feet

3" = 0.37 gal/lin ft.

Water Column Thickness: = _____ feet

4" = 0.65 gal/lin ft.

Unit Casing Volume*: x _____ gallon / foot

6" = 1.47 gal/lin ft.

Casing Water Volume: = _____ gallons

Casing Volume: x 3 each

Estimated Purge Volume: = _____ gallons

Free product measurement (if present): _____

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
<u>0</u>	<u>1101</u>	<u>1.45</u>	<u>80</u>	<u>—</u>	<u>600.2</u>	<u>23.2</u>	<u>7.1</u>	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: _____ gallons

Depth to Water at Sample Collection: _____ feet

Sample Collection Time: 1105

Purged Dry? (Y/N) (N)

Comments: NP @ 7'

Groundwater Sampling Data Sheet

Well I.D.: _____

Project Name/Location: BP/ALCO 374 ^{MW-3}

Project #: 06-88-602

Sampler's Name: SB + [unclear]

Date: 8/15/11

Purging Equipment: Duiker

Sampling Equipment: Duiker

Casing Type: PVC

Casing Diameter: 4 inch

***UNIT CASING VOLUMES**

Total Well Depth: 24.73 feet

2" = 0.16 gal/lin ft.

Depth to Water: 6.41 feet

3" = 0.37 gal/lin ft.

Water Column Thickness: = 20.32 feet

4" = 0.65 gal/lin ft.

Unit Casing Volume*: x 0.65 gallon / foot

6" = 1.47 gal/lin ft.

Casing Water Volume: = 13.2 gallons

Casing Volume: x 3 each

Estimated Purge Volume: = 39.6 gallons

Free product measurement (if present): _____

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
0	0959	1.04	91	—	651.4	20.0	7.2	
2	1003	X	X	X	645.5	19.6	7.1	
4	1005	X	X	X	654.3	19.5	7.0	
6	1007	X	X	X	666.5	19.2	7.0	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: 0.0 gallons

Depth to Water at Sample Collection: — feet

Sample Collection Time: 1010

Purged Dry? (Y/N) (N)

Comments: rust red particles in well water

Groundwater Sampling Data Sheet

Well I.D.:

Project Name/Location:

Sampler's Name:

Purging Equipment:

Sampling Equipment:

Casing Type: PVC

Casing Diameter: 4 inch

Total Well Depth: 26.95 feet

Depth to Water: 7.59 feet

Water Column Thickness: = 19.36 feet

Unit Casing Volume*: x 0.65 gallon / foot

Casing Water Volume: = 12.58 gallons

Casing Volume: x 3 each

Estimated Purge Volume: = 37.7 gallons

***UNIT CASING VOLUMES**

2" = 0.16 gal/lin ft.

3" = 0.37 gal/lin ft.

4" = 0.65 gal/lin ft.

6" = 1.47 gal/lin ft.

Free product measurement (if present):

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
0	1242	1.02	-68	—	959.1	21.1	7.2	
2	1244	X	X	X	967.1	19.1	7.2	
4	1246	X	X	X	987.6	18.9	7.2 7.1	
6	1249	X	X	X	971.3	19.0	7.0	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: 6.0 gallons

Depth to Water at Sample Collection: feet

Sample Collection Time: 1255

Purged Dry? (Y/N) (N)

Comments:

Groundwater Sampling Data Sheet

Well I.D.: MW-5
 Project Name/Location: BP/APCO 374 Project #: 06-88-602
 Sampler's Name: SB + LD Date: 8/15/11
 Purging Equipment: boiler
 Sampling Equipment: boiler

Casing Type: PVC
 Casing Diameter: 4.0 inch
 Total Well Depth: 23.04 feet
 Depth to Water: 7.91 feet
 Water Column Thickness: 15.13 feet
 Unit Casing Volume*: x 0.65 gallon / foot
 Casing Water Volume: = 9.83 gallons
 Casing Volume: x 3 each
 Estimated Purge Volume: = 29.5 gallons

***UNIT CASING VOLUMES**
 2" = 0.16 gal/lin ft.
 3" = 0.37 gal/lin ft.
 4" = 0.65 gal/lin ft.
 6" = 1.47 gal/lin ft.

Free product measurement (if present): _____

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
①	0909	2.46	122	—	692.9	20.5	7.8	
2	0911	X	X	X	587.9	20.9	7.6	
4	0914	X	X	X	582.3	20.7	7.5	
6	0918	X	X	X	583.0	20.1	7.4	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: 6.0 gallons
 Depth to Water at Sample Collection: — feet
 Sample Collection Time: 0920

Purged Dry? (Y/N) (Y)

Comments: _____

Groundwater Sampling Data Sheet

Well I.D.: mw-6
 Project Name/Location: RF/ARCO 374 Project #: 06-88-602
 Sampler's Name: SB & LD Date: 8/15/11
 Purging Equipment: bauler
 Sampling Equipment: bauler
 Casing Type: PVC

Casing Diameter: 4 inch
 Total Well Depth: 19.50 feet
 Depth to Water: - 4.52 feet
 Water Column Thickness: = 0.48 feet
 Unit Casing Volume*: x 0.65 gallon / foot
 Casing Water Volume: = 0.31 gallons
 Casing Volume: x 3 each
 Estimated Purge Volume: = 0.9 gallons

***UNIT CASING VOLUMES**
 2" = 0.16 gal/lin ft.
 3" = 0.37 gal/lin ft.
 4" = 0.65 gal/lin ft.
 6" = 1.47 gal/lin ft.

Free product measurement (if present):

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
0	0937	155	103	—	625.5	20.5	7.2	
1	0941	X	X	X	564.8	20.7	7.1	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: 1.0 gallons
 Depth to Water at Sample Collection: — feet
 Sample Collection Time: 0945 Purged Dry? (Y/N) (N)

Comments:

Groundwater Sampling Data Sheet

Well I.D.: _____ MW-7
 Project Name/Location: BP / AECO 374 Project #: 06-88-602
 Sampler's Name: SB & LD Date: 8/15/11
 Purging Equipment: Driller
 Sampling Equipment: Driller

Casing Type: PVC

Casing Diameter: 4 inch

***UNIT CASING VOLUMES**

Total Well Depth: 19.90 feet

2" = 0.16 gal/lin ft.

Depth to Water: 6.90 feet

3" = 0.37 gal/lin ft.

Water Column Thickness: 12.94 feet

4" = 0.65 gal/lin ft.

Unit Casing Volume*: 0.65 gallon / foot

6" = 1.47 gal/lin ft.

Casing Water Volume: 8.4 gallons

Casing Volume: 3 each

Estimated Purge Volume: 25.2 gallons

Free product measurement (if present): _____

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
0	1140	0.88	56	—	741.4	24.3	7.2	
2	1142	X	X	X	742.8	23.5	7.0	
4	1144	X	X	X	750.1	23.1	7.0	
6	1148	X	X	X	755.2	23.2	6.9	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: 6.0 gallons

Depth to Water at Sample Collection: _____ feet

Sample Collection Time: 1155

Purged Dry? (Y/N) (N)

Comments: _____



Groundwater Sampling Data Sheet

Well I.D.: MW-8
 Project Name/Location: 10/ARCO 374 Project #: 06-88-602
 Sampler's Name: SB & LD Date: 8/15/11
 Purging Equipment: briter
 Sampling Equipment: briter

Casing Type: PVC
 Casing Diameter: 4 inch
 Total Well Depth: 19.50 feet
 Depth to Water: 6.00 feet
 Water Column Thickness: 13.50 feet
 Unit Casing Volume*: x 0.65 gallon / foot
 Casing Water Volume: = 8.78 gallons
 Casing Volume: x 3 each
 Estimated Purge Volume: = 26.3 gallons

***UNIT CASING VOLUMES**

2" = 0.16 gal/lin ft.
 3" = 0.37 gal/lin ft.
 4" = 0.65 gal/lin ft.
 6" = 1.47 gal/lin ft.

Free product measurement (if present):

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
0	1115	0.51	86	—	575.5	23.1	7.0	
2	1118	X	X	X	578.8	23.5	6.9	
4	1120	X	X	X	587.4	23.3	6.8	
6	1123	X	X	X	599.2	23.4	6.7	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: 6.0 gallons
 Depth to Water at Sample Collection: 6.0 feet
 Sample Collection Time: 1130

Purged Dry? (Y/N) (N)

Comments:



Groundwater Sampling Data Sheet

Well I.D.: MW-9

Project Name/Location: BP/ARCO 374 Project #: 06-88-602

Sampler's Name: SD + UN Date: 8/15/11

Purging Equipment: _____

Sampling Equipment: hauler

Casing Type: PVC

Casing Diameter: 4 inch

*UNIT CASING VOLUMES

Total Well Depth: _____ feet

2" = 0.16 gal/lin ft.

Depth to Water: 7.09 feet

3" = 0.37 gal/lin ft.

Water Column Thickness: = _____ feet

4" = 0.65 gal/lin ft.

Unit Casing Volume*: x _____ gallon / foot

6" = 1.47 gal/lin ft.

Casing Water Volume: = _____ gallons

Casing Volume: x 3 each

Estimated Purge Volume: = _____ gallons

Free product measurement (if present): _____

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
<u>0</u>	<u>1040</u>	<u>0.88</u>	<u>68</u>	<u>—</u>	<u>629.7</u>	<u>22.5</u>	<u>7.1</u>	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: _____ gallons

Depth to Water at Sample Collection: _____ feet

Sample Collection Time: 1045

Purged Dry? (Y (N))

Comments: NP @ 5'


NON-HAZARDOUS WASTE DATA FORM

BESI # _____

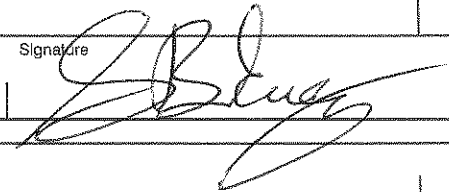
Generator's Name and Mailing Address BP WEST COAST PRODUCTS, LLC P.O. BOX 80249 RANCHO SANTA MARGARITA, CA 92688	Generator's Site Address (if different than mailing address) BP 374 6407 Telegraph Ave Oakland, CA
Generator's Phone: 949-460-5200	

Container type removed from site: <input type="checkbox"/> Drums <input type="checkbox"/> Vacuum Truck <input type="checkbox"/> Roll-off Truck <input type="checkbox"/> Dump Truck <input type="checkbox"/> Other _____	Container type transported to receiving facility: <input type="checkbox"/> Drums <input type="checkbox"/> Vacuum Truck <input type="checkbox"/> Roll-off Truck <input type="checkbox"/> Dump Truck <input type="checkbox"/> Other _____
Quantity <u>31</u>	Quantity _____ Volume _____

WASTE DESCRIPTION <u>NON-HAZARDOUS WATER</u>	GENERATING PROCESS <u>WELL PURGING / DECON WATER</u>																		
<table border="1" style="width:100%"> <thead> <tr> <th>COMPONENTS OF WASTE</th> <th>PPM</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>1. <u>WATER</u></td> <td></td> <td><u>99-100%</u></td> </tr> <tr> <td>2. <u>TPH</u></td> <td></td> <td><u><1%</u></td> </tr> </tbody> </table>	COMPONENTS OF WASTE	PPM	%	1. <u>WATER</u>		<u>99-100%</u>	2. <u>TPH</u>		<u><1%</u>	<table border="1" style="width:100%"> <thead> <tr> <th>COMPONENTS OF WASTE</th> <th>PPM</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>3. _____</td> <td></td> <td>_____</td> </tr> <tr> <td>4. _____</td> <td></td> <td>_____</td> </tr> </tbody> </table>	COMPONENTS OF WASTE	PPM	%	3. _____		_____	4. _____		_____
COMPONENTS OF WASTE	PPM	%																	
1. <u>WATER</u>		<u>99-100%</u>																	
2. <u>TPH</u>		<u><1%</u>																	
COMPONENTS OF WASTE	PPM	%																	
3. _____		_____																	
4. _____		_____																	
Waste Profile _____ PROPERTIES: pH <u>7-10</u> <input type="checkbox"/> SOLID <input checked="" type="checkbox"/> LIQUID <input type="checkbox"/> SLUDGE <input type="checkbox"/> SLURRY <input type="checkbox"/> OTHER _____																			
HANDLING INSTRUCTIONS: <u>WEAR ALL APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.</u>																			

Generator Printed/Typed Name <u>Sam Bardley</u>	Signature 	Month Day Year <u>8</u> <u>25</u> <u>11</u>
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The Generator certifies that the waste as described is 100% non-hazardous

Transporter 1 Company Name BROADBENT & ASSOCIATES, INC.	Phone# 530-566-1400
Transporter 1 Printed/Typed Name <u>Sam Bardley</u>	Signature 
Transporter Acknowledgment of Receipt of Materials	
Transporter 2 Company Name	Phone#
Transporter 2 Printed/Typed Name	Signature
Transporter Acknowledgment of Receipt of Materials	

Designated Facility Name and Site Address INSTRAT, INC. 1105 AIRPORT RD. RIO VISTA, CA 94571	Phone# 530-753-1829
Printed/Typed Name	Signature
Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.	

GENERATOR

TRANSPORTER

RECEIVING FACILITY

APPENDIX C

**LABORATORY REPORT
AND CHAIN-OF-CUSTODY DOCUMENTATION**



Environmental & Marine Chemistry Laboratories



CALSCIENCE

WORK ORDER NUMBER: 11-08-1101

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Broadbent & Associates, Inc

Client Project Name: BP Station #374

Attention: Tom Sparrowe
875 Cotting Lane, Suite G
Vacaville, CA 95688-9299

Approved for release on 08/29/2011 by:
Richard Villafania
Project Manager

ResultLink ▶

Email your PM ▶



Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety. Note that the Chain-of-Custody Record and Sample Receipt Form are integral parts of this report.





Broadbent & Associates, Inc
 875 Cotting Lane, Suite G
 Vacaville, CA 95688-9299

Date Received: 08/16/11
 Work Order No: 11-08-1101
 Preparation: EPA 5030C
 Method: EPA 8015B (M)

Project: BP Station #374

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-1	11-08-1101-1-E	08/15/11 10:35	Aqueous	GC 57	08/17/11	08/17/11 16:02	110817B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	93	38-134			

MW-2	11-08-1101-2-D	08/15/11 11:05	Aqueous	GC 57	08/17/11	08/17/11 14:28	110817B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	93	38-134			

MW-3	11-08-1101-3-D	08/15/11 10:10	Aqueous	GC 57	08/17/11	08/17/11 16:34	110817B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	90	38-134			

MW-4	11-08-1101-4-E	08/15/11 12:55	Aqueous	GC 57	08/19/11	08/20/11 01:12	110819B01
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Comment(s): -LW Quantitated against gasoline.

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	8600	250	5		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	84	38-134			

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



Broadbent & Associates, Inc
 875 Cotting Lane, Suite G
 Vacaville, CA 95688-9299

Date Received: 08/16/11
 Work Order No: 11-08-1101
 Preparation: EPA 5030C
 Method: EPA 8015B (M)

Project: BP Station #374

Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-5	11-08-1101-5-D	08/15/11 09:20	Aqueous	GC 57	08/17/11	08/17/11 17:36	110817B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	94	38-134			

MW-6	11-08-1101-6-D	08/15/11 09:45	Aqueous	GC 57	08/17/11	08/17/11 18:39	110817B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	72	38-134			

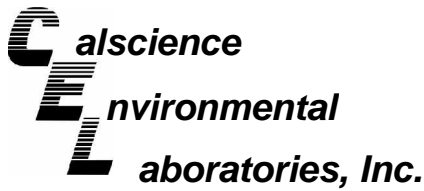
MW-7	11-08-1101-7-D	08/15/11 11:55	Aqueous	GC 57	08/17/11	08/17/11 19:10	110817B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	420	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	95	38-134			

MW-8	11-08-1101-8-D	08/15/11 11:30	Aqueous	GC 57	08/17/11	08/17/11 19:42	110817B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	100	38-134			

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



Analytical Report



Broadbent & Associates, Inc
 875 Cotting Lane, Suite G
 Vacaville, CA 95688-9299

Date Received: 08/16/11
 Work Order No: 11-08-1101
 Preparation: EPA 5030C
 Method: EPA 8015B (M)

Project: BP Station #374

Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-9	11-08-1101-9-D	08/15/11 10:45	Aqueous	GC 57	08/17/11	08/17/11 20:13	110817B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	97	38-134			

Method Blank	099-12-695-1,132	N/A	Aqueous	GC 57	08/17/11	08/17/11 12:54	110817B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	90	38-134			

Method Blank	099-12-695-1,133	N/A	Aqueous	GC 57	08/19/11	08/19/11 11:37	110819B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	84	38-134			

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



Broadbent & Associates, Inc
 875 Cotting Lane, Suite G
 Vacaville, CA 95688-9299

Date Received: 08/16/11
 Work Order No: 11-08-1101
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/L

Project: BP Station #374

Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-1	11-08-1101-1-B	08/15/11 10:35	Aqueous	GC/MS FFF	08/23/11	08/23/11 22:55	110823L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	2.5	5		Methyl-t-Butyl Ether (MTBE)	130	2.5	5	
1,2-Dibromoethane	ND	2.5	5		Tert-Butyl Alcohol (TBA)	ND	50	5	
1,2-Dichloroethane	ND	2.5	5		Diisopropyl Ether (DIPE)	ND	2.5	5	
Ethylbenzene	ND	2.5	5		Ethyl-t-Butyl Ether (ETBE)	ND	2.5	5	
Toluene	ND	2.5	5		Tert-Amyl-Methyl Ether (TAME)	ND	2.5	5	
Xylenes (total)	ND	2.5	5		Ethanol	ND	1500	5	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	102	68-120			Dibromofluoromethane	84	80-127		
1,2-Dichloroethane-d4	89	80-128			Toluene-d8	97	80-120		

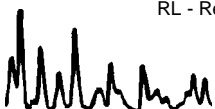
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-2	11-08-1101-2-B	08/15/11 11:05	Aqueous	GC/MS FFF	08/23/11	08/23/11 17:24	110823L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	1.7	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	104	68-120			Dibromofluoromethane	83	80-127		
1,2-Dichloroethane-d4	88	80-128			Toluene-d8	97	80-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-3	11-08-1101-3-C	08/15/11 10:10	Aqueous	GC/MS BB	08/24/11	08/24/11 21:30	110824L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	1.2	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	93	68-120			Dibromofluoromethane	108	80-127		
1,2-Dichloroethane-d4	99	80-128			Toluene-d8	97	80-120		

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





Broadbent & Associates, Inc
 875 Cotting Lane, Suite G
 Vacaville, CA 95688-9299

Date Received: 08/16/11
 Work Order No: 11-08-1101
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/L

Project: BP Station #374

Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-4	11-08-1101-4-B	08/15/11 12:55	Aqueous	GC/MS FFF	08/23/11	08/23/11 23:50	110823L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	2100	50	100		Methyl-t-Butyl Ether (MTBE)	ND	12	25	
1,2-Dibromoethane	ND	12	25		Tert-Butyl Alcohol (TBA)	ND	250	25	
1,2-Dichloroethane	ND	12	25		Diisopropyl Ether (DIPE)	ND	12	25	
Ethylbenzene	250	12	25		Ethyl-t-Butyl Ether (ETBE)	ND	12	25	
Toluene	86	12	25		Tert-Amyl-Methyl Ether (TAME)	ND	12	25	
Xylenes (total)	210	12	25		Ethanol	ND	7500	25	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	104	68-120			Dibromofluoromethane	86	80-127		
1,2-Dichloroethane-d4	86	80-128			Toluene-d8	99	80-120		

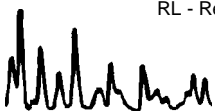
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-5	11-08-1101-5-B	08/15/11 09:20	Aqueous	GC/MS FFF	08/23/11	08/24/11 00:17	110823L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	104	68-120			Dibromofluoromethane	85	80-127		
1,2-Dichloroethane-d4	90	80-128			Toluene-d8	98	80-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-6	11-08-1101-6-B	08/15/11 09:45	Aqueous	GC/MS FFF	08/23/11	08/24/11 00:45	110823L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	2.2	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	104	68-120			Dibromofluoromethane	84	80-127		
1,2-Dichloroethane-d4	89	80-128			Toluene-d8	98	80-120		

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





Broadbent & Associates, Inc
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 Vacaville, CA 95688-9299

Date Received: 08/16/11
 Work Order No: 11-08-1101
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/L

Project: BP Station #374

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-7	11-08-1101-7-A	08/15/11 11:55	Aqueous	GC/MS BB	08/25/11	08/25/11 17:27	110825L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.0	2		Methyl-t-Butyl Ether (MTBE)	14	1.0	2	
1,2-Dibromoethane	ND	1.0	2		Tert-Butyl Alcohol (TBA)	ND	20	2	
1,2-Dichloroethane	ND	1.0	2		Diisopropyl Ether (DIPE)	ND	1.0	2	
Ethylbenzene	49	1.0	2		Ethyl-t-Butyl Ether (ETBE)	ND	1.0	2	
Toluene	ND	1.0	2		Tert-Amyl-Methyl Ether (TAME)	ND	1.0	2	
Xylenes (total)	6.7	1.0	2		Ethanol	ND	600	2	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	100	68-120			Dibromofluoromethane	93	80-127		
1,2-Dichloroethane-d4	101	80-128			Toluene-d8	103	80-120		

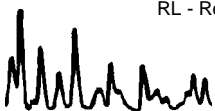
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-8	11-08-1101-8-B	08/15/11 11:30	Aqueous	GC/MS FFF	08/23/11	08/24/11 01:40	110823L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	5.2	1.0	2		Methyl-t-Butyl Ether (MTBE)	57	1.0	2	
1,2-Dibromoethane	ND	1.0	2		Tert-Butyl Alcohol (TBA)	ND	20	2	
1,2-Dichloroethane	ND	1.0	2		Diisopropyl Ether (DIPE)	ND	1.0	2	
Ethylbenzene	9.7	1.0	2		Ethyl-t-Butyl Ether (ETBE)	ND	1.0	2	
Toluene	ND	1.0	2		Tert-Amyl-Methyl Ether (TAME)	ND	1.0	2	
Xylenes (total)	ND	1.0	2		Ethanol	ND	600	2	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	105	68-120			Dibromofluoromethane	84	80-127		
1,2-Dichloroethane-d4	88	80-128			Toluene-d8	98	80-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-9	11-08-1101-9-B	08/15/11 10:45	Aqueous	GC/MS FFF	08/23/11	08/24/11 02:07	110823L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	2.0	4		Methyl-t-Butyl Ether (MTBE)	120	2.0	4	
1,2-Dibromoethane	ND	2.0	4		Tert-Butyl Alcohol (TBA)	ND	40	4	
1,2-Dichloroethane	ND	2.0	4		Diisopropyl Ether (DIPE)	ND	2.0	4	
Ethylbenzene	ND	2.0	4		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	4	
Toluene	ND	2.0	4		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	4	
Xylenes (total)	ND	2.0	4		Ethanol	ND	1200	4	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	105	68-120			Dibromofluoromethane	84	80-127		
1,2-Dichloroethane-d4	87	80-128			Toluene-d8	98	80-120		

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





Broadbent & Associates, Inc
875 Cotting Lane, Suite G
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Date Received: 08/16/11
Work Order No: 11-08-1101
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: BP Station #374

Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-703-1,831	N/A	Aqueous	GC/MS FFF	08/23/11	08/23/11 16:57	110823L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	103	68-120			Dibromofluoromethane	80	80-127		
1,2-Dichloroethane-d4	83	80-128			Toluene-d8	97	80-120		

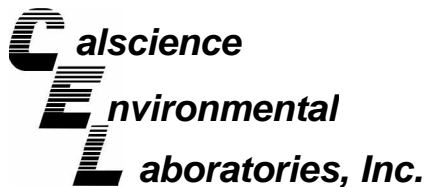
Method Blank	099-12-703-1,833	N/A	Aqueous	GC/MS BB	08/24/11	08/24/11 18:33	110824L01
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	92	68-120			Dibromofluoromethane	91	80-127		
1,2-Dichloroethane-d4	98	80-128			Toluene-d8	96	80-120		

Method Blank	099-12-703-1,836	N/A	Aqueous	GC/MS BB	08/25/11	08/25/11 14:29	110825L02
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	91	68-120			Dibromofluoromethane	99	80-127		
1,2-Dichloroethane-d4	101	80-128			Toluene-d8	98	80-120		

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



Quality Control - Spike/Spike Duplicate



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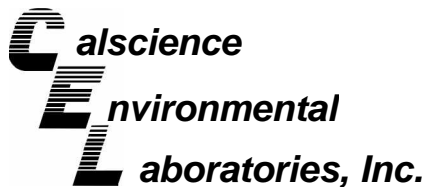
Date Received: 08/16/11
 Work Order No: 11-08-1101
 Preparation: EPA 5030C
 Method: EPA 8015B (M)

Project BP Station #374

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-2	Aqueous	GC 57	08/17/11	08/17/11	110817S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	84	83	38-134	2	0-25	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



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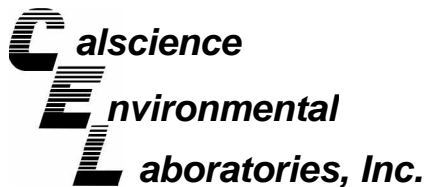
Date Received: 08/16/11
 Work Order No: 11-08-1101
 Preparation: EPA 5030C
 Method: EPA 8015B (M)

Project BP Station #374

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
11-08-1313-1	Aqueous	GC 57	08/19/11	08/19/11	110819S01

<u>Parameter</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Gasoline Range Organics (C6-C12)	87	87	38-134	0	0-25	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



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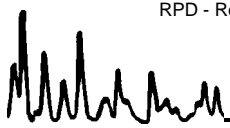
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 Work Order No: 11-08-1101
 Preparation: EPA 5030C
 Method: EPA 8260B

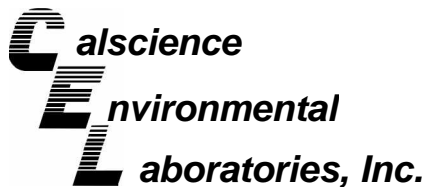
Project BP Station #374

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-2	Aqueous	GC/MS FFF	08/23/11	08/23/11	110823S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	99	94	76-124	5	0-20	
Carbon Tetrachloride	85	81	74-134	5	0-20	
Chlorobenzene	105	98	80-120	7	0-20	
1,2-Dibromoethane	109	102	80-120	6	0-20	
1,2-Dichlorobenzene	108	97	80-120	11	0-20	
1,2-Dichloroethane	103	99	80-120	4	0-20	
Ethylbenzene	106	98	78-126	7	0-20	
Toluene	100	95	80-120	5	0-20	
Trichloroethene	96	91	77-120	5	0-20	
Methyl-t-Butyl Ether (MTBE)	102	101	67-121	1	0-49	
Tert-Butyl Alcohol (TBA)	133	117	36-162	13	0-30	
Diisopropyl Ether (DIPE)	84	81	60-138	4	0-45	
Ethyl-t-Butyl Ether (ETBE)	82	80	69-123	3	0-30	
Tert-Amyl-Methyl Ether (TAME)	100	96	65-120	3	0-20	
Ethanol	115	109	30-180	5	0-72	

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



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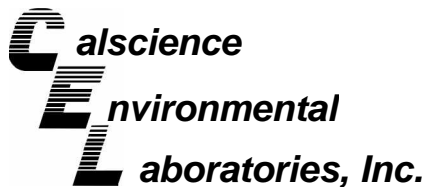
Date Received: 08/16/11
Work Order No: 11-08-1101
Preparation: EPA 5030C
Method: EPA 8260B

Project BP Station #374

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
11-08-1301-2	Aqueous	GC/MS BB	08/24/11	08/24/11	110824S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	109	93	76-124	16	0-20	
Carbon Tetrachloride	108	96	74-134	12	0-20	
Chlorobenzene	110	92	80-120	17	0-20	
1,2-Dibromoethane	106	92	80-120	14	0-20	
1,2-Dichlorobenzene	112	92	80-120	20	0-20	
1,2-Dichloroethane	107	92	80-120	15	0-20	
Ethylbenzene	113	95	78-126	17	0-20	
Toluene	110	94	80-120	16	0-20	
Trichloroethene	108	92	77-120	16	0-20	
Methyl-t-Butyl Ether (MTBE)	106	94	67-121	12	0-49	
Tert-Butyl Alcohol (TBA)	117	94	36-162	22	0-30	
Diisopropyl Ether (DIPE)	106	93	60-138	13	0-45	
Ethyl-t-Butyl Ether (ETBE)	109	95	69-123	13	0-30	
Tert-Amyl-Methyl Ether (TAME)	105	91	65-120	15	0-20	
Ethanol	117	93	30-180	23	0-72	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



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 Vacaville, CA 95688-9299

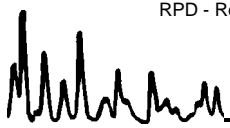
Date Received: 08/16/11
 Work Order No: 11-08-1101
 Preparation: EPA 5030C
 Method: EPA 8260B

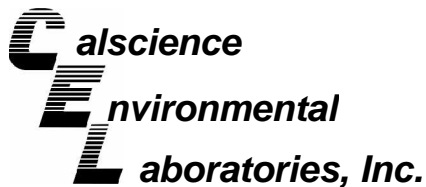
Project BP Station #374

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
11-08-1437-18	Aqueous	GC/MS BB	08/25/11	08/25/11	110825S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	104	108	76-124	4	0-20	
Carbon Tetrachloride	101	107	74-134	6	0-20	
Chlorobenzene	101	106	80-120	5	0-20	
1,2-Dibromoethane	101	108	80-120	7	0-20	
1,2-Dichlorobenzene	102	106	80-120	4	0-20	
1,2-Dichloroethane	101	107	80-120	5	0-20	
Ethylbenzene	104	109	78-126	4	0-20	
Toluene	106	110	80-120	4	0-20	
Trichloroethene	99	103	77-120	4	0-20	
Methyl-t-Butyl Ether (MTBE)	108	113	67-121	5	0-49	
Tert-Butyl Alcohol (TBA)	110	119	36-162	8	0-30	
Diisopropyl Ether (DIPE)	103	108	60-138	5	0-45	
Ethyl-t-Butyl Ether (ETBE)	106	111	69-123	5	0-30	
Tert-Amyl-Methyl Ether (TAME)	100	105	65-120	5	0-20	
Ethanol	105	108	30-180	3	0-72	

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Broadbent & Associates, Inc
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 Vacaville, CA 95688-9299

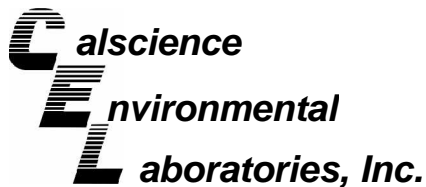
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 Work Order No: 11-08-1101
 Preparation: EPA 5030C
 Method: EPA 8015B (M)

Project: BP Station #374

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-1,132	Aqueous	GC 57	08/17/11	08/17/11	110817B01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	85	83	78-120	2	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Broadbent & Associates, Inc
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 Vacaville, CA 95688-9299

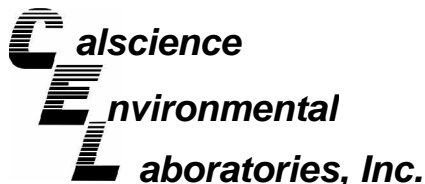
Date Received: N/A
 Work Order No: 11-08-1101
 Preparation: EPA 5030C
 Method: EPA 8015B (M)

Project: BP Station #374

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-1,133	Aqueous	GC 57	08/19/11	08/19/11	110819B01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	83	83	78-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Broadbent & Associates, Inc
 875 Cotting Lane, Suite G
 Vacaville, CA 95688-9299

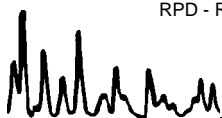
Date Received: N/A
 Work Order No: 11-08-1101
 Preparation: EPA 5030C
 Method: EPA 8260B

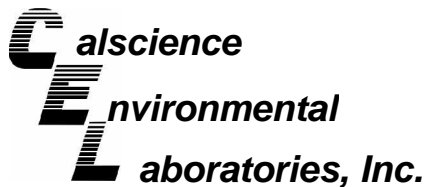
Project: BP Station #374

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number		
099-12-703-1,831	Aqueous	GC/MS FFF	08/23/11	08/23/11	110823L01		
Parameter	LCS %REC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	100	98	80-120	73-127	2	0-20	
Carbon Tetrachloride	91	88	74-134	64-144	4	0-20	
Chlorobenzene	104	102	80-120	73-127	1	0-20	
1,2-Dibromoethane	106	106	79-121	72-128	0	0-20	
1,2-Dichlorobenzene	105	104	80-120	73-127	1	0-20	
1,2-Dichloroethane	102	99	80-120	73-127	3	0-20	
Ethylbenzene	106	104	80-120	73-127	2	0-20	
Toluene	102	99	80-120	73-127	3	0-20	
Trichloroethene	101	98	79-127	71-135	3	0-20	
Methyl-t-Butyl Ether (MTBE)	90	88	69-123	60-132	3	0-20	
Tert-Butyl Alcohol (TBA)	101	99	63-123	53-133	2	0-20	
Diisopropyl Ether (DIPE)	86	83	59-137	46-150	3	0-37	
Ethyl-t-Butyl Ether (ETBE)	85	82	69-123	60-132	3	0-20	
Tert-Amyl-Methyl Ether (TAME)	100	98	70-120	62-128	3	0-20	
Ethanol	113	102	28-160	6-182	10	0-57	

Total number of LCS compounds : 15
 Total number of ME compounds : 0
 Total number of ME compounds allowed : 1
 LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Broadbent & Associates, Inc
 875 Cotting Lane, Suite G
 Vacaville, CA 95688-9299

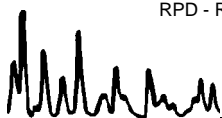
Date Received: N/A
 Work Order No: 11-08-1101
 Preparation: EPA 5030C
 Method: EPA 8260B

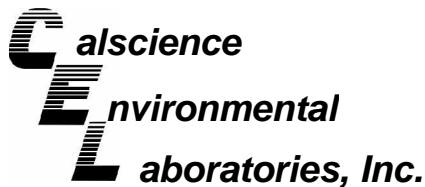
Project: BP Station #374

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number		
099-12-703-1,833	Aqueous	GC/MS BB	08/24/11	08/24/11	110824L01		
Parameter	LCS %REC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	104	109	80-120	73-127	4	0-20	
Carbon Tetrachloride	110	112	74-134	64-144	1	0-20	
Chlorobenzene	105	112	80-120	73-127	6	0-20	
1,2-Dibromoethane	105	112	79-121	72-128	6	0-20	
1,2-Dichlorobenzene	105	113	80-120	73-127	7	0-20	
1,2-Dichloroethane	102	107	80-120	73-127	5	0-20	
Ethylbenzene	108	115	80-120	73-127	7	0-20	
Toluene	106	111	80-120	73-127	4	0-20	
Trichloroethene	105	109	79-127	71-135	4	0-20	
Methyl-t-Butyl Ether (MTBE)	107	106	69-123	60-132	0	0-20	
Tert-Butyl Alcohol (TBA)	113	107	63-123	53-133	5	0-20	
Diisopropyl Ether (DIPE)	104	106	59-137	46-150	2	0-37	
Ethyl-t-Butyl Ether (ETBE)	107	110	69-123	60-132	3	0-20	
Tert-Amyl-Methyl Ether (TAME)	104	108	70-120	62-128	3	0-20	
Ethanol	115	107	28-160	6-182	7	0-57	

Total number of LCS compounds : 15
 Total number of ME compounds : 0
 Total number of ME compounds allowed : 1
 LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Broadbent & Associates, Inc
 875 Cotting Lane, Suite G
 Vacaville, CA 95688-9299

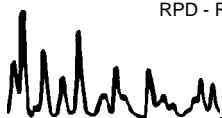
Date Received: N/A
 Work Order No: 11-08-1101
 Preparation: EPA 5030C
 Method: EPA 8260B

Project: BP Station #374

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number		
099-12-703-1,836	Aqueous	GC/MS BB	08/25/11	08/25/11	110825L02		
Parameter	LCS %REC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	100	103	80-120	73-127	3	0-20	
Carbon Tetrachloride	101	103	74-134	64-144	2	0-20	
Chlorobenzene	98	101	80-120	73-127	4	0-20	
1,2-Dibromoethane	96	99	79-121	72-128	3	0-20	
1,2-Dichlorobenzene	96	102	80-120	73-127	6	0-20	
1,2-Dichloroethane	98	102	80-120	73-127	4	0-20	
Ethylbenzene	102	106	80-120	73-127	4	0-20	
Toluene	103	106	80-120	73-127	2	0-20	
Trichloroethene	100	102	79-127	71-135	2	0-20	
Methyl-t-Butyl Ether (MTBE)	94	96	69-123	60-132	2	0-20	
Tert-Butyl Alcohol (TBA)	102	106	63-123	53-133	4	0-20	
Diisopropyl Ether (DIPE)	95	100	59-137	46-150	5	0-37	
Ethyl-t-Butyl Ether (ETBE)	97	101	69-123	60-132	5	0-20	
Tert-Amyl-Methyl Ether (TAME)	94	99	70-120	62-128	5	0-20	
Ethanol	107	105	28-160	6-182	2	0-57	

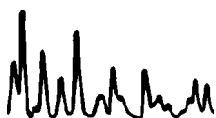
Total number of LCS compounds : 15
 Total number of ME compounds : 0
 Total number of ME compounds allowed : 1
 LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit



Work Order Number: 11-08-1101

<u>Qualifier</u>	<u>Definition</u>
AX	Sample too dilute to quantify surrogate.
BA	Relative percent difference out of control.
BA,AY	BA = Relative percent difference out of control. AY = Matrix interference suspected.
BB	Sample > 4x spike concentration.
BF	Reporting limits raised due to high hydrocarbon background.
BH	Reporting limits raised due to high level of non-target analytes.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
BY	Sample received at improper temperature.
BZ	Sample preserved improperly.
CL	Initial analysis within holding time but required dilution.
CQ	Analyte concentration greater than 10 times the blank concentration.
CU	Surrogate concentration diluted to not detectable during analysis.
DF	Reporting limits elevated due to matrix interferences.
DU	Insufficient sample quantity for matrix spike/dup matrix spike.
ET	Sample was extracted past end of recommended max. holding time.
ET	Sample was extracted past end of recommended maximum holding time.
EY	Result exceeds normal dynamic range; reported as a min est.
GR	Internal standard recovery is outside method recovery limit.
IB	CCV recovery abovelimit; analyte not detected.
IH	Calibrtn. verif. recov. below method CL for this analyte.
IJ	Calibrtn. verif. recov. above method CL for this analyte.
J,DX	J=EPA Flag -Estimated value; DX= Value < lowest standard (MQL), but > than MDL.
LA	Confirmatory analysis was past holding time.
LG,AY	LG= Surrogate recovery below the acceptance limit. AY= Matrix interference suspected.
LH,AY	LH= Surrogate recovery above the acceptance limit. AY= Matrix interference suspected.
LM,AY	LM= MS and/or MSD above acceptance limits. See Blank Spike (LCS). AY= Matrix interference suspected.
LN,AY	LN= MS and/or MSD below acceptance limits. See Blank Spike (LCS). AY= Matrix interference suspected.
LQ	LCS recovery above method control limits.
LR	LCS recovery below method control limits.
LW	Quantitation of unknown hydrocarbon(s) in sample based on gasoline.
LX	Quantitation of unknown hydrocarbon(s) in sample based on diesel.
MB	Analyte present in the method blank.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
PC	Sample taken from VOA vial with air bubble > 6mm diameter.
PI	Primary and confirm results varied by > than 40% RPD.
RB	RPD exceeded method control limit; % recoveries within limits.
SG	A silica gel cleanup procedure was performed.



Qualifier

Definition

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.





Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Project Name: BP Station #374

Req Due Date (mm/dd/yy): STD-TAT Rush TAT: Yes No

BP/ARC Facility No: 374

Lab Work Order Number: **11-08-1101**

Lab Name: Cal Science	BP/ARC Facility Address: 6407 Telegraph Avenue	Consultant/Contractor: Broadbent & Associates, Inc.
Lab Address: 7440 Lincoln Way	City, State, ZIP Code: Oakland, CA 94609	Consultant/Contractor Project No: 06-88-602-5-822
Lab PM: Richard Villafania	Lead Regulatory Agency: ACEH	Address: 875 Cotting Lane, Suite G, Vacaville, CA 95608
Lab Phone: 714-895-5494 / 714-895-7501 (fax)	California Global ID No.: T0600100106	Consultant/Contractor PM: Tom Sparrowe
Lab Shipping Acct: 9255	Enfos Proposal No: WR232154/005TT-0001	Phone: 707-455-7290 / 707-455-7295 (fax)
Lab Bottle Order No:	Accounting Mode: Provision <input checked="" type="checkbox"/> OOC-BU <input type="checkbox"/> OOC-RM <input type="checkbox"/>	Email EDD To: tsparrowe@broadbentinc.com
Other Info:	Stage: Operate (40) Activity: Monitoring/MNA 80	Invoice To: BP/ARC <input checked="" type="checkbox"/> Contractor <input type="checkbox"/>

BP/ARC EBM: Shannon Couch				Matrix			No. Containers / Preservative					Requested Analyses								Report Type & QC Level						
EBM Phone: 925-275-3804				Soil / Solid	Water / Liquid	Air / Vapor	Total Number of Containers	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	Methanol	GRO (8015M)	BTEX / 5 Oxys (8260)	EDB / 1,2-DCA (8260)	Ethanol (8260)									Standard <input checked="" type="checkbox"/>	Full Data Package <input type="checkbox"/>
EBM Email: shannon.couch@bp.com																									<p>Comments</p> <p>Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.</p>	
Lab No.	Sample Description	Date	Time																							
1	MW-1	8/15/11	1035	X			6				X	X	X	X												
2	MW-2		1105	X			6				X															
3	MW-3		1010	X			6				X															
4	MW-4		1255	X			6				X															
5	MW-5		0920	X			6				X															
6	MW-6		0945	X			6				X															
7	MW-7		1155	X			6				X															
8	MW-8		1130	X			6				X															
9	MW-9		1045	X			6				X															
10	TB - 374 - 110815		1300	X			2				X															ON HOLD

Sampler's Name: <u>Sam Bordley</u>	Relinquished By / Affiliation:	Date: <u>8/15/11</u>	Time: <u>1600</u>	Accepted By / Affiliation: <u>prec / n - ca</u>	Date: <u>8/16/11</u>	Time: <u>10:23</u>
Sampler's Company: <u>BAI</u>						
Shipment Method: <u>GSO</u>	Ship Date: <u>8/15/11</u>					
Shipment Tracking No: <u>107158376</u>						

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

THIS LINE - LAB USE ONLY: 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

1101

8/15/11
 ANY
 ESS
 ESS
 875 Cotting Lane
 STE/ ROOM
 ZIP CODE 95688
 Vacaville
 San Rockley
 PHONE NUMBER 530-588-7777
 PHONE NUMBER 714-895-5494
 STE/ ROOM
 ZIP CODE 92641
 IDEN GROVE
 PERMANENT BILLING
 RECEIPT WILL APPEAR
 ON INVOICE
 IS



SHIPPING AIR BILL

4 PACKAGE INFORMATION

LETTER (MAX 8 OZ)

PACKAGE (WT) _____

DECLARED VALUE \$ _____

COD AMOUNT \$ _____
 (CASH NOT ACCEPTED)

5 DELIVERY SERVICE

PRIORITY OVERNIGHT BY 10:30 AM

EARLY PRIORITY BY 8:00 AM

SATURDAY DELIVERY

*DELIVERY TIMES MAY BE LATER IN SOME AREAS • CONSULT YOUR SERVICE GUIDE OR CALL GOLDEN STATE OVERNIGHT.

6 RELEASE SIGNATURE _____
SIGN TO AUTHORIZE DELIVERY WITHOUT OBTAINING SIGNATURE

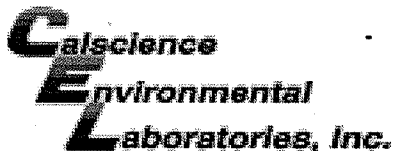
7 _____

8 PICK UP INFORMATION

TIME 2:45 DRIVER # 4246230 ROUTE # _____

9 GSO TRACKING NUMBER 107158370

PACKAGE LABEL



WORK ORDER #: 11-08-

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: BAI

DATE: 08/16/11

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 0.9 °C + 0.5 °C (CF) = 1.4 °C Blank Sample

Sample(s) outside temperature criteria (PM/APM contacted by: _____).

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter Initial: PS

CUSTODY SEALS INTACT:

Cooler _____ No (Not Intact) Not Present N/A Initial: PS

Sample _____ No (Not Intact) Not Present Initial: PT

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
<input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours...	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (____) EnCores® TerraCores® _____

Water: VOA VOAh VOAna₂ 125AGB 125AGBh 125AGBp 1AGB 1AGBna₂ 1AGBs

500AGB 500AGJ 500AGJs 250AGB 250CGB 250CGBs 1PB 500PB 500PBna

250PB 250PBn 125PB 125PBz_{na} 100PJ 100PJna₂ _____ _____ _____

Air: Tedlar® Summa® **Other:** _____ **Trip Blank Lot#:** 110705B **Labeled/Checked by:** PT

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** TN

Preservative: h: HCL n: HNO₃ na₂: Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ z_{na}: ZnAc₂+NaOH f: Field-filtered **Scanned by:** TN

APPENDIX D

GEOTRACKER UPLOAD CONFIRMATION RECEIPTS

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER ESI

UPLOADING A GEO_WELL FILE

SUCCESS

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

<u>Submittal Type:</u>	GEO_WELL
<u>Submittal Title:</u>	3Q11 GEO_WELL 374
<u>Facility Global ID:</u>	T0600100106
<u>Facility Name:</u>	ARCO #0374
<u>File Name:</u>	GEO_WELL.zip
<u>Organization Name:</u>	Broadbent & Associates, Inc.
<u>Username:</u>	BROADBENT-C
<u>IP Address:</u>	67.118.40.90
<u>Submittal Date/Time:</u>	8/31/2011 9:25:26 AM
<u>Confirmation Number:</u>	5298749566

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER ESI

UPLOADING A EDF FILE

SUCCESS

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

<u>Submittal Type:</u>	EDF - Monitoring Report - Quarterly
<u>Submittal Title:</u>	3Q11 GW Monitoring
<u>Facility Global ID:</u>	T0600100106
<u>Facility Name:</u>	ARCO #0374
<u>File Name:</u>	11081101.zip
<u>Organization Name:</u>	Broadbent & Associates, Inc.
<u>Username:</u>	BROADBENT-C
<u>IP Address:</u>	67.118.40.90
<u>Submittal Date/Time:</u>	8/31/2011 9:26:35 AM
<u>Confirmation Number:</u>	3571044862

[VIEW QC REPORT](#)

[VIEW DETECTIONS REPORT](#)