



Atlantic Richfield Company  
(a BP affiliated company)

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

2:26 pm, Jan 29, 2008

Alameda County  
Environmental Health



25 January 2008

Re: Fourth Quarter 2007 Ground-Water Monitoring Report  
Atlantic Richfield Company (a BP affiliated company) Station #276  
10600 MacArthur Boulevard  
Oakland, California  
ACEH Case #RO0002565

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

Submitted by:

Paul Supple  
Environmental Business Manager

**Fourth Quarter 2007 Ground-Water Monitoring Report**  
Atlantic Richfield Company Station #276  
10600 MacArthur Boulevard  
Oakland, California

Prepared for

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

Prepared by



1324 Mangrove Avenue, Suite 212  
Chico, California 95926  
(530) 566-1400  
*www.broadbentinc.com*

25 January 2008

Project No. 06-08-601

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



25 January 2008

Project No. 06-08-601

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

Attn.: Mr. Paul Supple

Re: Fourth Quarter 2007 Report, Atlantic Richfield Company (a BP affiliated company)  
Station #276, 10600 MacArthur Boulevard, Oakland, Alameda County, California  
ACEH Case #RO0002565

Dear Mr. Supple:

Provided herein is the *Fourth Quarter 2007 Ground-Water Monitoring Report* for Atlantic Richfield Company Station #276 (herein referred to as Station #276) located at 10600 MacArthur Boulevard, Oakland, Alameda County, California (Property). This report presents results of ground-water monitoring conducted during the Fourth Quarter of 2007.

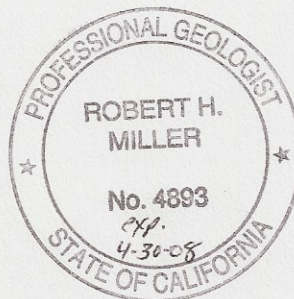
Should you have questions regarding the work performed or results obtained, please do not hesitate to contact us at (530) 566-1400.

Sincerely,

BROADBENT & ASSOCIATES, INC.

Thomas A. Venus, P.E.  
Senior Engineer

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



Enclosures

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

## STATION #276 QUARTERLY GROUND-WATER MONITORING REPORT

Facility: #276	Address:	10600 MacArthur Boulevard, Oakland, California
Environmental Business Manager:		Mr. Paul Supple
Consulting Co./Contact Persons:		Broadbent & Associates, Inc.(BAI)/Rob Miller & Tom Venus (530) 566-1400
Consultant Project No.:		06-08-601
Primary Agency/Regulatory ID No.:		Alameda County Environmental Health (ACEH) ACEH Case #RO0002565
Facility Permits/Permitting Agency:		NA

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

1. Prepared and submitted Third Quarter 2007 Ground-Water Monitoring Report.
2. Conducted ground-water monitoring/sampling for Fourth Quarter 2007. Work performed on 13 November 2007 by Stratus Environmental, Inc (Stratus).

### WORK PROPOSED FOR NEXT QUARTER (First Quarter 2008):

1. Prepared and submitted Fourth Quarter 2007 Ground-Water Monitoring Report (contained herein).
2. Conduct quarterly ground-water monitoring/sampling for First Quarter 2008.

### QUARTERLY RESULTS SUMMARY:

Current phase of project:	<b>Ground-water monitoring/sampling</b>
Frequency of ground-water monitoring:	<b>Quarterly = MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, RW-1, WGR-3</b>
Frequency of ground-water sampling:	<b>Quarterly = MW-2, MW-5, and MW-8 Semi-Annually (1Q and 3Q) = MW-6 and MW-7 Annually (1Q) = MW-1, MW-3, MW-4, WGR-3, and RW-1</b>
Is free product (FP) present on-site:	<b>No</b>
Current remediation techniques:	<b>NA</b>
Depth to ground water (below TOC):	<b>16.11 ft (MW-2) to 36.31 ft (MW-6)</b>
General ground-water flow direction:	<b>South-southwest</b>
Approximate hydraulic gradient:	<b>0.003 ft/ft</b>

### DISCUSSION:

Fourth quarter 2007 ground-water monitoring and sampling was conducted at Station #276 on 13 November 2007 by Stratus. Water levels were gauged in the 10 wells at the Site. No irregularities were noted during water level gauging. Depth-to-water measurements ranged from 16.11 ft at MW-2 to 36.31 ft at MW-6. Resulting ground-water surface elevations ranged from 44.10 ft above mean sea level (msl) in well MW-2 to 29.91 ft above msl in well MW-8. Water level elevations were between historic minimum and maximum ranges for each well, as summarized in Table 1. Water level elevations yielded a potentiometric ground-water flow direction and gradient to the south-southwest at approximately 0.003 ft/ft, consistent with historical data (see Table 3). Ground-water monitoring field data sheets are provided within Appendix A. Measured depths to ground water and respective ground-water elevations are summarized in Table 1. Potentiometric ground-water elevation contours are presented in Drawing 1.

Consistent with the current ground-water sampling schedule, water samples were collected from wells MW-2, MW-5, and MW-8 on 13 November 2007. No irregularities were reported during sampling.

Samples were submitted under chain-of-custody protocol to Test America Analytical Testing Corporation (Morgan Hill, California), for analysis of Gasoline Range Organics (GRO, C4-12) by the LUFT GCMS Method; for Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) by EPA Method 8260B; and tert-Amyl methyl ether (TAME), tert-Butyl alcohol (TBA), Di-isopropyl ether (DIPE), 1,2-Dibromomethane (EDB), 1,2-Dichloroethane (1,2-DCA), Ethanol, Ethyl tert-butyl ether (ETBE), Tetrachloroethene (PCE), and Methyl tert-butyl ether (MTBE) by EPA Method 8260B. No significant irregularities were encountered during laboratory analysis of the samples. Ground-water sampling field data sheets and the laboratory analytical report, including chain-of-custody documentation, are provided in Appendix A.

Gasoline range organics (GRO) were detected above the laboratory reporting limits in each of the three wells sampled at concentrations up to 950 micrograms per liter ( $\mu\text{g/L}$ ) in well MW-5. TAME was detected above the laboratory reporting limit in each of the wells sampled at concentrations up to 18  $\mu\text{g/L}$  in well MW-8. DIPE was detected above the laboratory reporting limit in one of the three wells sampled at a concentration of 0.60  $\mu\text{g/L}$  in well MW-5. 1,2-DCA was detected above the laboratory reporting limit in one of the three wells sampled at a concentration of 5.2  $\mu\text{g/L}$  in well MW-5. MTBE was detected above the laboratory reporting limit in each of the wells sampled at concentrations up to 400  $\mu\text{g/L}$  in well MW-8. PCE was detected above the laboratory reporting limit in two of the three wells sampled at concentrations up to 1,500  $\mu\text{g/L}$  in well MW-5. The remaining fuel additives and oxygenates were not detected above their laboratory reporting limits in the three wells sampled this quarter.

Detected analyte concentrations were within the historic minimum and maximum ranges recorded for each well with the following exception: the PCE concentration in well MW-8 reached a historic maximum value of 17  $\mu\text{g/L}$ . Historic laboratory analytical results are summarized in Table 1 and Table 2. The most recent GRO, Benzene, and MTBE concentrations are also presented in Drawing 1. A copy of the Laboratory Analytical Report, including chain-of-custody documentation is provided in Appendix A. Ground-water monitoring data (GEO\_WELL) and laboratory analytical results (EDF) were uploaded to the GeoTracker AB2886 database. Upload confirmation pages are provided in Appendix B.

## **CLOSURE:**

The findings presented in this report are based upon: observations of Stratus field personnel (see Appendix A), the points investigated, and results of laboratory tests performed by Test America (Morgan Hill, California). Our services were performed in accordance with the generally accepted standard of practice at the time this report was written. No other warranty, expressed or implied was made. This report has been prepared for the exclusive use of Atlantic Richfield Company. It is possible that variations in soil or ground-water conditions could exist beyond points explored in this investigation. Also, changes in site conditions could occur in the future due to variations in rainfall, temperature, regional water usage, or other factors.

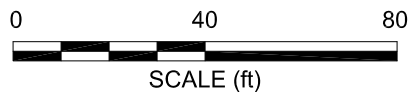
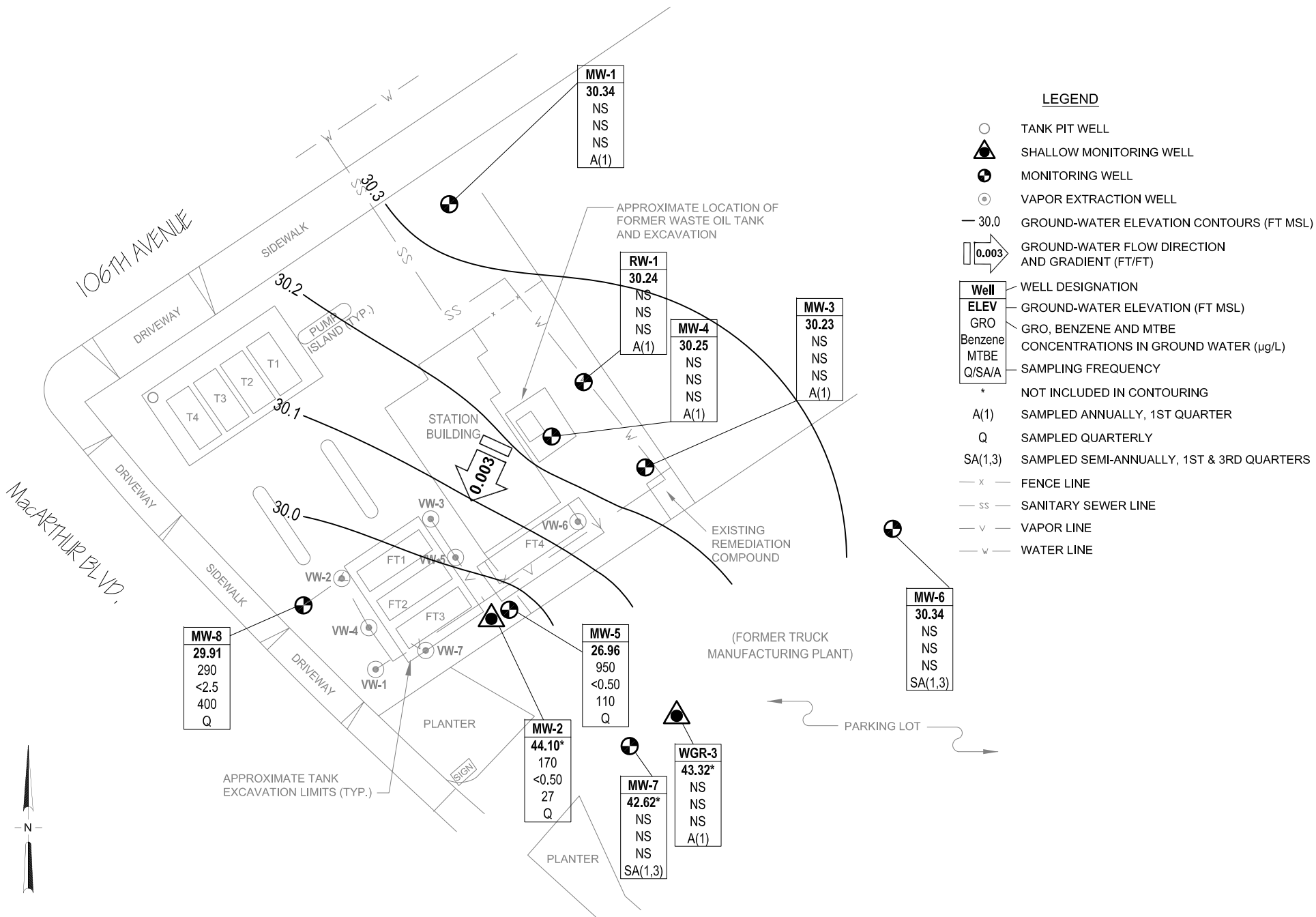
## **ATTACHMENTS:**

Drawing 1. Ground-Water Elevation Contour and Analytical Summary Map, 13 November 2007, Station #276, 10600 MacArthur Boulevard, Oakland, California

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses, Station #276, 10600 MacArthur Blvd., Oakland, CA

- Table 2. Summary of Fuel Additives Analytical Data, Station #276, 10600 MacArthur Blvd., Oakland, CA
- Table 3. Historical Ground-Water Flow Direction and Gradient, Station #276, 10600 MacArthur Blvd., Oakland, CA
- Appendix A. Stratus Ground-Water Sampling Data Package (Includes Field Data Sheets and Laboratory Analytical Report with Chain-of-Custody Documentation)
- Appendix B. GeoTracker Upload Confirmation





**BROADBENT & ASSOCIATES, INC.**  
 ENGINEERING, WATER RESOURCES & ENVIRONMENTAL  
 1324 Mangrove Ave. Suite 212, Chico, California  
 Project No.: 06-08-601 Date: 1/3/08

Station #276  
 10600 MacArthur Boulevard  
 Oakland, California

Ground-Water Elevation Contour  
 and Analytical Summary Map  
 13 November 2007

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

**Station #276, 10600 MacArthur Blvd., Oakland, CA**

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
<b>MW-1</b>															
12/17/2000	--		55.92	23.50	28.50	29.16	26.76	5.09	--	--	--	--	--	--	--
12/28/2001	--		55.92	23.50	28.50	27.38	28.54	8.8	--	--	--	--	--	--	--
11/27/2002	NP		55.92	23.50	28.50	29.45	26.47	4.2	--	--	--	--	--	2.3	6.7
7/22/2003	NP		55.92	23.50	28.50	27.58	28.34	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.1	6.7
11/07/2003	NP		55.92	23.50	28.50	30.42	25.50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.1	6.6
02/03/2004	NP		55.92	23.50	28.50	38.80	17.12	--	--	--	--	--	--	1.5	--
05/04/2004	NP	g	61.26	23.50	28.50	26.67	34.59	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	6.6
08/12/2004	NP		61.26	23.50	28.50	29.49	31.77	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.2	6.6
11/10/2004	NP		61.26	23.50	28.50	30.29	30.97	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.1	6.6
02/03/2005	NP		61.26	23.50	28.50	26.23	35.03	--	--	--	--	--	--	0.89	--
05/09/2005	--		61.26	23.50	28.50	22.93	38.33	--	--	--	--	--	--	--	--
08/11/2005	--		61.26	23.50	28.50	26.11	35.15	--	--	--	--	--	--	--	--
11/18/2005	--		61.26	23.50	28.50	29.14	32.12	--	--	--	--	--	--	--	--
02/01/2006	NP	i	61.26	23.50	28.50	24.15	37.11	53	<0.50	<0.50	<0.50	<0.50	<0.50	1.6	6.7
5/30/2006	--		61.26	23.50	28.50	21.25	40.01	--	--	--	--	--	--	--	--
8/10/2006	--		61.26	23.50	28.50	24.70	36.56	--	--	--	--	--	--	--	--
11/2/2006	--		61.26	23.50	28.50	27.71	33.55	--	--	--	--	--	--	--	--
2/6/2007	NP		61.26	23.50	28.50	28.12	33.14	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.15	7.57
5/8/2007	--		61.26	23.50	28.50	27.27	33.99	--	--	--	--	--	--	--	--
8/14/2007	--		61.26	23.50	28.50	29.70	31.56	--	--	--	--	--	--	--	--
<b>11/13/2007</b>	<b>--</b>		<b>61.26</b>	<b>23.50</b>	<b>28.50</b>	<b>30.92</b>	<b>30.34</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>MW-2</b>															
12/17/2000	--		55.10	15.00	25.00	15.72	39.38	--	--	--	--	--	--	--	--
12/28/2001	--		55.10	15.00	25.00	27.38	27.72	--	--	--	--	--	--	--	--
11/27/2002	--		55.10	15.00	25.00	16.35	38.75	--	--	--	--	--	--	--	--
7/22/2003	--		55.10	15.00	25.00	16.20	38.90	--	--	--	--	--	--	--	--
11/07/2003	P		55.10	15.00	25.00	18.22	36.88	990	<5.0	<5.0	<5.0	<5.0	110	1.8	6.7
02/03/2004	P		55.10	15.00	25.00	13.63	41.47	180	<2.5	<2.5	2.6	4.1	55	1.8	6.5
05/04/2004	P	g	60.21	15.00	25.00	15.76	44.45	290	<2.5	<2.5	<2.5	<2.5	70	0.6	6.3
08/12/2004	P		60.21	15.00	25.00	17.21	43.00	<250	<2.5	<2.5	3.2	<2.5	49	1.6	6.6



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

**Station #276, 10600 MacArthur Blvd., Oakland, CA**

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
<b>MW-2 Cont.</b>															
11/10/2004	P		60.21	15.00	25.00	15.90	44.31	270	<1.0	<1.0	1.6	<1.0	90	0.9	6.2
02/03/2005	P		60.21	15.00	25.00	14.29	45.92	480	1.7	<0.50	2.0	1.4	37	1.53	6.5
05/09/2005	P		60.21	15.00	25.00	14.38	45.83	320	<0.50	<0.50	<0.50	0.64	56	0.57	6.5
08/11/2005	P		60.21	15.00	25.00	15.97	44.24	320	<0.50	<0.50	<0.50	<0.50	50	1.0	6.3
11/18/2005	P		60.21	15.00	25.00	17.66	42.55	990	3.2	0.64	3.8	1.6	49	3.23	6.5
02/01/2006	P		60.21	15.00	25.00	12.50	47.71	<50	<0.50	<0.50	<0.50	<0.50	3.1	1.0	6.4
5/30/2006	P		60.21	15.00	25.00	13.25	46.96	280	<0.50	<0.50	<0.50	<0.50	64	1.76	6.5
8/11/2006	P	Water Levels 8/10	60.21	15.00	25.00	15.90	44.31	210	<0.50	<0.50	<0.50	<0.50	28	0.63	6.4
11/2/2006	P		60.21	15.00	25.00	17.38	42.83	270	0.64	<0.50	<0.50	<0.50	40	1.41	6.82
2/6/2007	NP	i	60.21	15.00	25.00	15.48	44.73	110	<0.50	<0.50	<0.50	<0.50	39	0.67	6.95
5/8/2007	NP		60.21	15.00	25.00	15.40	44.81	140	<0.50	<0.50	<0.50	<0.50	25	0.84	6.85
8/14/2007	NP		60.21	15.00	25.00	17.40	42.81	190	<0.50	<0.50	<0.50	<0.50	19	0.71	6.75
<b>11/13/2007</b>	<b>P</b>		<b>60.21</b>	<b>15.00</b>	<b>25.00</b>	<b>16.11</b>	<b>44.10</b>	<b>170</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>27</b>	<b>1.99</b>	<b>6.32</b>
<b>MW-3</b>															
12/17/2000	--		56.55	22.00	27.00	29.78	26.77	158	--	--	--	--	--	--	--
12/28/2001	--		56.55	22.00	27.00	27.95	28.60	310	20	1.5	13	--	--	--	--
11/27/2002	NP		56.55	22.00	27.00	30.10	26.45	110	--	--	--	--	--	2.0	7.2
7/22/2003	NP		56.55	22.00	27.00	28.32	28.23	120	<0.50	<0.50	<0.50	<0.50	<0.50	2.2	5.9
11/07/2003	NP		56.55	22.00	27.00	30.86	25.69	70	<0.50	<0.50	<0.50	<0.50	<0.50	2.8	6.5
02/03/2004	NP		56.55	22.00	27.00	27.65	28.90	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.1	6.7
05/04/2004	NP	g	61.89	22.00	27.00	27.57	34.32	<100	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	6.4
08/12/2004	NP		61.89	22.00	27.00	30.31	31.58	52	<0.50	<0.50	<0.50	<0.50	<0.50	1.6	6.3
11/10/2004	NP		61.89	22.00	27.00	31.00	30.89	91	<0.50	<0.50	<0.50	<0.50	<0.50	2.6	6.7
02/03/2005	NP	i	61.89	22.00	27.00	26.85	35.04	180	<0.50	<0.50	<0.50	<0.50	<0.50	2.25	6.5
05/09/2005	--		61.89	22.00	27.00	23.72	38.17	--	--	--	--	--	--	--	--
08/11/2005	--		61.89	22.00	27.00	26.84	35.05	--	--	--	--	--	--	--	--
11/18/2005	--		61.89	22.00	27.00	29.82	32.07	--	--	--	--	--	--	--	--
02/01/2006	NP		61.89	22.00	27.00	24.80	37.09	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.4	6.4
5/30/2006	--		61.89	22.00	27.00	21.77	40.12	--	--	--	--	--	--	--	--
8/10/2006	--		61.89	22.00	27.00	25.37	36.52	--	--	--	--	--	--	--	--

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

Station #276, 10600 MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
<b>MW-3 Cont.</b>															
11/2/2006	--		61.89	22.00	27.00	28.43	33.46	--	--	--	--	--	--	--	--
2/6/2007	NP	i, k	61.86	22.00	27.00	28.85	33.01	50	<0.50	<0.50	<0.50	<0.50	<0.50	1.27	8.63
5/8/2007	--	k	61.86	22.00	27.00	27.98	33.88	--	--	--	--	--	--	--	--
8/14/2007	--	k	61.86	22.00	27.00	30.41	31.45	--	--	--	--	--	--	--	--
<b>11/13/2007</b>	<b>--</b>		<b>61.86</b>	<b>22.00</b>	<b>27.00</b>	<b>31.63</b>	<b>30.23</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>MW-4</b>															
12/17/2000	--		55.98	25.00	45.00	29.22	26.76	225	--	--	--	--	--	--	--
12/28/2001	--		55.98	25.00	45.00	27.37	28.61	160	1.2	--	--	--	--	--	--
11/27/2002	NP		55.98	25.00	45.00	29.55	26.43	95	--	--	--	--	--	3.7	6.7
7/22/2003	NP		55.98	25.00	45.00	27.73	28.25	130	<0.50	<0.50	<0.50	<0.50	<0.50	2.9	6.6
11/07/2003	NP		55.98	25.00	45.00	30.41	25.57	59	<0.50	<0.50	<0.50	<0.50	<0.50	2.6	6.5
02/03/2004	NP		55.98	25.00	45.00	27.01	28.97	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.2	7.1
05/04/2004	NP	g	61.30	25.00	45.00	26.91	34.39	<100	<1.0	<1.0	<1.0	<1.0	<1.0	2.1	6.5
08/12/2004	NP		61.30	25.00	45.00	29.76	31.54	58	<0.50	<0.50	<0.50	<0.50	<0.50	2.3	6.4
11/10/2004	NP		61.30	25.00	45.00	30.40	30.90	69	<0.50	<0.50	<0.50	<0.50	<0.50	2.4	6.6
02/03/2005	NP	i	61.30	25.00	45.00	26.28	35.02	51	<0.50	<0.50	<0.50	<0.50	<0.50	3.77	6.8
05/09/2005	--		61.30	25.00	45.00	23.14	38.16	--	--	--	--	--	--	--	--
08/11/2005	--		61.30	25.00	45.00	26.23	35.07	--	--	--	--	--	--	--	--
11/18/2005	--		61.30	25.00	45.00	29.24	32.06	--	--	--	--	--	--	--	--
02/01/2006	P	i	61.30	25.00	45.00	24.20	37.10	330	<0.50	<0.50	<0.50	<0.50	<0.50	1.7	7.0
5/30/2006	--		61.30	25.00	45.00	21.26	40.04	--	--	--	--	--	--	--	--
8/10/2006	--		61.30	25.00	45.00	24.62	36.68	--	--	--	--	--	--	--	--
11/2/2006	--		61.30	25.00	45.00	27.90	33.40	--	--	--	--	--	--	--	--
2/6/2007	NP	i	61.30	25.00	45.00	28.28	33.02	55	<0.50	<0.50	<0.50	<0.50	<0.50	1.21	8.28
5/8/2007	--		61.30	25.00	45.00	27.40	33.90	--	--	--	--	--	--	--	--
8/14/2007	--		61.30	25.00	45.00	29.88	31.42	--	--	--	--	--	--	--	--
<b>11/13/2007</b>	<b>--</b>		<b>61.30</b>	<b>25.00</b>	<b>45.00</b>	<b>31.05</b>	<b>30.25</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>MW-5</b>															
12/17/2000	--		55.43	23.50	31.50	28.82	26.61	1,040	--	--	--	--	--	--	--

**Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses**  
**Station #276, 10600 MacArthur Blvd., Oakland, CA**

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
<b>MW-5 Cont.</b>															
12/28/2001	--		55.43	23.50	31.50	26.91	28.52	3,200	190	2/4/1900	140	1.9/3.2/2.0	--	--	--
11/27/2002	P		55.43	23.50	31.50	29.15	26.28	110	--	--	--	--	--	1.4	6.4
7/22/2003	P		55.43	23.50	31.50	27.43	28.00	160	<1.0	<1.0	<1.0	<1.0	110	1.5	6.6
11/07/2003	P		55.43	23.50	31.50	29.99	25.44	<250	<2.5	<2.5	<2.5	<2.5	120	0.6	6.2
02/03/2004	P		55.43	23.50	31.50	26.55	28.88	85	<2.5	<2.5	<2.5	<2.5	71	1.7	6.7
05/04/2004	P	g	60.73	23.50	31.50	26.47	34.26	<250	<2.5	<2.5	<2.5	<2.5	150	0.9	6.2
08/12/2004	P		60.73	23.50	31.50	29.49	31.24	<250	<2.5	<2.5	<2.5	<2.5	140	1.8	6.3
11/10/2004	P		60.73	23.50	31.50	30.15	30.58	170	<1.0	<1.0	<1.0	<1.0	150	1.0	6.3
02/03/2005	P		60.73	23.50	31.50	25.85	34.88	100	<0.50	<0.50	<0.50	<0.50	16	1.65	6.5
05/09/2005	P		60.73	23.50	31.50	22.85	37.88	340	<2.5	<2.5	<2.5	<2.5	140	0.87	6.3
08/11/2005	P		60.73	23.50	31.50	26.05	34.68	<250	<2.5	<2.5	<2.5	<2.5	160	1.6	6.3
11/18/2005	P		60.73	23.50	31.50	29.07	31.66	<250	<2.5	<2.5	<2.5	<2.5	120	1.98	6.3
02/01/2006	P	i	60.73	23.50	31.50	23.70	37.03	520	<1.2	<1.2	<1.2	<1.2	100	0.4	6.4
5/30/2006	P		60.73	23.50	31.50	21.03	39.70	220	<2.5	<2.5	<2.5	<2.5	230	1.32	6.3
8/11/2006	P	Water Levels 8/10	60.73	23.50	31.50	24.77	35.96	150	<2.5	<2.5	<2.5	<2.5	170	0.68	6.1
11/2/2006	P		60.73	23.50	31.50	27.65	33.08	100	<1.0	<1.0	<1.0	<1.0	160	1.43	6.52
2/6/2007	NP	i	60.73	23.50	31.50	28.00	32.73	150	<1.0	<1.0	<1.0	<1.0	120	1.19	7.33
5/8/2007	NP	i	60.73	23.50	31.50	27.12	33.61	130	<1.0	<1.0	<1.0	<1.0	180	0.82	6.42
8/14/2007	NP	i	60.73	23.50	31.50	29.62	31.11	110	<0.50	<0.50	<0.50	<0.50	150	1.32	6.97
<b>11/13/2007</b>	<b>NP</b>		<b>60.73</b>	<b>23.50</b>	<b>31.50</b>	<b>30.77</b>	<b>29.96</b>	<b>950</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>110</b>	<b>1.83</b>	<b>6.50</b>
<b>MW-6</b>															
12/17/2000	--		61.21	37.50	56.00	34.61	26.60	--	--	--	--	--	--	--	--
12/28/2001	--		61.21	37.50	56.00	32.80	28.41	--	--	--	--	--	--	--	--
11/27/2002	--		61.21	37.50	56.00	35.00	26.21	--	--	--	--	--	--	--	--
7/22/2003	--		61.21	37.50	56.00	33.17	28.04	--	--	--	--	--	--	--	--
11/07/2003	P	d, e	61.21	37.50	56.00	35.70	25.51	<500	<5.0	<5.0	<5.0	<5.0	<5.0	2.7	6.9
02/03/2004	P		61.21	37.50	56.00	32.17	29.04	84	<2.5	<2.5	<2.5	<2.5	<2.5	1.9	7.0
05/04/2004	P	g	66.65	37.50	56.00	32.07	34.58	<250	<2.5	<2.5	<2.5	<2.5	<2.5	2.0	6.7
08/12/2004	P		66.65	37.50	56.00	34.90	31.75	660	<0.50	<0.50	<0.50	<0.50	0.81	1.4	6.9
11/10/2004	P		66.65	37.50	56.00	35.70	30.95	640	<0.50	<0.50	<0.50	<0.50	0.89	2.6	6.8

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

**Station #276, 10600 MacArthur Blvd., Oakland, CA**

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)					DO (mg/L)	pH	
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes			MTBE
<b>MW-6 Cont.</b>															
02/03/2005	P	i	66.65	37.50	56.00	31.48	35.17	77	<0.50	<0.50	<0.50	<0.50	<0.50	1.73	7.0
05/09/2005	--		66.65	37.50	56.00	28.37	38.28	--	--	--	--	--	--	--	--
08/11/2005	P		66.65	37.50	56.00	31.40	35.25	630	<0.50	<0.50	<0.50	<0.50	0.77	1.9	6.3
11/18/2005	--		66.65	37.50	56.00	34.50	32.15	--	--	--	--	--	--	--	--
02/01/2006	P	i	66.65	37.50	56.00	29.40	37.25	760	<5.0	<5.0	<5.0	<5.0	<5.0	2.1	6.9
5/30/2006	--		66.65	37.50	56.00	26.51	40.14	--	--	--	--	--	--	--	--
8/11/2006	P	Water Levels 8/10	66.65	37.50	56.00	30.10	36.55	790	<5.0	<5.0	<5.0	<5.0	<5.0	1.32	6.7
11/2/2006	--		66.65	37.50	56.00	33.12	33.53	--	--	--	--	--	--	--	--
2/6/2007	P	i	66.65	37.50	56.00	33.53	33.12	510	<0.50	<0.50	<0.50	<0.50	0.80	0.68	6.84
5/8/2007	--		66.65	37.50	56.00	32.65	34.00	--	--	--	--	--	--	--	--
8/14/2007	P	i	66.65	37.50	56.00	35.10	31.55	510	<0.50	<0.50	<0.50	<0.50	0.91	1.60	7.10
<b>11/13/2007</b>	--		<b>66.65</b>	<b>37.50</b>	<b>56.00</b>	<b>36.31</b>	<b>30.34</b>	--	--	--	--	--	--	--	--
<b>MW-7</b>															
12/17/2000	--		58.22	17.50	37.5	19.94	38.28	--	--	--	--	--	--	--	--
12/28/2001	--		58.22	17.50	37.5	17.29	40.93	--	--	--	--	--	--	--	--
11/27/2002	--		58.22	17.50	37.5	21.30	36.92	--	--	--	--	--	--	--	--
7/22/2003	--		58.22	17.50	37.5	21.36	36.86	--	--	--	--	--	--	--	--
11/07/2003	P	d	58.22	17.50	37.5	23.76	34.46	3,200	15	<2.5	130	11	53	2.2	6.8
02/03/2004	P		58.22	17.50	37.5	17.74	40.48	53	<0.50	<0.50	<0.50	0.54	32	1.9	6.4
02/03/2005	P		63.54	17.50	37.5	18.13	45.41	61	<0.50	<0.50	<0.50	<0.50	14	3.39	6.5
05/09/2005	--		63.54	17.50	37.5	18.39	45.15	--	--	--	--	--	--	--	--
08/11/2005	P		63.54	17.50	37.5	21.47	42.07	1,500	1.8	<1.0	4.2	1.2	21	2.0	6.3
11/18/2005	--		63.54	17.50	37.5	22.41	41.13	--	--	--	--	--	--	--	--
02/01/2006	P		63.54	17.50	37.5	16.65	46.89	<50	<0.50	<0.50	<0.50	<0.50	1.8	1.3	6.3
5/30/2006	--		63.54	17.50	37.50	19.22	44.32	--	--	--	--	--	--	--	--
8/11/2006	P	Water Levels 8/10	63.54	17.50	37.50	21.28	42.26	1,800	1.3	0.55	5.0	1.4	41	1.22	6.4
11/2/2006	--		63.54	17.50	37.50	22.61	40.93	--	--	--	--	--	--	--	--
2/6/2007	NP		63.54	17.50	37.50	19.79	43.75	530	<0.50	<0.50	<0.50	<0.50	8.4	0.93	7.23
5/8/2007	--		63.54	17.50	37.50	19.62	43.92	--	--	--	--	--	--	--	--
8/14/2007	NP		63.54	17.50	37.50	22.72	40.82	1,900	1.2	<0.50	2.7	1.3	9.8	0.94	7.5

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

**Station #276, 10600 MacArthur Blvd., Oakland, CA**

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
<b>MW-7 Cont.</b>															
11/13/2007	--		63.54	17.50	37.50	20.92	42.62	--	--	--	--	--	--	--	--
<b>MW-8</b>															
12/17/2000	--		53.65	29.00	49.00	27.02	26.63	--	--	--	--	--	--	--	--
12/28/2001	--		53.65	29.00	49.00	24.99	28.66	--	--	--	--	--	--	--	--
11/27/2002	--		53.65	29.00	49.00	27.45	26.20	--	--	--	--	--	--	--	--
7/22/2003	--		53.65	29.00	49.00	25.74	27.91	--	--	--	--	--	--	--	--
11/07/2003	P		53.65	29.00	49.00	28.27	25.38	<500	<5.0	<5.0	<5.0	<5.0	440	2.6	6.5
02/03/2004	P	f	53.65	29.00	49.00	24.80	28.85	170	<12	<12	<12	<12	470	3.0	6.7
05/04/2004	P	g	58.96	29.00	49.00	24.81	34.15	<1,000	<10	<10	<10	<10	700	3.8	6.4
08/12/2004	P		58.96	29.00	49.00	27.72	31.24	<2,500	<25	<25	<25	<25	400	3.4	6.5
11/10/2004	P		58.96	29.00	49.00	28.41	30.55	<500	<5.0	<5.0	<5.0	<5.0	480	3.4	6.3
02/03/2005	P		58.96	29.00	49.00	24.01	34.95	<50	<0.50	<0.50	<0.50	<0.50	45	1.43	6.4
05/09/2005	P	i	58.96	29.00	49.00	21.07	37.89	640	<5.0	<5.0	<5.0	<5.0	440	1.06	6.4
08/11/2005	P		58.96	29.00	49.00	24.32	34.64	<500	<5.0	<5.0	<5.0	<5.0	420	5.0	6.1
11/18/2005	P		58.96	29.00	49.00	27.35	31.61	<500	<5.0	<5.0	<5.0	<5.0	390	3.51	6.4
02/01/2006	P	i	58.96	29.00	49.00	22.00	36.96	520	<5.0	<5.0	<5.0	<5.0	600	0.5	6.3
5/30/2006	P		58.96	29.00	49.00	19.25	39.71	310	<5.0	<5.0	<5.0	<5.0	480	1.35	6.3
8/11/2006	P	Water Levels 8/10	58.96	29.00	49.00	22.95	36.01	320	<0.50	<0.50	<0.50	<0.50	630	0.65	6.2
11/2/2006	P		58.96	29.00	49.00	25.98	32.98	370	<2.5	<2.5	<2.5	<2.5	660	1.46	6.61
2/6/2007	P	i	58.96	29.00	49.00	26.27	32.69	66	<0.50	<0.50	<0.50	<0.50	60	0.65	6.64
5/8/2007	P	i, j (MTBE)	58.96	29.00	49.00	25.35	33.61	440	<0.50	<0.50	<0.50	<0.50	490	1.35	6.60
8/14/2007	P		58.96	29.00	49.00	27.92	31.04	250	<0.50	<0.50	<0.50	<0.50	510	2.80	6.88
<b>11/13/2007</b>	<b>P</b>		<b>58.96</b>	<b>29.00</b>	<b>49.00</b>	<b>29.05</b>	<b>29.91</b>	<b>290</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>400</b>	<b>3.14</b>	<b>6.38</b>
<b>RW-1</b>															
12/17/2000	--		56.32	36.00	51.00	29.57	26.75	--	--	--	--	--	--	--	--
12/28/2001	--		56.32	36.00	51.00	27.64	28.68	--	--	--	--	--	--	--	--
11/27/2002	--		56.32	36.00	51.00	29.93	26.39	--	--	--	--	--	--	--	--
7/22/2003	--		56.32	36.00	51.00	28.09	28.23	--	--	--	--	--	--	--	--
11/07/2003	P		56.32	36.00	51.00	30.64	25.68	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.1	7.0

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Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH	
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
<b>RW-1 Cont.</b>																
02/03/2004	P		56.32	36.00	51.00	27.28	29.04	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	6.7	7.1
05/04/2004	P	g	61.65	36.00	51.00	27.16	34.49	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	4.4	6.8
08/12/2004	P		61.65	36.00	51.00	30.10	31.55	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.2	7.1
11/10/2004	P		61.65	36.00	51.00	30.79	30.86	<100	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	5.7	6.9
02/03/2005	P		61.65	36.00	51.00	26.61	35.04	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.57	7.1
05/09/2005	--		61.65	36.00	51.00	23.51	38.14	--	--	--	--	--	--	--	--	--
08/11/2005	--		61.65	36.00	51.00	26.60	35.05	--	--	--	--	--	--	--	--	--
11/18/2005	--		61.65	36.00	51.00	29.65	32.00	--	--	--	--	--	--	--	--	--
02/01/2006	P		61.65	36.00	51.00	24.65	37.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.5	7.0
5/30/2006	--		61.65	36.00	51.00	21.69	39.96	--	--	--	--	--	--	--	--	--
8/10/2006	--		61.65	36.00	51.00	25.31	36.34	--	--	--	--	--	--	--	--	--
11/2/2006	--		61.65	36.00	51.00	28.28	33.37	--	--	--	--	--	--	--	--	--
2/6/2007	NP		61.65	36.00	51.00	28.63	33.02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.21	6.92
5/8/2007	--		61.65	36.00	51.00	27.77	33.88	--	--	--	--	--	--	--	--	--
8/14/2007	--		61.65	36.00	51.00	30.23	31.42	--	--	--	--	--	--	--	--	--
<b>11/13/2007</b>	--		<b>61.65</b>	<b>36.00</b>	<b>51.00</b>	<b>31.41</b>	<b>30.24</b>	--	--	--	--	--	--	--	--	--
<b>WGR-3</b>																
12/17/2000	--		--	--	--	19.21	--	--	--	--	--	--	--	--	--	--
12/28/2001	--	h	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11/27/2002	--		--	--	--	20.60	--	--	--	--	--	--	--	--	--	--
7/22/2003	--		--	--	--	20.77	--	--	--	--	--	--	--	--	--	--
05/04/2004	P	g	63.27	--	--	19.53	43.74	<50	<0.50	<0.50	<0.50	<0.50	<0.50	11	1.8	6.5
08/12/2004	P		63.27	--	--	22.20	41.07	<50	<0.50	<0.50	<0.50	<0.50	<0.50	35	2.0	--
11/10/2004	P		63.27	--	--	19.98	43.29	<50	<0.50	<0.50	<0.50	<0.50	<0.50	5.6	0.3	6.3
02/03/2005	P		63.27	--	--	16.91	46.36	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	2.04	6.5
05/09/2005	--		63.27	--	--	17.29	45.98	--	--	--	--	--	--	--	--	--
08/11/2005	--		63.27	--	--	20.88	42.39	--	--	--	--	--	--	--	--	--
11/18/2005	--		63.27	--	--	22.15	41.12	--	--	--	--	--	--	--	--	--
02/01/2006	P		63.27	--	--	14.90	48.37	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.3	2.0	6.5
5/30/2006	--		63.27	--	--	18.39	44.88	--	--	--	--	--	--	--	--	--

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Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)					DO (mg/L)	pH	
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes			MTBE
<b>WGR-3 Cont.</b>															
8/10/2006	--		63.27	--	--	20.63	42.64	--	--	--	--	--	--	--	--
11/2/2006	--		63.27	--	--	20.32	42.95	--	--	--	--	--	--	--	--
2/6/2007	P		63.27	--	--	18.52	44.75	<50	<0.50	<0.50	<0.50	<0.50	4.4	0.89	6.87
5/8/2007	--		63.27	--	--	18.41	44.86	--	--	--	--	--	--	--	--
8/14/2007	--		63.27	--	--	22.38	40.89	--	--	--	--	--	--	--	--
<b>11/13/2007</b>	--		<b>63.27</b>	--	--	<b>19.95</b>	<b>43.32</b>	--	--	--	--	--	--	--	--



#### SYMBOLS & ABBREVIATIONS:

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

#### FOOTNOTES:

a = 1,1 DCE; this footnote is no longer applicable.  
b = 1,2 DCA; this footnote is no longer applicable.  
c = Chlorobenzene; this footnote is no longer applicable.  
d = Sample was originally analyzed within the EPA recommended hold time. Re-analysis for confirmation or dilution was performed past the recommended hold time. Results may still be used for intended purpose.  
e = The sample was diluted due to the presence of high levels of non-target analytes resulting in elevated reporting limits.  
f = Discrete peak @ C5 for GRO/TPH-g.  
g = Site was re-surveyed to NAVD' 88 on January 26, 2004.  
h = Well was dry.  
i = Hydrocarbon result for GRO partly due to individual peak(s) in quantitative range.  
j = Initial analysis within holding time but required dilution.  
k = TOC recorded incorrectly (61.86 instead of 61.89).

#### 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.

Groundwater samples were analyzed by EPA method 8015B for GRO and EPA method 8260B for BTEX, fuel oxygenates, ethanol, and PCE.

Values for pH and DO levels are field measurements.

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

**Table 2. Summary of Fuel Additives Analytical Data  
Station #276, 10600 MacArthur Blvd., Oakland, CA**

Well and Sample Date	Concentrations in (µg/L)														Footnotes
	Ethanol	TBA	MtBE	DIPE	EtBE	TAME	1,2-DCA	EDB	trans-1,2	cis-1,2	VOC	Oxygen	PCE	TCE	
<b>MW-1</b>															
12/17/2000	--	--	--	--	--	--	--	--	--	--	--	--	5.09	--	
12/28/2001	--	--	--	--	--	--	--	--	--	--	--	--	8.8	--	
11/27/2002	--	--	--	--	--	--	--	--	--	--	--	--	4.2	--	
7/22/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	6.0	--	
11/07/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	3.0	--	
02/03/2004	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
05/04/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	34	--	
08/12/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	4.5	--	
11/10/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	4.9	--	
02/03/2005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	e
05/09/2005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
08/11/2005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
11/18/2005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
02/01/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	38	--	e
5/30/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	g
8/11/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	g
11/2/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	g
2/6/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	
<b>MW-2</b>															
11/07/2003	<1,000	<200	110	<5.0	<5.0	28	--	--	--	--	--	--	<5.0	--	
02/03/2004	<500	<100	55	<5.0	<5.0	16	<2.5	<2.5	--	--	--	--	<2.5	--	
05/04/2004	<500	<100	70	<2.5	<2.5	15	<2.5	<2.5	--	--	--	--	<2.5	--	
08/12/2004	<500	<100	49	<2.5	<2.5	14	<2.5	<2.5	--	--	--	--	<0.50	--	
11/10/2004	<200	<40	90	<1.0	<1.0	19	<1.0	<1.0	--	--	--	--	<1.0	--	
02/03/2005	<100	<20	37	<0.50	<0.50	13	<0.50	<0.50	--	--	--	--	<0.50	--	e
05/09/2005	<100	<20	56	<0.50	<0.50	17	<0.50	<0.50	--	--	--	--	<0.50	--	e
08/11/2005	<100	<20	50	<0.50	<0.50	8.5	<0.50	<0.50	--	--	--	--	<0.50	--	
11/18/2005	<100	<20	49	<0.50	<0.50	11	<0.50	<0.50	--	--	--	--	<0.50	--	f
02/01/2006	<300	<20	3.1	<0.50	<0.50	0.52	<0.50	<0.50	--	--	--	--	<0.50	--	e
5/30/2006	<300	<20	64	<0.50	<0.50	12	<0.50	<0.50	--	--	--	--	<0.50	--	
8/11/2006	<300	<20	28	<0.50	<0.50	5.9	<0.50	<0.50	--	--	--	--	<0.50	--	

**Table 2. Summary of Fuel Additives Analytical Data  
Station #276, 10600 MacArthur Blvd., Oakland, CA**

Well and Sample Date	Concentrations in (µg/L)														Footnotes
	Ethanol	TBA	MtBE	DIPE	EtBE	TAME	1,2-DCA	EDB	trans-1,2	cis-1,2	VOC	Oxygen	PCE	TCE	
<b>MW-2 Cont.</b>															
11/2/2006	<300	<20	40	<0.50	<0.50	7.9	<0.50	<0.50	--	--	--	--	<0.50	--	
2/6/2007	<300	<20	39	<0.50	<0.50	9.2	<0.50	<0.50	--	--	--	--	--	--	
5/8/2007	<300	<20	25	<0.50	<0.50	5.4	<0.50	<0.50	--	--	--	--	<0.50	--	
8/14/2007	<300	<20	19	<0.50	<0.50	3.4	<0.50	<0.50	--	--	--	--	<0.50	--	
<b>11/13/2007</b>	<b>&lt;300</b>	<b>&lt;20</b>	<b>27</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>5.1</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	--	--	--	--	<b>&lt;0.50</b>	--	
<b>MW-3</b>															
12/17/2000	--	--	--	--	--	--	--	--	--	--	--	--	158	--	
12/28/2001	--	--	--	--	--	--	--	--	1.5	13	--	--	310	20	
11/27/2002	--	--	--	--	--	--	--	--	--	--	--	--	110	--	
7/22/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	80	--	
11/07/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	80	--	
02/03/2004	<100	<20	<0.50	<1.0	<1.0	<1.0	<0.50	<0.50	--	--	--	--	110	--	
05/04/2004	<200	<40	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--	110	--	
08/12/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	61	--	
11/10/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	99	--	
02/03/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	160	-- e	
05/09/2005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
08/11/2005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
11/18/2005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
02/01/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	110	-- e	
5/30/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	-- g	
8/11/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	-- g	
11/2/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	-- g	
2/6/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	
<b>MW-4</b>															
12/17/2000	--	--	--	--	--	--	--	--	--	--	--	--	225	--	
12/28/2001	--	--	--	--	--	--	--	--	--	--	--	--	160	1.2	
11/27/2002	--	--	--	--	--	--	--	--	--	--	--	--	95	--	
7/22/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	94	--	
11/07/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	68	--	

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Station #276, 10600 MacArthur Blvd., Oakland, CA**

Well and Sample Date	Concentrations in (µg/L)														Footnotes
	Ethanol	TBA	MtBE	DIPE	EtBE	TAME	1,2-DCA	EDB	trans-1,2	cis-1,2	VOC	Oxygen	PCE	TCE	
<b>MW-4 Cont.</b>															
02/03/2004	<100	<20	<0.50	<1.0	<1.0	<1.0	<0.50	<0.50	--	--			83	--	
05/04/2004	<200	<40	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--			81	--	
08/12/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--			59	--	
11/10/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--			78	--	
02/03/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--			61	--	e
05/09/2005	--	--	--	--	--	--	--	--	--	--			--	--	
08/11/2005	--	--	--	--	--	--	--	--	--	--			--	--	
11/18/2005	--	--	--	--	--	--	--	--	--	--			--	--	
02/01/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--			320	--	e
5/30/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	g
8/11/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	g
11/2/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	g
2/6/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	
<b>MW-5</b>															
12/17/2000	--	--	--	--	--	--	--	--	--	--	--	--	1,040	--	
12/28/2001	--	--	--	--	--	--	--	--	36	140	1.9, 3.2, 2.0	--	3,200	190	a,b,c
11/27/2002	--	--	--	--	--	--	--	--	--	--	--	--	110	--	
7/22/2003	<200	<40	110	1.4	<1.0	3.2	12	<1.0	--	--	--	--	55	--	
11/07/2003	<500	<100	120	<2.5	<2.5	6.6	--	--	--	--	--	--	42	--	
02/03/2004	<500	<100	71	<5.0	<5.0	<5.0	12	<2.5	--	--	--	--	130	--	
05/04/2004	<500	<100	150	<2.5	<2.5	5.9	8.8	<2.5	--	--	--	--	36	--	
08/12/2004	<500	<100	140	<2.5	<2.5	10	10	<2.5	--	--	--	--	37	--	
11/10/2004	<200	<40	150	1.1	<1.0	9.5	9.8	<1.0	--	--	--	--	50	--	
02/03/2005	<100	<20	16	<0.50	<0.50	0.54	2.7	<0.50	--	--	--	--	480	--	e
05/09/2005	<500	<100	140	<2.5	<2.5	9.2	10	<2.5	--	--	--	--	78	--	e
08/11/2005	<500	<100	160	<2.5	<2.5	10	9.6	<2.5	--	--	--	--	27	--	
11/18/2005	<500	<100	120	<2.5	<2.5	9.2	10	<2.5	--	--	--	--	19	--	f
02/01/2006	<750	<50	100	<1.2	<1.2	5.1	7.4	<1.2	--	--	--	--	470	--	e
5/30/2006	<1,500	<100	230	<2.5	<2.5	11	11	<2.5	--	--	--	--	48	--	
8/11/2006	<1,500	<100	170	<2.5	<2.5	14	9.2	<2.5	--	--	--	--	24	--	
11/2/2006	<600	<40	160	<1.0	<1.0	12	7.8	<1.0	--	--	--	--	9.8	--	

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Station #276, 10600 MacArthur Blvd., Oakland, CA**

Well and Sample Date	Concentrations in (µg/L)														Footnotes
	Ethanol	TBA	MtBE	DIPE	EtBE	TAME	1,2-DCA	EDB	trans-1,2	cis-1,2	VOC	Oxygen	PCE	TCE	
<b>MW-5 Cont.</b>															
2/6/2007	<600	<40	120	<1.0	<1.0	13	4.6	<1.0	--	--	--	--	--	--	
5/8/2007	<600	<40	180	<1.0	<1.0	16	8.6	<1.0	--	--	--	--	9.0	--	
8/14/2007	<300	<20	150	0.73	<0.50	14	5.4	<0.50	--	--	--	--	5.6	--	
<b>11/13/2007</b>	<b>&lt;300</b>	<b>&lt;20</b>	<b>110</b>	<b>0.60</b>	<b>&lt;0.50</b>	<b>12</b>	<b>5.2</b>	<b>&lt;0.50</b>	--	--	--	--	<b>1,500</b>	--	
<b>MW-6</b>															
11/07/2003	<1,000	<200	<5.0	<5.0	<5.0	<5.0	--	--	--	--			560	--	
02/03/2004	<500	<100	<2.5	<5.0	<5.0	<5.0	<2.5	<2.5	--	--			220	--	
05/04/2004	<500	<100	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	--	--			210	--	
08/12/2004	<100	<20	0.81	<0.50	<0.50	<0.50	<0.50	<0.50	--	--			750	--	
11/10/2004	<100	<20	0.89	<0.50	<0.50	<0.50	<0.50	<0.50	--	--			530	--	
02/03/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--			85	--	e
05/09/2005	--	--	--	--	--	--	--	--	--	--			--	--	
08/11/2005	<100	<20	0.77	<0.50	<0.50	<0.50	<0.50	<0.50	--	--			610	--	
11/18/2005	--	--	--	--	--	--	--	--	--	--			--	--	
02/01/2006	<3,000	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	--			690	--	e
8/11/2006	<3,000	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	--	--	--	880	--	
2/6/2007	<300	<20	0.80	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	
8/14/2007	<300	<20	0.91	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	640	--	
<b>MW-7</b>															
11/07/2003	<500	<100	53	<2.5	<2.5	13	--	--	--	--			<2.5	--	
02/03/2004	<100	<20	32	<1.0	<1.0	7.4	<0.50	<0.50	--	--			0.74	--	
02/03/2005	<100	<20	14	<0.50	<0.50	3.9	<0.50	<0.50	--	--			1.6	--	e
05/09/2005	--	--	--	--	--	--	--	--	--	--			--	--	
08/11/2005	<200	<40	21	<1.0	<1.0	4.7	<1.0	<1.0	--	--			1.0	--	e
11/18/2005	--	--	--	--	--	--	--	--	--	--			--	--	
02/01/2006	<300	<20	1.8	<0.50	<0.50	<0.50	<0.50	<0.50	--	--			0.71	--	e
8/11/2006	<300	<20	41	<0.50	<0.50	9.0	<0.50	<0.50	--	--	--	--	<0.50	--	
2/6/2007	<300	<20	8.4	<0.50	<0.50	2.2	<0.50	<0.50	--	--	--	--	<0.50	--	
8/14/2007	<300	<20	9.8	<0.50	<0.50	1.8	<0.50	<0.50	--	--	--	--	<0.50	--	
<b>MW-8</b>															

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	Ethanol	TBA	MtBE	DIPE	EtBE	TAME	1,2-DCA	EDB	trans-1,2	cis-1,2	VOC	Oxygen	PCE	TCE	
<b>MW-8 Cont.</b>															
11/07/2003	<1,000	<200	440	<5.0	<5.0	18	--	--	--	--			<5.0	--	
02/03/2004	<2,500	<500	470	<25	<25	<25	<12	<12	--	--			<12	--	
05/04/2004	<2,000	<400	700	<10	<10	21	<10	<10	--	--			12	--	
08/12/2004	<5,000	<1,000	400	<25	<25	<25	<25	<25	--	--			1.1	--	
11/10/2004	<1,000	<200	480	<5.0	<5.0	21	<5.0	<5.0	--	--			8.9	--	
02/03/2005	<100	<20	45	<0.50	<0.50	1.9	<0.50	<0.50	--	--			0.59	--	e
05/09/2005	<1,000	<200	440	<5.0	<5.0	21	<5.0	<5.0	--	--			<5.0	--	e
08/11/2005	<1,000	<200	420	<5.0	<5.0	24	<5.0	<5.0	--	--			<0.50	--	e
11/18/2005	<1,000	<200	390	<5.0	<5.0	23	<5.0	<5.0	--	--			4.2	--	f
02/01/2006	<3,000	<200	600	<5.0	<5.0	21	<5.0	<5.0	--	--			<0.50	--	e
5/30/2006	<3,000	<200	480	<5.0	<5.0	25	<5.0	<5.0	--	--	--	--	<5.0	--	
8/11/2006	<300	<20	630	<0.50	<0.50	37	1.2	<0.50	--	--	--	--	<0.50	--	
11/2/2006	<1,500	<100	660	<2.5	<2.5	43	<2.5	<2.5	--	--	--	--	<2.5	--	
2/6/2007	<300	<20	60	<0.50	<0.50	4.8	<0.50	<0.50	--	--	--	--	0.72	--	
5/8/2007	<300	<20	490	<0.50	<0.50	35	1.9	<0.50	--	--	--	--	9.0	--	h (MTBE)
8/14/2007	<300	<20	510	<0.50	<0.50	39	1.5	<0.50	--	--	--	--	12	--	
<b>11/13/2007</b>	<b>&lt;1,500</b>	<b>&lt;100</b>	<b>400</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>18</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>17</b>	<b>--</b>	
<b>RW-1</b>															
11/07/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	--	--			3.1	--	
02/03/2004	<100	<20	<0.50	<1.0	<1.0	<1.0	<0.50	<0.50	--	--			0.76	--	
05/04/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--			1.8	--	
08/12/2004	330/<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--			2.9	--	d
11/10/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--			5.2	--	
02/03/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--			1.7	--	e
05/09/2005	--	--	--	--	--	--	--	--	--	--			--	--	
08/11/2005	--	--	--	--	--	--	--	--	--	--			--	--	
11/18/2005	--	--	--	--	--	--	--	--	--	--			--	--	
02/01/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--			1.7	--	e
5/30/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	g
8/11/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	g
11/2/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	g

**Table 2. Summary of Fuel Additives Analytical Data  
Station #276, 10600 MacArthur Blvd., Oakland, CA**

Well and Sample Date	Concentrations in (µg/L)														Footnotes
	Ethanol	TBA	MtBE	DIPE	EtBE	TAME	1,2-DCA	EDB	trans-1,2	cis-1,2	VOC	Oxygen	PCE	TCE	
<b>RW-1 Cont.</b>															
2/6/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	15	--	
<b>WGR-3</b>															
05/04/2004	<100	<20	11	<0.50	<0.50	2.4	<0.50	<0.50	--	--			<0.50	--	
08/12/2004	<100	<20	35	<0.50	<0.50	7.5	<0.50	<0.50	--	--			<0.50	--	
11/10/2004	<100	<20	5.6	<0.50	<0.50	1.3	<0.50	<0.50	--	--			<0.50	--	
02/03/2005	<100	<20	1.1	<0.50	<0.50	<0.50	<0.50	<0.50	--	--			<0.50	--	e
05/09/2005	--	--	--	--	--	--	--	--	--	--			--	--	
08/11/2005	--	--	--	--	--	--	--	--	--	--			--	--	
11/18/2005	--	--	--	--	--	--	--	--	--	--			--	--	
02/01/2006	<300	<20	2.3	<0.50	<0.50	<0.50	<0.50	<0.50	--	--			<0.50	--	e
5/30/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	g
8/11/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	g
11/2/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	g
2/6/2007	<300	<20	4.4	<0.50	<0.50	0.58	<0.50	<0.50	--	--	--	--	<0.50	--	



SYMBOLS & ABBREVIATIONS:

-- = Not analyzed/applicable/measured/available  
< = Not detected at or above the laboratory reporting limit  
1,2-DCA = 1,2-Dichloroethane  
cis-1,2-DCE = cis-1,2-Dichloroethene  
DIPE = Di-isopropyl ether  
EDB = 1,2-Dibromoethane  
ETBE = Ethyl tert-butyl ether  
MTBE = Methyl tert-butyl ether  
PCE = Tetrachloroethene  
TAME = tert-Amyl methyl ether  
TBA = tert-Butyl alcohol  
TCE = Trichloroethene  
trans-1,2-DCE = trans 1,2-Dichloroethene  
VOC = Volatile organic compounds  
µg/L = Micrograms per Liter  
BTEX = Benzene, toluene, ethylbenzene and xylenes

FOOTNOTES:

a = VOC 1,1 DCE detected at a concentration of 1.9 ug/L.  
b = VOC 1,2 DCA detected at a concentration of 3.2 ug/L.  
c = VOC Chlorobenzene detected at a concentration of 2.0 ug/L.  
d = Ethanol was re-analyzed two days out of holding time and was not detected above a laboratory reporting limit of 100 ug/L.  
e = Calibration verification for ethanol was within method limits but outside contract limits.  
f = Sample for PCE analyzed after holding time expired.  
g = Well sampled annually.  
h = Initial analysis within holding time but required dilution.

NOTES:

PCE was analyzed using EPA Method 8260B. Samples were analyzed by EPA method 8015B for GRO and EPA method 8260B for BTEX, fuel oxygenates, ethanol, and PCE.

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

**Table 3. Historical Ground-Water Flow Direction and Gradient  
Station #276, 10600 MacArthur Blvd., Oakland, CA**

<b>Date Sampled</b>	<b>Approximate Flow Direction</b>	<b>Approximate Hydraulic Gradient</b>
12/17/2000	South-Southeast	0.003
12/28/2001	Southeast	0.002
11/27/2002	South-Southeast	0.003
7/22/2003	South	0.007
11/7/2003	Southwest	0.002
2/3/2004	South-Southwest	0.002
5/4/2004	South-Southwest	0.003
8/12/2004	South	0.004
11/10/2004	Southwest	0.004
2/3/2005	Southwest	0.003
5/9/2005	South-Southwest	0.004
8/11/2005	South-Southwest	0.007
11/18/2005	Southwest	0.005
2/1/2006	Southwest	0.002
5/30/2006	South-Southwest	0.007
8/10/2006	South-Southwest	0.004
11/2/2006	South-Southwest	0.004
2/6/2007	South-Southwest	0.005
5/8/2007	South-Southwest	0.005
8/14/2007	South-Southwest	0.004
<b>11/13/2007</b>	<b>South-Southwest</b>	<b>0.003</b>

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

**APPENDIX A**

**STRATUS GROUND-WATER SAMPLING DATA PACKAGE  
(INCLUDES FIELD DATA SHEETS AND LABORATORY ANALYTICAL REPORT WITH  
CHAIN-OF-CUSTODY DOCUMENTATION)**



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

December 13, 2007

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

Re: Groundwater Sampling Data Package, BP Service Station No. 276, located at  
10600 MacArthur Boulevard, Oakland, California

### **General Information**

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

*Phone Number:* (530) 676-6000

*On-Site Supplier Representative:* Jerry Gonzales

*Sampling Date:* November 13, 2007

*Arrival:* 11:55                      *Departure:* 14:10

*Weather Conditions:* Clear

*Unusual Field Conditions:* None

*Scope of Work Performed:* Quarterly monitoring and sampling

*Variations from Work Scope:* None noted

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

Sincerely,

**STRATUS ENVIRONMENTAL, INC.**

Jay R. Johnson, P.G.  
Project Manager



**Attachments:**

- Field Data Sheets
- Non-Hazardous Waste Data Form
- Chain of Custody Documentation
- Certified Analytical Results

cc: Mr. Paul Supple, BP/ARCO



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

PROJECT #: 276 PURGED BY: Jo WELL I.D.: MW-2  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: [Signature] SAMPLE I.D.: MW-2  
 LOCATION: Oakland - 10600 MacArthur Blvd. QA SAMPLES: \_\_\_\_\_

DATE PURGED 11-13-07 START (2400hr) 13:17 END (2400hr) 13:23  
 DATE SAMPLED 11-13-07 SAMPLE TIME (2400hr) 13:27  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

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

DEPTH TO BOTTOM (feet) = 25.11 CASING VOLUME (gal) = 6.0  
 DEPTH TO WATER (feet) = 16.11 CALCULATED PURGE (gal) = 18.0  
 WATER COLUMN HEIGHT (feet) = 9.0 ACTUAL PURGE (gal) = 18.6

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>11-13-07</u>	<u>13:19</u>	<u>6.2</u>	<u>21.4</u>	<u>567</u>	<u>6.32</u>	<u>clear</u>	
<u>/</u>	<u>13:21</u>	<u>12.4</u>	<u>20.8</u>	<u>602</u>	<u>6.32</u>	<u>/</u>	
<u>/</u>	<u>13:23</u>	<u>18.6</u>	<u>19.9</u>	<u>602</u>	<u>6.32</u>	<u>/</u>	

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 18.41 SAMPLE TURBIDITY: clear

80% RECHARGE:  YES  NO ANALYSES: SU-0  
 ODOR: yes SAMPLE VESSEL / PRESERVATIVE: 6.000-HIC

PURGING EQUIPMENT

\_\_\_\_ Bladder Pump \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_ Centrifugal Pump \_\_\_\_\_ Bailer (PVC)  
 Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel)  
 \_\_\_\_ Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_

Other: \_\_\_\_\_  
 Pump Depth: 23

SAMPLING EQUIPMENT

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

Other: DISP TUBING

WELL INTEGRITY: good LOCK#: NY

REMARKS: Do 199

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



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

PROJECT #: 276 PURGED BY: Jc WELL I.D.: NW 5  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: J SAMPLE I.D.: NW 5  
 LOCATION: Oakland - 10600 MacArthur Blvd. QA SAMPLES: \_\_\_\_\_

DATE PURGED 11-13-07 START (2400hr) 13:40 END (2400hr) 13:44  
 DATE SAMPLED 11-13-07 SAMPLE TIME (2400hr) 13:42  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

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

DEPTH TO BOTTOM (feet) = 46.68 CASING VOLUME (gal) = 10.6  
 DEPTH TO WATER (feet) = 30.77 CALCULATED PURGE (gal) = 31.9  
 WATER COLUMN HEIGHT (feet) = 15.9 ACTUAL PURGE (gal) = 0/NP

FIELD MEASUREMENTS							
DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>11-13-07</u>	<u>13:43</u>	<u>0</u>	<u>12.8</u>	<u>193</u>	<u>6.50</u>	<u>clear</u>	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	<u>N</u>	<u>P</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

SAMPLE DEPTH TO WATER: 30.77 SAMPLE INFORMATION SAMPLE TURBIDITY: clear

80% RECHARGE:  YES  NO ANALYSES: SWB  
 ODOR: NO SAMPLE VESSEL / PRESERVATIVE: 6 Vol-HCC

**PURGING EQUIPMENT**  
 Bladder Pump  Bailer (Teflon)  
 Centrifugal Pump  Bailer (PVC)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: 40

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

WELL INTEGRITY: good LOCK#: NW 5  
 REMARKS: DO 1.83

SIGNATURE: \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_

# BP ALAMEDA PORTFOLIO

## WATER SAMPLE FIELD DATA SHEET

PROJECT #: 276 PURGED BY: [Signature] WELL I.D.: MW-8  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: [Signature] SAMPLE I.D.: MW-8  
 LOCATION: Oakland - 10600 MacArthur Blvd. QA SAMPLES: \_\_\_\_\_

DATE PURGED 11-13-07 START (2400hr) 12:50 END (2400hr) 13:00  
 DATE SAMPLED 11-13-07 SAMPLE TIME (2400hr) 13:03  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

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

DEPTH TO BOTTOM (feet) = 47.78 CASING VOLUME (gal) = 12.5  
 DEPTH TO WATER (feet) = 29.05 CALCULATED PURGE (gal) = 27.6  
 WATER COLUMN HEIGHT (feet) = 18.7 ACTUAL PURGE (gal) = 38.0

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>11-13-07</u>	<u>1353</u>	<u>12.5</u>	<u>22.6</u>	<u>703</u>	<u>6.48</u>	<u>0/100</u>	_____
<u>/</u>	<u>1356</u>	<u>27.0</u>	<u>21.2</u>	<u>727</u>	<u>6.37</u>	<u>/</u>	_____
<u>/</u>	<u>1300</u>	<u>38.0</u>	<u>21.2</u>	<u>730</u>	<u>6.38</u>	<u>/</u>	_____

SAMPLE DEPTH TO WATER: 31.63 SAMPLE INFORMATION SAMPLE TURBIDITY: clear

80% RECHARGE:  YES  NO ANALYSES: S-W-10  
 ODOR: NO SAMPLE VESSEL / PRESERVATIVE: 6 Voa-HCC

**PURGING EQUIPMENT**  
 Bladder Pump  Bailer (Teflon)  
 Centrifugal Pump  Bailer (PVC)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: 43

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

WELL INTEGRITY: good LOCK#: NA

REMARKS: DO 3.14

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



NO. 665143

# NON-HAZARDOUS WASTE DATA FORM

SITE:

EPA I.D. NO.

NOT REQUIRED

NAME BP WEST COAST PRODUCTS LLC ARCO # 276  
ADDRESS P.O. BOX 80249 RANCHO SANTA MARGARITA CA 92688  
CITY, STATE, ZIP

PROFILE NO.

PHONE NO. ( )

CONTAINERS: No. VOLUME WEIGHT

TYPE:  TANK TRUCK  DUMP TRUCK  DRUMS  CARTONS  OTHER

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

COMPONENTS OF WASTE			PPM	%	COMPONENTS OF WASTE			PPM	lb
1.	WATER		99-100%		5.				
2.	TPH		<1%		6.				
3.					7.	BESI#			

PROPERTIES: 7-10 pH  SOLID  LIQUID  SLUDGE  SLURRY  OTHER

HANDLING INSTRUCTIONS: WEAR ALL APPROPRIATE PROTECTIVE CLOTHING

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

*Larry Moothart*  
Larry Moothart BESI for BP  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

TO BE COMPLETED BY GENERATOR

TRANSPORTER

Transporter #1 STRATUS ENVIRONMENTAL  
NAME 3330 CAMERON PARK DR  
ADDRESS CAMERON PARK, CA 95682  
CITY, STATE, ZIP 530-676-2031  
PHONE NO.  
TRUCK, UNIT, I.D. NO.

EPA I.D. NO.

SERVICE ORDER NO.

PICK UP DATE

*Larry Moothart*  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

TSD FACILITY

SEAPORT REFINING & ENVIRONMENTAL, LLC  
NAME 700 SEAPORT BLVD.  
ADDRESS REDWOOD CITY, CA 94063  
CITY, STATE, ZIP 650-364-1024  
PHONE NO.  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

EPA I.D. NO.

DISPOSAL METHOD

LANDFILL  OTHER

GEN	OLD/NEW	L	A	TONS
TRANS		S	B	
C/O		RT/CO	HWDF	NONE

DISCREPANCY



# Chain of Custody Record

Project Name: BP 276  
 BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > CA > Alameda > 276  
 State or Lead Regulatory Agency: \_\_\_\_\_  
 Requested Due Date (mm/dd/yy): \_\_\_\_\_

On-site Time: <u>11:55</u>	Temp: <u>70</u>
Off-site Time: <u>14:10</u>	Temp: <u>74</u>
Sky Conditions: <u>Clear</u>	
Meteorological Events: <u>NONE</u>	
Wind Speed: <u>3 MPH</u>	Direction: <u>NW</u>

Lab Name: <u>TestAmerica</u>	BP/AR Facility No.: <u>276</u>	Consultant/Contractor: <u>Stratus Environmental, Inc.</u>
Address: <u>885 Jarvis Drive</u>	BP/AR Facility Address: <u>10600 MacArthur Blvd., Oakland</u>	Address: <u>3330 Cameron Park Drive, Suite 550</u>
<u>Morgan Hill, CA 95937</u>	Site Lat/Long:	<u>Cameron Park, CA 95682</u>
Lab PM: <u>Lisa Race</u>	California Global ID #: <u>T0600108312</u>	Consultant/Contractor Project No.: <u>E276-04</u>
Tele/Fax: <u>408-782-8156 408-782-6308 (fax)</u>	Enfos Project No.: <u>GOC20-0014</u>	Consultant/Contractor PM: <u>Jay Johnson</u>
BP/AR PM Contact: <u>Paul Supple</u>	Provision or RCOP (circle one) <u>Provision</u>	Tele/Fax: <u>(530) 676-6000 / (530) 676-6005</u>
Address: <u>2010 Crow Canyon Place, Suite 150</u>	Phase/WBS: <u>04-Monitoring</u>	Report Type & QC Level: <u>Level 3 with EDF</u>
<u>San Ramon, CA</u>	Sub Phase/Task: <u>03-Analytical</u>	E-mail EDD To: <u>shaves@stratusinc.net</u>
Tele/Fax: <u>925-275-3506</u>	Cost Element: <u>01-Contractor labor</u>	Invoice to: <u>Atlantic Richfield Co.</u>

Item No.	Sample Description	Time	Date	Matrix			Laboratory No.	No. of Containers	Preservative					Requested Analysis					Sample Point Lat/Long and Comments *Oxy = MTBE, TAME, ETBE, DIPE, TBA
				Soil/Solid	Water/Liquid	Air			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	Methanol	GROBTEX/Oxy*	EDB	1,2 DCA	Ethanol by 8260	PCE by 8010	
1	MW-2	1327	11/17	X				6			X			X	X	X	X	X	
2	MW-5	1342	/	X				6			X			X	X	X	X	X	
3	MW-8	1303	/	X				6			X			X	X	X	X	X	
4	TB 276-111307	530	/	X				3			X			X	X	X	X	X	HOLD
5																			
6																			
7																			
8																			
9																			
10																			

Sampler's Name: <u>Jerry Gonzalez</u>	Relinquished by / Affiliation: _____	Date: <u>11-14</u>	Time: <u>16:00</u>	Accepted By / Affiliation: _____	Date: <u>11-14</u>	Time: <u>16:00</u>
Sampler's Company: <u>Doulos ENV</u>						
Shipment Date:						
Shipment Method:						
Shipment Tracking No:						

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

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

28 November, 2007

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

RE: ARCO #0276, Oakland, CA  
Work Order: MQK0495

Enclosed are the results of analyses for samples received by the laboratory on 11/14/07 20:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Lisa Race  
Senior Project Manager

CA ELAP Certificate # 1210

The results in this laboratory report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the BPGCLN Technical Specifications, applicable Federal, State, local regulations and certification requirements as well as the methodologies as described in laboratory SOPs reviewed by the BPGCLN. This entire report was reviewed and approved for release.

Stratus Environmental Inc. [Arco] 3330 Cameron Park Dr., Suite 550 Cameron Park CA, 95682	Project: ARCO #0276, Oakland, CA Project Number: G0C20-0014 Project Manager: Jay Johnson	MQK0495 Reported: 11/28/07 10:44
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ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-2	MQK0495-01	Water	11/13/07 13:27	11/14/07 20:00
MW-5	MQK0495-02	Water	11/13/07 13:42	11/14/07 20:00
MW-8	MQK0495-03	Water	11/13/07 13:03	11/14/07 20:00
TB-276-111307	MQK0495-04	Water	11/13/07 05:30	11/14/07 20:00

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

These samples were received with no custody seals.

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

Project: ARCO #0276, Oakland, CA  
Project Number: G0C20-0014  
Project Manager: Jay Johnson

MQK0495  
Reported:  
11/28/07 10:44

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-2 (MQK0495-01) Water Sampled: 11/13/07 13:27 Received: 11/14/07 20:00</b>									
<b>Gasoline Range Organics (C4-C12)</b>	<b>170</b>	<b>50</b>	ug/l	1	7K21014	11/21/07	11/21/07	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		90 %	60-150		"	"	"	"	
Surrogate: Dibromofluoromethane		98 %	75-130		"	"	"	"	
Surrogate: Toluene-d8		100 %	75-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	55-130		"	"	"	"	
<b>MW-5 (MQK0495-02) Water Sampled: 11/13/07 13:42 Received: 11/14/07 20:00</b>									
<b>Gasoline Range Organics (C4-C12)</b>	<b>950</b>	<b>50</b>	ug/l	1	7K21014	11/21/07	11/21/07	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		90 %	60-150		"	"	"	"	
Surrogate: Dibromofluoromethane		100 %	75-130		"	"	"	"	
Surrogate: Toluene-d8		91 %	75-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		81 %	55-130		"	"	"	"	
<b>MW-8 (MQK0495-03) Water Sampled: 11/13/07 13:03 Received: 11/14/07 20:00</b>									
<b>Gasoline Range Organics (C4-C12)</b>	<b>290</b>	<b>50</b>	ug/l	1	7K21014	11/21/07	11/21/07	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		92 %	60-150		"	"	"	"	
Surrogate: Dibromofluoromethane		99 %	75-130		"	"	"	"	
Surrogate: Toluene-d8		89 %	75-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		78 %	55-130		"	"	"	"	



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Project Manager: Jay Johnson

MQK0495  
Reported:  
11/28/07 10:44

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**MW-2 (MQK0495-01) Water** Sampled: 11/13/07 13:27 Received: 11/14/07 20:00

<b>tert-Amyl methyl ether</b>	5.1	0.50	ug/l	1	7K19002	11/19/07	11/19/07	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	300	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	27	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		104 %	75-130		"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		118 %	60-150		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		103 %	75-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		103 %	55-130		"	"	"	"	

**MW-5 (MQK0495-02) Water** Sampled: 11/13/07 13:42 Received: 11/14/07 20:00

<b>tert-Amyl methyl ether</b>	12	0.50	ug/l	1	7K19002	11/19/07	11/19/07	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
<b>Di-isopropyl ether</b>	0.60	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
<b>1,2-Dichloroethane</b>	5.2	0.50	"	"	"	"	"	"	
Ethanol	ND	300	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	110	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		103 %	75-130		"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		115 %	60-150		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		100 %	75-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		96 %	55-130		"	"	"	"	

Stratus Environmental Inc. [Arco]  
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MQK0495  
Reported:  
11/28/07 10:44

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-8 (MQK0495-03) Water Sampled: 11/13/07 13:03 Received: 11/14/07 20:00</b>									
<b>tert-Amyl methyl ether</b>	<b>18</b>	2.5	ug/l	5	7K21014	11/21/07	11/21/07	EPA 8260B	
Benzene	ND	2.5	"	"	"	"	"	"	
tert-Butyl alcohol	ND	100	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.5	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.5	"	"	"	"	"	"	
Ethanol	ND	1500	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Ethylbenzene	ND	2.5	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>400</b>	2.5	"	"	"	"	"	"	
Toluene	ND	2.5	"	"	"	"	"	"	
Xylenes (total)	ND	2.5	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		98 %		75-130	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		88 %		60-150	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		87 %		75-120	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		78 %		55-130	"	"	"	"	

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MQK0495  
Reported:  
11/28/07 10:44

**EPA 8010 list Volatile Organic Compounds by EPA 8260B**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-2 (MQK0495-01) Water Sampled: 11/13/07 13:27 Received: 11/14/07 20:00</b>									
Tetrachloroethene	ND	0.50	ug/l	1	7K19002	11/19/07	11/19/07	EPA 8260B	
Surrogate: Dibromofluoromethane		104 %	75-130		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		118 %	60-150		"	"	"	"	
Surrogate: Toluene-d8		103 %	75-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	55-130		"	"	"	"	
<b>MW-5 (MQK0495-02) Water Sampled: 11/13/07 13:42 Received: 11/14/07 20:00</b>									
Tetrachloroethene	1500	5.0	ug/l	10	7K21014	11/21/07	11/21/07	EPA 8260B	
Surrogate: Dibromofluoromethane		98 %	75-130		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		89 %	60-150		"	"	"	"	
Surrogate: Toluene-d8		92 %	75-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80 %	55-130		"	"	"	"	
<b>MW-8 (MQK0495-03) Water Sampled: 11/13/07 13:03 Received: 11/14/07 20:00</b>									
Tetrachloroethene	17	0.50	ug/l	1	7K21014	11/21/07	11/21/07	EPA 8260B	
Surrogate: Dibromofluoromethane		99 %	75-130		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		92 %	60-150		"	"	"	"	
Surrogate: Toluene-d8		89 %	75-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		78 %	55-130		"	"	"	"	

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MQK0495  
Reported:  
11/28/07 10:44

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 7K21014 - EPA 5030B P/T / LUFT GCMS**

**Blank (7K21014-BLK1)**

Prepared & Analyzed: 11/21/07

Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Surrogate: 1,2-Dichloroethane-d4	2.20		"	2.50		88	60-150			
Surrogate: Dibromofluoromethane	2.41		"	2.50		96	75-130			
Surrogate: Toluene-d8	2.33		"	2.50		93	75-120			
Surrogate: 4-Bromofluorobenzene	1.97		"	2.50		79	55-130			

**Laboratory Control Sample (7K21014-BS2)**

Prepared & Analyzed: 11/21/07

Gasoline Range Organics (C4-C12)	433	50	ug/l	500		87	55-130			
Surrogate: 1,2-Dichloroethane-d4	2.18		"	2.50		87	60-150			
Surrogate: Dibromofluoromethane	2.42		"	2.50		97	75-130			
Surrogate: Toluene-d8	2.54		"	2.50		102	75-120			
Surrogate: 4-Bromofluorobenzene	2.89		"	2.50		116	55-130			

**Laboratory Control Sample Dup (7K21014-BS2)**

Prepared & Analyzed: 11/21/07

Gasoline Range Organics (C4-C12)	428	50	ug/l	500		86	55-130	1	20	
Surrogate: 1,2-Dichloroethane-d4	2.16		"	2.50		86	60-150			
Surrogate: Dibromofluoromethane	2.40		"	2.50		96	75-130			
Surrogate: Toluene-d8	2.59		"	2.50		104	75-120			
Surrogate: 4-Bromofluorobenzene	2.56		"	2.50		102	55-130			

**Matrix Spike (7K21014-MS1)**

Source: MQK0495-01

Prepared & Analyzed: 11/21/07

Gasoline Range Organics (C4-C12)	710	50	ug/l	550	173	98	25-150			
Surrogate: 1,2-Dichloroethane-d4	2.30		"	2.50		92	60-150			
Surrogate: Dibromofluoromethane	2.52		"	2.50		101	75-130			
Surrogate: Toluene-d8	2.56		"	2.50		102	75-120			
Surrogate: 4-Bromofluorobenzene	2.69		"	2.50		108	55-130			

**Matrix Spike Dup (7K21014-MSD1)**

Source: MQK0495-01

Prepared & Analyzed: 11/21/07

Gasoline Range Organics (C4-C12)	701	50	ug/l	550	173	96	25-150	1	20	
Surrogate: 1,2-Dichloroethane-d4	2.26		"	2.50		90	60-150			
Surrogate: Dibromofluoromethane	2.49		"	2.50		100	75-130			
Surrogate: Toluene-d8	2.53		"	2.50		101	75-120			
Surrogate: 4-Bromofluorobenzene	2.70		"	2.50		108	55-130			

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MQK0495  
Reported:  
11/28/07 10:44

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 7K19002 - EPA 5030B P/T / EPA 8260B**

**Blank (7K19002-BLK1)**

Prepared & Analyzed: 11/19/07

tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	"							
tert-Butyl alcohol	ND	20	"							
Di-isopropyl ether	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
Ethanol	ND	300	"							
Ethyl tert-butyl ether	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
<i>Surrogate: Dibromofluoromethane</i>	2.50		"	2.50		100	75-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.76		"	2.50		110	60-150			
<i>Surrogate: Toluene-d8</i>	2.43		"	2.50		97	75-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.37		"	2.50		95	55-130			

**Laboratory Control Sample (7K19002-BS1)**

Prepared & Analyzed: 11/19/07

tert-Amyl methyl ether	10.8	0.50	ug/l	10.0		108	75-125			
Benzene	9.65	0.50	"	10.0		96	75-120			
tert-Butyl alcohol	185	20	"	200		93	80-120			
Di-isopropyl ether	9.81	0.50	"	10.0		98	70-130			
1,2-Dibromoethane (EDB)	10.4	0.50	"	10.0		104	75-130			
1,2-Dichloroethane	10.4	0.50	"	10.0		104	65-130			
Ethanol	173	300	"	200		86	50-150			
Ethyl tert-butyl ether	10.2	0.50	"	10.0		102	75-130			
Ethylbenzene	10.4	0.50	"	10.0		104	80-125			
Methyl tert-butyl ether	10.2	0.50	"	10.0		102	80-130			
Toluene	10.2	0.50	"	10.0		102	80-120			
Xylenes (total)	31.2	0.50	"	30.0		104	80-125			
<i>Surrogate: Dibromofluoromethane</i>	2.40		"	2.50		96	75-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.60		"	2.50		104	60-150			
<i>Surrogate: Toluene-d8</i>	2.55		"	2.50		102	75-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.59		"	2.50		104	55-130			

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MQK0495  
Reported:  
11/28/07 10:44

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 7K19002 - EPA 5030B P/T / EPA 8260B**

**Laboratory Control Sample Dup (7K19002-BSD1)**

Prepared & Analyzed: 11/19/07

tert-Amyl methyl ether	10.9	0.50	ug/l	10.0	109	75-125	0.5	25	
Benzene	8.79	0.50	"	10.0	88	75-120	9	20	
tert-Butyl alcohol	173	20	"	200	86	80-120	7	25	
Di-isopropyl ether	9.93	0.50	"	10.0	99	70-130	1	25	
1,2-Dibromoethane (EDB)	10.1	0.50	"	10.0	101	75-130	3	30	
1,2-Dichloroethane	10.5	0.50	"	10.0	105	65-130	1	25	
Ethanol	157	300	"	200	79	50-150	9	25	
Ethyl tert-butyl ether	10.3	0.50	"	10.0	103	75-130	0.3	25	
Ethylbenzene	8.70	0.50	"	10.0	87	80-125	18	20	
Methyl tert-butyl ether	10.0	0.50	"	10.0	100	80-130	2	25	
Toluene	8.67	0.50	"	10.0	87	80-120	16	25	
Xylenes (total)	26.4	0.50	"	30.0	88	80-125	17	20	
<i>Surrogate: Dibromofluoromethane</i>	2.68		"	2.50	107	75-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.78		"	2.50	111	60-150			
<i>Surrogate: Toluene-d8</i>	2.41		"	2.50	96	75-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.43		"	2.50	97	55-130			

**Matrix Spike (7K19002-MS1)**

Source: MQK0591-05

Prepared & Analyzed: 11/19/07

tert-Amyl methyl ether	11.0	0.50	ug/l	10.0	ND	110	75-140		
Benzene	9.21	0.50	"	10.0	ND	92	80-120		
tert-Butyl alcohol	185	20	"	200	ND	92	80-125		
Di-isopropyl ether	9.94	0.50	"	10.0	ND	99	75-135		
1,2-Dibromoethane (EDB)	10.4	0.50	"	10.0	ND	104	80-135		
1,2-Dichloroethane	10.6	0.50	"	10.0	ND	106	65-145		
Ethanol	163	300	"	200	ND	82	50-150		
Ethyl tert-butyl ether	10.6	0.50	"	10.0	ND	106	80-135		
Ethylbenzene	9.72	0.50	"	10.0	ND	97	75-130		
Methyl tert-butyl ether	10.3	0.50	"	10.0	ND	103	75-145		
Toluene	9.60	0.50	"	10.0	ND	96	80-125		
Xylenes (total)	29.4	0.50	"	30.0	ND	98	75-125		
<i>Surrogate: Dibromofluoromethane</i>	2.65		"	2.50	106	75-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.82		"	2.50	113	60-150			
<i>Surrogate: Toluene-d8</i>	2.51		"	2.50	100	75-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.55		"	2.50	102	55-130			

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MQK0495  
Reported:  
11/28/07 10:44

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 7K19002 - EPA 5030B P/T / EPA 8260B**

Matrix Spike Dup (7K19002-MSD1)	Source: MQK0591-05	Prepared & Analyzed: 11/19/07								
tert-Amyl methyl ether	10.6	0.50	ug/l	10.0	ND	106	75-140	4	25	
Benzene	9.43	0.50	"	10.0	ND	94	80-120	2	20	
tert-Butyl alcohol	191	20	"	200	ND	95	80-125	3	25	
Di-isopropyl ether	9.88	0.50	"	10.0	ND	99	75-135	0.6	25	
1,2-Dibromoethane (EDB)	9.89	0.50	"	10.0	ND	99	80-135	5	30	
1,2-Dichloroethane	10.3	0.50	"	10.0	ND	103	65-145	3	25	
Ethanol	198	300	"	200	ND	99	50-150	19	25	
Ethyl tert-butyl ether	10.3	0.50	"	10.0	ND	103	80-135	3	25	
Ethylbenzene	10.4	0.50	"	10.0	ND	104	75-130	6	20	
Methyl tert-butyl ether	9.59	0.50	"	10.0	ND	96	75-145	7	25	
Toluene	9.94	0.50	"	10.0	ND	99	80-125	3	25	
Xylenes (total)	30.9	0.50	"	30.0	ND	103	75-125	5	20	
<i>Surrogate: Dibromofluoromethane</i>	2.63		"	2.50		105	75-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.71		"	2.50		108	60-150			
<i>Surrogate: Toluene-d8</i>	2.56		"	2.50		102	75-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.56		"	2.50		102	55-130			

**Batch 7K21014 - EPA 5030B P/T / EPA 8260B**

Blank (7K21014-BLK1)	Prepared & Analyzed: 11/21/07									
tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	"							
tert-Butyl alcohol	ND	20	"							
Di-isopropyl ether	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
Ethanol	ND	300	"							
Ethyl tert-butyl ether	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
<i>Surrogate: Dibromofluoromethane</i>	2.41		"	2.50		96	75-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.20		"	2.50		88	60-150			
<i>Surrogate: Toluene-d8</i>	2.33		"	2.50		93	75-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	1.97		"	2.50		79	55-130			

TestAmerica - Morgan Hill, CA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.

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

Project: ARCO #0276, Oakland, CA  
Project Number: G0C20-0014  
Project Manager: Jay Johnson

MQK0495  
Reported:  
11/28/07 10:44

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 7K21014 - EPA 5030B P/T / EPA 8260B**

**Laboratory Control Sample (7K21014-BS1)**

Prepared & Analyzed: 11/21/07

tert-Amyl methyl ether	10.4	0.50	ug/l	10.0		104	75-125			
Benzene	10.5	0.50	"	10.0		105	75-120			
tert-Butyl alcohol	185	20	"	200		93	80-120			
Di-isopropyl ether	8.89	0.50	"	10.0		89	70-130			
1,2-Dibromoethane (EDB)	11.1	0.50	"	10.0		111	75-130			
1,2-Dichloroethane	8.99	0.50	"	10.0		90	65-130			
Ethanol	178	300	"	200		89	50-150			
Ethyl tert-butyl ether	9.75	0.50	"	10.0		98	75-130			
Ethylbenzene	10.5	0.50	"	10.0		105	80-125			
Methyl tert-butyl ether	10.1	0.50	"	10.0		101	80-130			
Toluene	10.9	0.50	"	10.0		109	80-120			
Xylenes (total)	32.9	0.50	"	30.0		110	80-125			
<i>Surrogate: Dibromofluoromethane</i>	2.48		"	2.50		99	75-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.25		"	2.50		90	60-150			
<i>Surrogate: Toluene-d8</i>	2.50		"	2.50		100	75-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.43		"	2.50		97	55-130			

**Matrix Spike (7K21014-MS2)**

Source: MQK0495-01RE1

Prepared & Analyzed: 11/21/07

tert-Amyl methyl ether	16.1	0.50	ug/l	10.0	4.88	112	75-140			
Benzene	10.4	0.50	"	10.0	0.290	101	80-120			
tert-Butyl alcohol	193	20	"	200	ND	96	80-125			
Di-isopropyl ether	8.79	0.50	"	10.0	ND	88	75-135			
1,2-Dibromoethane (EDB)	11.5	0.50	"	10.0	ND	115	80-135			
1,2-Dichloroethane	9.00	0.50	"	10.0	ND	90	65-145			
Ethanol	171	300	"	200	ND	85	50-150			
Ethyl tert-butyl ether	9.65	0.50	"	10.0	ND	96	80-135			
Ethylbenzene	10.2	0.50	"	10.0	0.310	99	75-130			
Methyl tert-butyl ether	34.7	0.50	"	10.0	25.2	96	75-145			
Toluene	10.7	0.50	"	10.0	0.320	104	80-125			
Xylenes (total)	31.6	0.50	"	30.0	0.390	104	75-125			
<i>Surrogate: Dibromofluoromethane</i>	2.52		"	2.50		101	75-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.30		"	2.50		92	60-150			
<i>Surrogate: Toluene-d8</i>	2.56		"	2.50		102	75-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.69		"	2.50		108	55-130			



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

Project: ARCO #0276, Oakland, CA  
Project Number: G0C20-0014  
Project Manager: Jay Johnson

MQK0495  
Reported:  
11/28/07 10:44

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 7K21014 - EPA 5030B P/T / EPA 8260B**

<b>Matrix Spike Dup (7K21014-MSD2)</b>	<b>Source: MQK0495-01RE1</b>			<b>Prepared &amp; Analyzed: 11/21/07</b>						
tert-Amyl methyl ether	16.2	0.50	ug/l	10.0	4.88	113	75-140	0.5	25	
Benzene	10.4	0.50	"	10.0	0.290	101	80-120	0.6	20	
tert-Butyl alcohol	181	20	"	200	ND	91	80-125	6	25	
Di-isopropyl ether	8.84	0.50	"	10.0	ND	88	75-135	0.6	25	
1,2-Dibromoethane (EDB)	11.2	0.50	"	10.0	ND	112	80-135	2	30	
1,2-Dichloroethane	8.90	0.50	"	10.0	ND	89	65-145	1	25	
Ethanol	160	300	"	200	ND	80	50-150	7	25	
Ethyl tert-butyl ether	9.87	0.50	"	10.0	ND	99	80-135	2	25	
Ethylbenzene	10.3	0.50	"	10.0	0.310	100	75-130	0.5	20	
Methyl tert-butyl ether	34.5	0.50	"	10.0	25.2	94	75-145	0.6	25	
Toluene	10.7	0.50	"	10.0	0.320	104	80-125	0.2	25	
Xylenes (total)	31.6	0.50	"	30.0	0.390	104	75-125	0.2	20	
<i>Surrogate: Dibromofluoromethane</i>	<i>2.49</i>		<i>"</i>	<i>2.50</i>		<i>100</i>	<i>75-130</i>			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>2.26</i>		<i>"</i>	<i>2.50</i>		<i>90</i>	<i>60-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>2.53</i>		<i>"</i>	<i>2.50</i>		<i>101</i>	<i>75-120</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>2.70</i>		<i>"</i>	<i>2.50</i>		<i>108</i>	<i>55-130</i>			

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

Project: ARCO #0276, Oakland, CA  
Project Number: GOC20-0014  
Project Manager: Jay Johnson

MQK0495  
Reported:  
11/28/07 10:44

**EPA 8010 list Volatile Organic Compounds by EPA 8260B - Quality Control  
TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 7K19002 - EPA 5030B P/T / EPA 8260B</b>										
<b>Blank (7K19002-BLK1)</b>										
Prepared & Analyzed: 11/19/07										
Tetrachloroethene	ND	0.50	ug/l							
Surrogate: Dibromofluoromethane	2.50		"	2.50		100	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.76		"	2.50		110	60-150			
Surrogate: Toluene-d8	2.43		"	2.50		97	75-120			
Surrogate: 4-Bromofluorobenzene	2.37		"	2.50		95	55-130			
<b>Laboratory Control Sample (7K19002-BS1)</b>										
Prepared & Analyzed: 11/19/07										
Tetrachloroethene	11.5	0.50	ug/l	10.0		115	75-135			
Surrogate: Dibromofluoromethane	2.40		"	2.50		96	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.60		"	2.50		104	60-150			
Surrogate: Toluene-d8	2.55		"	2.50		102	75-120			
Surrogate: 4-Bromofluorobenzene	2.59		"	2.50		104	55-130			
<b>Laboratory Control Sample Dup (7K19002-BS1)</b>										
Prepared & Analyzed: 11/19/07										
Tetrachloroethene	8.73	0.50	ug/l	10.0		87	75-135	27	25	BA
Surrogate: Dibromofluoromethane	2.68		"	2.50		107	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.78		"	2.50		111	60-150			
Surrogate: Toluene-d8	2.41		"	2.50		96	75-120			
Surrogate: 4-Bromofluorobenzene	2.43		"	2.50		97	55-130			
<b>Matrix Spike (7K19002-MS1)</b>										
Source: MQK0591-05										
Prepared & Analyzed: 11/19/07										
Tetrachloroethene	10.4	0.50	ug/l	10.0	ND	104	75-135			
Surrogate: Dibromofluoromethane	2.65		"	2.50		106	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.82		"	2.50		113	60-150			
Surrogate: Toluene-d8	2.51		"	2.50		100	75-120			
Surrogate: 4-Bromofluorobenzene	2.55		"	2.50		102	55-130			
<b>Matrix Spike Dup (7K19002-MSD1)</b>										
Source: MQK0591-05										
Prepared & Analyzed: 11/19/07										
Tetrachloroethene	11.1	0.50	ug/l	10.0	ND	111	75-135	6	25	
Surrogate: Dibromofluoromethane	2.63		"	2.50		105	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.71		"	2.50		108	60-150			
Surrogate: Toluene-d8	2.56		"	2.50		102	75-120			
Surrogate: 4-Bromofluorobenzene	2.56		"	2.50		102	55-130			

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

Project: ARCO #0276, Oakland, CA  
Project Number: G0C20-0014  
Project Manager: Jay Johnson

MQK0495  
Reported:  
11/28/07 10:44

**EPA 8010 list Volatile Organic Compounds by EPA 8260B - Quality Control**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 7K21014 - EPA 5030B P/T / EPA 8260B**

**Blank (7K21014-BLK1)**

Prepared & Analyzed: 11/21/07

Tetrachloroethene	ND	0.50	ug/l							
Surrogate: Dibromofluoromethane	2.41		"	2.50		96	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.20		"	2.50		88	60-150			
Surrogate: Toluene-d8	2.33		"	2.50		93	75-120			
Surrogate: 4-Bromofluorobenzene	1.97		"	2.50		79	55-130			

**Laboratory Control Sample (7K21014-BS1)**

Prepared & Analyzed: 11/21/07

Tetrachloroethene	11.5	0.50	ug/l	10.0		115	75-135			
Surrogate: Dibromofluoromethane	2.48		"	2.50		99	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.25		"	2.50		90	60-150			
Surrogate: Toluene-d8	2.50		"	2.50		100	75-120			
Surrogate: 4-Bromofluorobenzene	2.43		"	2.50		97	55-130			

**Matrix Spike (7K21014-MS2)**

Source: MQK0495-01RE1

Prepared & Analyzed: 11/21/07

Tetrachloroethene	10.8	0.50	ug/l	10.0	ND	108	75-135			
Surrogate: Dibromofluoromethane	2.52		"	2.50		101	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.30		"	2.50		92	60-150			
Surrogate: Toluene-d8	2.56		"	2.50		102	75-120			
Surrogate: 4-Bromofluorobenzene	2.69		"	2.50		108	55-130			

**Matrix Spike Dup (7K21014-MSD2)**

Source: MQK0495-01RE1

Prepared & Analyzed: 11/21/07

Tetrachloroethene	10.7	0.50	ug/l	10.0	ND	107	75-135	0.8	25	
Surrogate: Dibromofluoromethane	2.49		"	2.50		100	75-130			
Surrogate: 1,2-Dichloroethane-d4	2.26		"	2.50		90	60-150			
Surrogate: Toluene-d8	2.53		"	2.50		101	75-120			
Surrogate: 4-Bromofluorobenzene	2.70		"	2.50		108	55-130			

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

Project: ARCO #0276, Oakland, CA  
Project Number: G0C20-0014  
Project Manager: Jay Johnson

MQK0495  
Reported:  
11/28/07 10:44

**Notes and Definitions**

BA Relative percent difference out of control  
DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference



bp  
A BP affiliated company

### Chain of Custody Record

Project Name: BP 276  
 BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > CA > Alameda > 276  
 State or Lead Regulatory Agency: \_\_\_\_\_  
 Requested Due Date (mm/dd/yy): \_\_\_\_\_

On-site Time: <u>11:55</u>	Temp: <u>70</u>
Off-site Time: <u>14:10</u>	Temp: <u>74</u>
Sky Conditions: <u>clear</u>	
Meteorological Events: <u>None</u>	
Wind Speed: <u>3 mph</u>	Direction: <u>NW</u>

Lab Name: <u>TestAmerica</u>	BP/AR Facility No.: <u>276</u>	Consultant/Contractor: <u>Stratus Environmental, Inc.</u>
Address: <u>885 Jarvis Drive</u>	BP/AR Facility Address: <u>10600 MacArthur Blvd., Oakland</u>	Address: <u>3330 Cameron Park Drive, Suite 550</u>
<u>Morgan Hill, CA 95937</u>	Site Lat/Long:	<u>Cameron Park, CA 95682</u>
Lab PM: <u>Lisa Race</u>	California Global ID #: <u>T0600108312</u>	Consultant/Contractor Project No.: <u>E276-04</u>
Tele/Fax: <u>408-782-8156 408-782-6308 (fax)</u>	Enfos Project No.: <u>G0C20-0014</u>	Consultant/Contractor PM: <u>Jay Johnson</u>
BP/AR PM Contact: <u>Paul Supple</u>	Provision or RCOP (circle one) <u>Provision</u>	Tele/Fax: <u>(530) 676-6000 / (530) 676-6005</u>
Address: <u>2010 Crow Canyon Place, Suite 150</u>	Phase/WBS: <u>04-Monitoring</u>	Report Type & QC Level: <u>Level 1 with EDF</u>
<u>San Ramon, CA</u>	Sub Phase/Task: <u>03-Analytical</u>	E-mail EDD To: <u>shaves@stratusinc.net</u>
Tele/Fax: <u>925-275-3506</u>	Cost Element: <u>01-Contractor labor</u>	Invoice to: <u>Atlantic Richfield Co.</u>

Item No.	Sample Description	Time	Date	Matrix			Laboratory No.	No. of Containers	Preservative					Requested Analysis					Sample Point Lat/Long and Comments *Oxy = MTBE, TAME, ETBE, DIPE, TBA					
				Soil/Solid	Water/Liquid	Air			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	Methanol	GRO/BTEX/Oxy*	EDB	1,2 DCA	Ethanol by 8260	PCE by 8010						
1	MW-2	1327	11-13-07	X			01	6						X	X	X	X	X						
2	MW-5	1342	11-13-07	X			02	6						X	X	X	X	X						
3	MW-8	1303	11-13-07	X			03	6						X	X	X	X	X						
4	TB 276-111307	530	11-13-07	X			04	3						X	X	X	X	X						HOLD
5																								
6																								
7																								
8																								
9																								
10																								

Sampler's Name: <u>Jerry Gonzalez</u>	Relinquished By / Affiliation: <u>[Signature]</u>	Date: <u>11-14</u>	Time: <u>16:00</u>	Accepted By / Affiliation: <u>[Signature]</u>	Date: <u>11-14</u>	Time: <u>16:00</u>
Sampler's Company: <u>Doulo's ENV</u>		Date: <u>11-14</u>	Time: <u>16:00</u>		Date: <u>11-14</u>	Time: <u>16:00</u>
Shipment Date:		Date: <u>11-14</u>	Time: <u>20:00</u>		Date: <u>11-14</u>	Time: <u>20:00</u>
Shipment Method:						
Shipment Tracking No:						

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

Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 4.4 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

## TEST AMERICA SAMPLE RECEIPT LOG

**CLIENT NAME:** APCO 276  
**REC. BY (PRINT):** D.V.  
**WORKORDER:** UQK0495

**DATE REC'D AT LAB:** 11/11/07  
**TIME REC'D AT LAB:** 2000  
**DATE LOGGED IN:** 11/15/07

**For Regulatory Purposes?**  
 DRINKING WATER  
 WASTE WATER  
 OTHER

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present <input checked="" type="radio"/> Absent Intact / Broken*								See sec 11/14/07 D.V.
2. Chain-of-Custody Present <input checked="" type="radio"/> / Absent*								
3. Traffic Reports or Packing List: Present / <input checked="" type="radio"/> Absent								
4. Airbill: Airbill / Sticker Present / <input checked="" type="radio"/> Absent								
5. Airbill #:								
6. Sample Labels: <input checked="" type="radio"/> Present / Absent								
7. Sample IDs: <input checked="" type="radio"/> Listed / Not Listed on Chain-of-Custody								
8. Sample Condition: <input checked="" type="radio"/> Intact / Broken* / Leaking*								
9. Does information on chain-of-custody, traffic reports and sample labels agree? <input checked="" type="radio"/> Yes / No*								
10. Sample received within hold time? <input checked="" type="radio"/> Yes / No*								
11. Adequate sample volume received? <input checked="" type="radio"/> Yes / No*								
12. Proper preservatives used? <input checked="" type="radio"/> Yes / No*								
13. Trip Blank / Temp Blank Received? (circle which, if yes) <input checked="" type="radio"/> Yes / No*								
14. Read Temp: <u>5.4°</u> Correction Factor: <u>-1.0°</u> Corrected Temp: <u>4.4°</u> Is corrected temp. 0-6°C? <input checked="" type="radio"/> Yes / No**								

**\*\*Exception (if any):** Metals / Perchlorate  
 DFF on Ice or Problem COC

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

**APPENDIX B**

**GEOTRACKER UPLOAD CONFIRMATION**

# Electronic Submittal Information

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

## UPLOADING A GEO\_WELL FILE

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

<b>Submittal Title:</b>	4Q07 GEO_WELL 276
<b>Facility Global ID:</b>	T0600100082
<b>Facility Name:</b>	ARCO #0276
<b>Submittal Date/Time:</b>	12/27/2007 3:29:05 PM
<b>Confirmation Number:</b>	<b>6400237858</b>

[Back to Main Menu](#)

Logged in as BROADBENT-C  
(CONTRACTOR)

CONTACT SITE [ADMINISTRATOR](#).



# Electronic Submittal Information

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

Your EDF file has been successfully uploaded!

**Confirmation Number:** 3848549962

**Date/Time of Submittal:** 12/20/2007 9:43:17 AM

**Facility Global ID:** T0600100082

**Facility Name:** ARCO #0276

**Submittal Title:** 4Q07 GW Monitoring

**Submittal Type:** GW Monitoring Report

[Click here](#) to view the detections report for this upload.

## ARCO #0276

10600 MACARTHUR  
OAKLAND, CA 94605

## Regional Board - Case #: 01-0089

SAN FRANCISCO BAY RWQCB (REGION 2)

## Local Agency (lead agency) - Case #: RO0000831

ALAMEDA COUNTY LOP - (BC)

**NOTE: THIS DATA WAS SUBMITTED AFTER THE SITE WAS CLOSED**

CONF #	TITLE	QUARTER
3848549962	4Q07 GW Monitoring	Q4 2007
SUBMITTED BY	SUBMIT DATE	STATUS
Broadbent & Associates, Inc.	12/20/2007	PENDING REVIEW

## SAMPLE DETECTIONS REPORT

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

## METHOD QA/QC REPORT

METHODS USED	8260FA,8260TPH,SW8260B
TESTED FOR REQUIRED ANALYTES?	Y
LAB NOTE DATA QUALIFIERS	Y

## QA/QC FOR 8021/8260 SERIES SAMPLES

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

## WATER SAMPLES FOR 8021/8260 SERIES

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

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

**SOIL SAMPLES FOR 8021/8260 SERIES**

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135% n/a

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% n/a

SURROGATE SPIKES % RECOVERY BETWEEN 70-125% n/a

BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130% n/a

**FIELD QC SAMPLES**

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

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