Atlantic Richfield Company
(a BP affiliated company)

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

October 31, 2006

Re: Third Quarter, 2006 Ground-Water Monitoring Report
Atlantic Richfield Company Station #4977
2770 Castro Valley Boulevard
Castro Valley, California

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

Submitted by:

Paul Supple
Environmental Business Manger

Third Quarter, 2006 Ground-Water Monitoring Report
Atlantic Richfield Company Station #4977
2770 Castro Valley Boulevard
Castro Valley, California

Prepared for

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

Prepared by

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

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

October 2006

Project No. 06-02-625

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

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

October 31, 2006 Project No. 06-02-625

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

Attn.: Mr. Paul Supple

Re: Third Quarter, 2006 Ground-Water Monitoring Report, Atlantic Richfield Company (a BP affiliated company) Station #4977, 2770 Castro Valley Boulevard, Castro Valley, CA. ACEH Case No. RO0002436.

Dear Mr. Supple:

Provided herein is the *Third Quarter, 2006 Ground-Water Monitoring Report* for Atlantic Richfield Company Station #4977 (herein referred to as Station #4977) located at 2770 Castro Valley Boulevard, Castro Valley, CA (Property). This report presents a summary of Third Quarter, 2006 ground-water monitoring results.

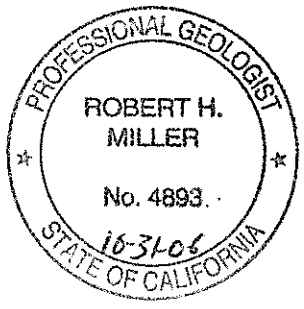
Should you have questions regarding the work performed or results obtained, please do not hesitate to contact us at (530) 566-1400.

Sincerely,

BROADBENT & ASSOCIATES, INC.

Matthew Herrick
Project Hydrogeologist

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



Enclosures

cc: Mr. Steven Plunkett, Alameda County Environmental Health (submitted via ACEH ftp site)

STATION #4977 QUARTERLY GROUND-WATER MONITORING REPORT

Facility: #4977 Address:	2770 Castro Valley Boulevard, Castro Valley, CA
Station #4977 Environmental Business Manager:	Mr. Paul Supple
Primary Agency/Regulatory ID No.:	Alameda County Environmental Health (ACEH)/ ACEH Case No. RO0002436
Consulting Co./Contact Persons:	Broadbent & Associates, Inc. (BAI)/Rob Miller & Matt Herrick
Consultant Project No.:	06-02-625

WORK PERFORMED THIS QUARTER (Third Quarter, 2006):

1. Submitted Second Quarter, 2006 report. Work performed by BAI.
2. Conducted ground-water monitoring/sampling for Third Quarter, 2006. Work performed by URS.

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

1. Submit Third Quarter, 2006 Report (contained herein).
2. Conduct quarterly ground-water monitoring/sampling for Fourth Quarter, 2006.

QUARTERLY RESULTS SUMMARY:

Current phase of project:	**Groundwater Monitoring / Sampling**
Frequency of ground-water sampling:	**Wells MW-1 through MW-3: Quarterly**
Frequency of ground-water monitoring:	**Quarterly**
Is free product (FP) present on-site:	**No**
Current remediation techniques:	**None**
Depth to ground water (below TOC):	**6.85 (MW-2) to 8.85 (MW-1) feet**
General ground-water flow direction:	**South**
Approximate hydraulic gradient:	**0.025 Feet per foot**

DISCUSSION:

Gasoline range organics (GRO) were detected in MW-2 and MW-3 at 24, 000 µg/L and 220 µg/L, respectively. Benzene was detected in MW-2 and MW-3 at 530 µg/L and 0.86 µg/L, respectively. Ethylbenzenene was detected in MW-2 and MW-3 at 1,300 µg/L and 2.2 µg/L, respectively. Xylenes were detected in MW-2 and MW-3 at 1,800 µg/L and 0.58 µg/L, respectively. Methyl tert-butyl ether (MTBE) was detected in MW-1, MW-2, and MW-3 at concentrations ranging from 5.2 µg/L (MW-1) to 86 µg/L (MW-2). Tert-butyl alcohol (TBA) was detected in MW-3 at 55 µg/L. No other analytes were detected in ground-water samples collected during Third Quarter, 2006.

Drawing 1 depicts a ground-water elevation contour and an analytical summary map for the Third Quarter, 2006. Table 1 includes a summary of ground-water monitoring data including relative water elevations and laboratory analyses. Table 2 provides a summary of fuel additives analytical data. Table 3 presents historical groundwater flow directions and gradients.

CLOSURE:

The findings presented in this report are based upon: observations of URS field personnel (see Appendix A), the points investigated, and results of laboratory tests performed by TestAmerica (Morgan Hill, CA). 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, Station #4977, Castro Valley, CA
Table 1.	Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses, Station #4977, Castro Valley, CA
Table 2.	Summary of Fuel Additives Analytical Data, Station #4977, Castro Valley, CA
Table 3.	Historical Groundwater Flow Direction and Gradient, Station #4977, Castro Valley, CA
Appendix A.	URS Ground-Water Sampling Data Package (Includes Laboratory Report and Chain of Custody Documentation, Field and Laboratory Procedures, and Field Data Sheets)
Appendix B.	GeoTracker Upload Confirmation

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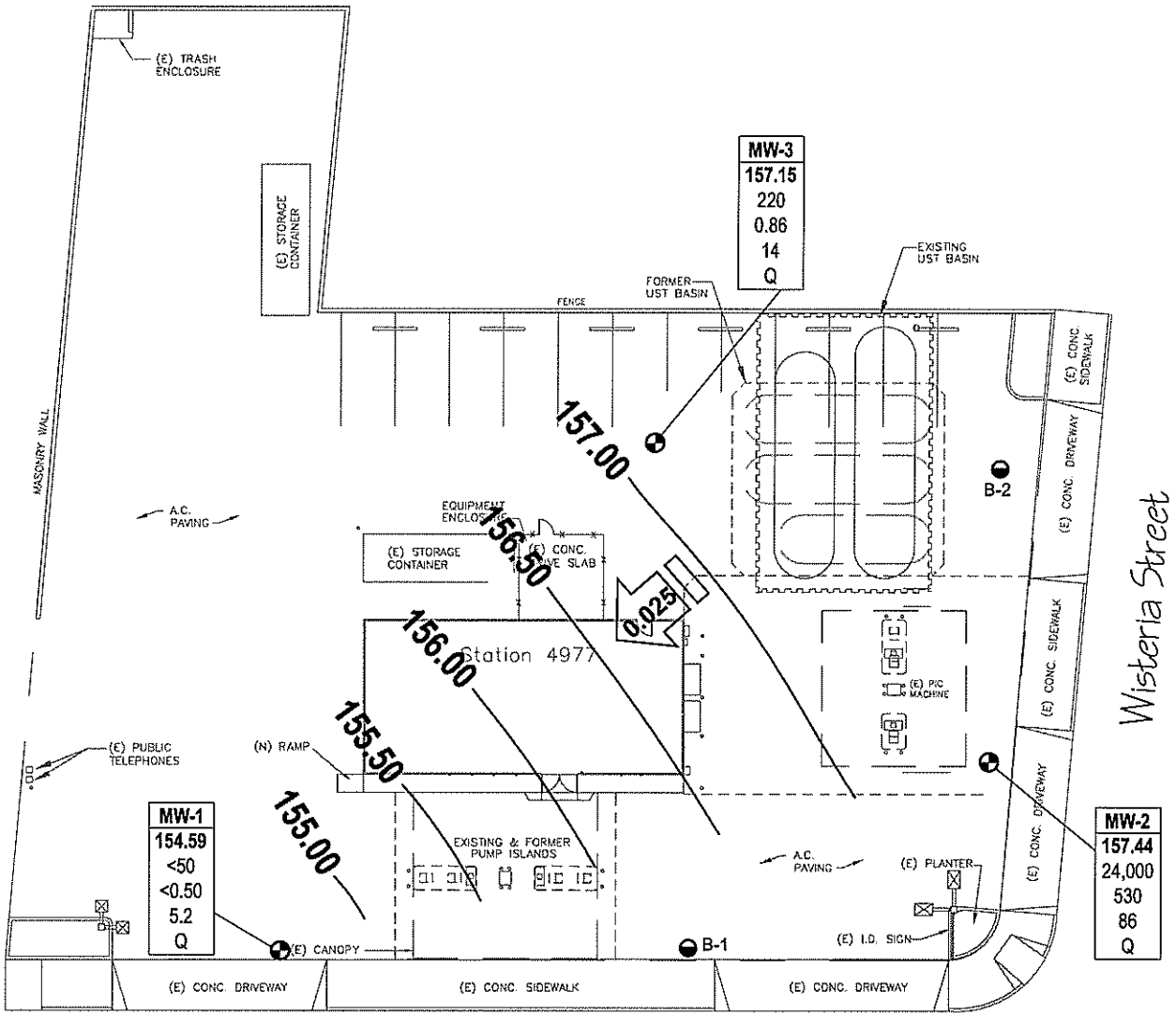


LEGEND

- MONITORING WELL
- SOIL BORING
- Well — WELL DESIGNATION
- ELEV — GROUNDWATER ELEVATION (FT ABOVE MSL)
- GRO, BZ, MTBE — CONCENTRATION OF GRO, BENZENE AND MTBE IN GROUNDWATER (µg/L)
- Q — SAMPLING FREQUENCY
- < — NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMITS
- Q — SAMPLED QUARTERLY
- —164.2 — GROUNDWATER ELEVATION CONTOUR (FT ABOVE MSL)
- 0.01 — GROUNDWATER FLOW DIRECTION AND GRADIENT (FT/FT)

NOTE: SITE MAP ADAPTED FROM DELTA ENVIRONMENTAL FIGURES. SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.

N

0 30 60

SCALE (ft)

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave. Suite 212, Chico, California 95926
Project No.: 06-02-625 Date: 10/25/06

Station #4977
2770 Castro Valley Blvd.
Castro Valley, California

Ground-Water Elevation Contour and Analytical Summary Map
September 29, 2006

Drawing
1

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

Station #4977, 2770 Castro Valley Blvd., Castro Valley, 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		
MW-1															
4/19/2002	--		161.11	5.0	15.0	11.21	149.9	660	12	1.3	4.3	0.8	38	--	--
9/27/2002	--		161.11	5.0	15.0	9.29	151.82	130	7.7	0.87	5.4	0.79	39	1.7	6.9
12/16/2002	--	a	161.11	5.0	15.0	8.55	152.56	77	1.8	<0.50	0.69	<1.0	42	1.6	6.9
3/11/2003	--		161.11	5.0	15.0	8.07	153.04	140	9.8	<0.50	5.6	<0.50	20	1.4	7.4
6/17/2003	--		161.11	5.0	15.0	8.31	152.8	510	60	1.4	81	<1.0	23	2.2	7
9/18/2003	--	b	161.11	5.0	15.0	9.45	151.66	72	2.4	1.4	1.6	1.5	39	2.7	7
12/11/2003	P		161.11	5.0	15.0	8.80	152.31	79	1.5	<0.50	1.5	4.4	48	2.1	7.0
03/11/2004	P		163.44	5.0	15.0	7.61	155.83	<50	1.3	<0.50	0.77	1.3	17	1.4	6.8
06/02/2004	P		163.44	5.0	15.0	8.95	154.49	53	1.4	<0.50	0.93	<0.50	39	2.3	7.1
09/22/2004	P		163.44	5.0	15.0	9.42	154.02	70	<0.50	<0.50	<0.50	<0.50	48	1.7	6.8
12/15/2004	P		163.44	5.0	15.0	7.88	155.56	63	<0.50	<0.50	<0.50	<0.50	45	1.8	6.9
03/07/2005	P		163.44	5.0	15.0	7.02	156.42	<50	<0.50	<0.50	<0.50	<0.50	4.0	2.4	6.8
06/27/2005	P		163.44	5.0	15.0	7.53	155.91	52	2.0	<0.50	1.9	0.78	8.1	2.8	7.1
09/16/2005	P		163.44	5.0	15.0	9.20	154.24	<50	<0.50	<0.50	<0.50	0.76	14	1.82	6.9
12/27/2005	P		163.44	5.0	15.0	7.60	155.84	<50	1.3	<0.50	1.5	<0.50	9.4	2.02	7.87
03/16/2006	P		163.44	5.0	15.0	6.97	156.47	71	3.0	<0.50	3.5	<0.50	3.4	1.6	7.1
6/26/2006	P		163.44	5.0	15.0	8.58	154.86	71	0.69	<0.50	1.1	3.5	3.2	2.2	6.9
9/29/2006	**P**		**163.44**	**5.0**	**15.0**	**8.85**	**154.59**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**5.2**	**2.35**	**6.7**
MW-2															
4/19/2002	--		161.87	5.0	15.0	6.59	155.28	28,000	970	120	860	6,900	760	--	--
9/27/2002	--		161.87	5.0	15.0	7.18	154.69	17,000	1,400	<50	1,200	3,700	1,400	1.5	6.8
12/16/2002	--	a	161.87	5.0	15.0	7.31	154.56	17,000	1,000	<50	980	3,300	980	1.9	6.8
3/11/2003	--		161.87	5.0	15.0	6.02	155.85	24,000	1,600	70	1,300	4,300	920	1.7	7.4
6/17/2003	--		161.87	5.0	15.0	6.31	155.56	28,000	1,300	55	1,300	4,500	610	1.4	6.9
9/18/2003	--		161.87	5.0	15.0	7.61	154.26	19,000	960	63	1,100	3,100	580	2.7	6.8
12/11/2003	P		161.87	5.0	15.0	6.50	155.37	29,000	710	53	1,300	3,800	490	2.0	7.0
03/11/2004	P		164.29	5.0	15.0	6.02	158.27	19,000	830	49	1,500	4,000	410	0.8	6.5
06/02/2004	P		164.29	5.0	15.0	7.14	157.15	25,000	680	<50	1,300	3,900	240	4.3	7.1
09/22/2004	--		164.29	5.0	15.0	7.63	156.66	15,000	980	<25	980	940	390	--	6.7
12/15/2004	P	c	164.29	5.0	15.0	6.48	157.81	22,000	610	26	1,300	3,200	290	0.3	6.9

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

Station #4977, 2770 Castro Valley Blvd., Castro Valley, 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) GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE	DO (mg/L)	pH
MW-2 Cont.															
03/07/2005	P		164.29	5.0	15.0	6.08	158.21	25,000	570	33	1,400	3,900	120	2.3	6.8
06/27/2005	P		164.29	5.0	15.0	6.90	157.39	24,000	630	32	1,200	2,900	86	2.5	7.2
09/16/2005	P		164.29	5.0	15.0	7.66	156.63	25,000	550	<25	1,400	3,000	82	1.41	7.0
12/27/2005	P		164.29	5.0	15.0	5.60	158.69	33,000	540	<25	1,300	2,700	100	2.26	7.19
03/16/2006	P	c	164.29	5.0	15.0	7.25	157.04	29,000	710	<50	1,400	2,600	78	1.4	7.1
6/26/2006	P	c	164.29	5.0	15.0	6.60	157.69	20,000	630	<25	1,200	1,100	110	0.64	6.8
9/29/2006	**P**		**164.29**	**5.0**	**15.0**	**6.85**	**157.44**	**24,000**	**530**	**<25**	**1,300**	**1,800**	**86**	**1.36**	**6.7**
MW-3															
4/19/2002	--		162.14	5.0	15.0	6.94	155.2	1,200	29	1.1	43	62	1,700	--	--
9/27/2002	--		162.14	5.0	15.0	8.26	153.88	740	7.8	<2.5	6.8	4.4	1,100	1	6.7
12/16/2002	--	a	162.14	5.0	15.0	6.76	155.38	1,200	13	<10	170	88	910	2.3	6.8
3/11/2003	--		162.14	5.0	15.0	6.92	155.22	<2,500	<25	<25	<25	<25	470	1.7	7.5
6/17/2003	--		162.14	5.0	15.0	7.44	154.7	<1,000	<10	<10	14	<10	530	1.9	7
9/18/2003	--		162.14	5.0	15.0	8.43	153.71	470	4.8	<2.5	10	9.2	300	2.9	6.8
12/11/2003	P		162.14	5.0	15.0	6.72	155.42	<500	<5.0	<5.0	7.0	13	180	1.9	6.9
03/11/2004	P		164.53	5.0	15.0	6.09	158.44	360	1.9	<1.0	5.6	5.0	110	2.6	6.8
06/02/2004	P		164.53	5.0	15.0	7.50	157.03	380	2.8	<0.50	8.0	2.1	43	3.6	7.3
09/22/2004	P		164.53	5.0	15.0	8.00	156.53	270	<0.50	<0.50	0.54	<0.50	50	1.8	6.9
12/15/2004	P		164.53	5.0	15.0	6.43	158.10	390	3.5	<0.50	20	3.7	49	1.1	6.9
03/07/2005	P		164.53	5.0	15.0	6.12	158.41	1,900	13	<1.0	93	29	70	2.3	6.8
06/27/2005	P		164.53	5.0	15.0	7.08	157.45	830	4.0	<0.50	13	2.8	33	3.3	7.3
09/16/2005	P		164.53	5.0	15.0	7.28	157.25	320	2.1	<0.50	5.4	0.60	21	2.11	7.0
12/27/2005	P		164.53	5.0	15.0	6.47	158.06	770	6.0	<0.50	33	2.7	36	2.96	7.42
03/16/2006	P		164.53	5.0	15.0	6.10	158.43	1,600	11	<0.50	59	6.4	45	1.4	7.1
6/26/2006	P		164.53	5.0	15.0	6.92	157.61	400	<0.50	<0.50	1.6	2.1	26	2.41	7.0
9/29/2006	**P**		**164.53**	**5.0**	**15.0**	**7.38**	**157.15**	**220**	**0.86**	**<0.50**	**2.2**	**0.58**	**14**	**1.95**	**7.0**

SYMBOLS AND ABBREVIATIONS:
< = Not detected at or above specified laboratory reporting limits
-- = Not measured, sampled, analyzed, applicable
ft bgs = Feet below ground surface
DO = Dissolved oxygen
DTW = Depth to water in ft bgs
GRO = Gasoline range organics
GWE = Groundwater elevation in ft MSL
mg/L = Milligrams per liter
ft MSL = Feet above mean sea level
MTBE = Methyl tert-butyl ether analyzed by EPA Method 8021B unless otherwise noted (before 12/16/02)
P/NP = Well was purged/not purged prior to sampling
TPH-g = Total petroleum hydrocarbons as gasoline (C5-C9)
TOC = Top of casing measured in ft MSL
µg/L = Micrograms per liter

FOOTNOTES:
a = TPH, benzene, toluene, ethylbenzene, total xylenes, and MTBE analyzed by EPA Method 8260B beginning on 4th quarter sampling event (12/16/02).
b = This sample was originally analyzed within the EPA recommended hold time. Re-analysis for confirmation or dilution was performed past the recommended hold time. The results may still be used for their intended purpose.
c = Sheen in well.

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 inclusion of non-TPH-g analytes within the requested fuel range resulting in a higher concentration being reported.

Wells were re-surveyed on 3/23/2004.

Values for DO and pH were field measurements.

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

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 #4977, 2770 Castro Valley Blvd., Castro Valley, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-1									
12/16/2002	<50	<5.0	42	<0.50	<0.50	<0.50	<0.50	<0.50	
3/11/2003	<100	<20	20	<0.50	<0.50	<0.50	<0.50	<0.50	
6/17/2003	<200	<40	23	<1.0	<1.0	<1.0	<1.0	<1.0	
9/18/2003	<100	<20	39	<0.50	<0.50	<0.50	<0.50	<0.50	a
12/11/2003	<100	<20	48	<0.50	<0.50	<0.50	<0.50	<0.50	
03/11/2004	<100	<20	17	<0.50	<0.50	<0.50	<0.50	<0.50	
06/02/2004	<100	<20	39	<0.50	<0.50	<0.50	<0.50	<0.50	
09/22/2004	<100	<20	48	<0.50	<0.50	<0.50	<0.50	<0.50	
12/15/2004	<100	<20	45	<0.50	<0.50	<0.50	<0.50	<0.50	a
03/07/2005	<100	<20	4.0	<0.50	<0.50	<0.50	<0.50	<0.50	
06/27/2005	<100	<20	8.1	<0.50	<0.50	<0.50	<0.50	<0.50	
09/16/2005	<100	<20	14	<0.50	<0.50	<0.50	<0.50	<0.50	
12/27/2005	<100	<20	9.4	<0.50	<0.50	<0.50	<0.50	<0.50	b
03/16/2006	<300	<20	3.4	<0.50	<0.50	<0.50	<0.50	<0.50	c
6/26/2006	<300	<20	3.2	<0.50	<0.50	<0.50	<0.50	<0.50	
9/29/2006	**<300**	**<20**	**5.2**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-2									
12/16/2002	<5,000	<500	980	<50	<50	<50	<50	<50	
3/11/2003	<10,000	<2,000	920	<50	<50	<50	<50	<50	
6/17/2003	<10,000	<2,000	610	<50	<50	<50	<50	<50	
9/18/2003	<5,000	<1,000	580	<25	<25	<25	<25	<25	
12/11/2003	<5,000	<1,000	490	<25	<25	<25	<25	<25	
03/11/2004	<2,000	<400	410	<10	<10	<10	<10	<10	
06/02/2004	<10,000	<2,000	240	<50	<50	<50	<50	<50	
09/22/2004	<5,000	<1,000	390	<25	<25	<25	<25	<25	
12/15/2004	<2,000	<400	290	<10	<10	<10	<10	<10	a
03/07/2005	<5,000	<1,000	120	<25	<25	<25	<25	<25	
06/27/2005	<5,000	<1,000	86	<25	<25	<25	<25	<25	
09/16/2005	<5,000	<1,000	82	<25	<25	<25	<25	<25	
12/27/2005	<5,000	<1,000	100	<25	<25	<25	<25	<25	b
03/16/2006	<30,000	<2,000	78	<50	<50	<50	<50	<50	c

Table 2. Summary of Fuel Additives Analytical Data

Station #4977, 2770 Castro Valley Blvd., Castro Valley, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-2 Cont.									
6/26/2006	<15,000	<1,000	110	<25	<25	<25	<25	<25	
9/29/2006	**<15,000**	**<1,000**	**86**	**<25**	**<25**	**<25**	**<25**	**<25**	
MW-3									
12/16/2002	<1,000	<100	910	<10	<10	12	<10	<10	
3/11/2003	<5,000	<1,000	470	<25	<25	<25	<25	<25	
6/17/2003	<2,000	<400	530	<10	<10	<10	<10	<10	
9/18/2003	<500	<100	300	<2.5	<2.5	3.2	<2.5	<2.5	
12/11/2003	<1,000	<200	180	<5.0	<5.0	<5.0	<5.0	<5.0	
03/11/2004	<200	570	110	<1.0	<1.0	<1.0	<1.0	<1.0	
06/02/2004	<100	130	43	<0.50	<0.50	0.56	<0.50	<0.50	
09/22/2004	<100	28	50	<0.50	<0.50	0.51	<0.50	<0.50	
12/15/2004	<100	110	49	<0.50	0.52	0.61	<0.50	<0.50	a
03/07/2005	<200	190	70	<1.0	<1.0	<1.0	<1.0	<1.0	
06/27/2005	<100	130	33	<0.50	<0.50	<0.50	<0.50	<0.50	
09/16/2005	<100	44	21	<0.50	<0.50	<0.50	<0.50	<0.50	
12/27/2005	<100	150	36	<0.50	<0.50	<0.50	<0.50	<0.50	b
03/16/2006	<300	160	45	<0.50	<0.50	0.84	<0.50	<0.50	c
6/26/2006	<300	53	26	<0.50	<0.50	<0.50	<0.50	<0.50	
9/29/2006	**<300**	**55**	**14**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	

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

FOOTNOTES:
a = This sample was originally analyzed within the EPA recommended hold time. Re-analysis for confirmation or dilution was performed past the recommended hold time. The results may still be used for their intended purpose.
b = Calibration verification for ethanol was within method limits but outside contract limits.
c = Possible high bias for DIPE, 1,2-DCA, and ethanol due to CCV falling outside acceptance criteria.

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 #4977, 2770 Castro Valley Blvd., Castro Valley, CA

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
4/19/2002	Southwest	0.038
9/27/2002	Southwest	0.021
12/16/2002	Southeast	0.029
3/11/2003	South	0.024
6/17/2003	South-Southwest	0.022
9/18/2003	South-Southwest	0.022
3/11/2004	South-Southwest	0.024
6/2/2004	South	0.025
9/22/2004	South	0.025
12/15/2004	South	0.020
3/7/2005	South	0.02
6/27/2005	South	0.01
9/16/2005	Southeast	0.03
12/27/2005	South-Southeast	0.02
3/16/2006	Southeast	0.02
6/26/2006	South	0.03
9/29/2006	**South**	**0.025**

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

APPENDIX A

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

URS

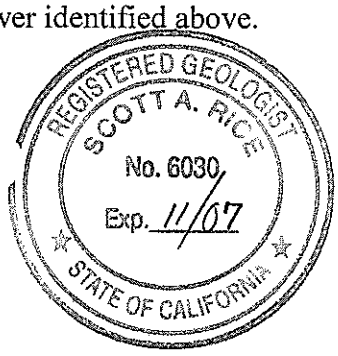
October 23, 2006

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

Groundwater Sampling Data Package
Station # 4977
2770 Castro Valley Road
Castro Valley, CA
Field Work Performed: 09/29/06

General Information
Data Submittal Prepared/Reviewed by: Chani Leimbach
Phone Number: 916-679-2313
On-Site Supplier Representative: Blaine Tech Services, Inc.
Scope of Work Performed: Groundwater Monitoring in accordance with 3rd Quarter 2006 protocols as identified in the Quarterly Monitoring Program Table.
Variations from Work Scope: None

This submittal presents the tabulation of data collected in association with routine groundwater monitoring. The attachments include, at a minimum, sampling procedures, field data collected, laboratory results, chain of custody documentation, and waste management activities. The information is being provided to BP-ARCO's Scoping Supplier for use in preparing a report for regulatory submittal. This submittal is limited to presentation of collected data and does not include data interpretation or conclusions or recommendations. Laboratory data has not been reviewed by a URS chemist at the time of this data transmittal. Any questions concerning this submittal should be addressed to the Preparer/Reviewer identified above.



Scott Rice, P.G.
Portfolio Manager

Attachments

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

URS Group, Inc.
Crown Corporate Center
2870 Gateway Oaks Drive, Suite 150
Sacramento, CA 95833-3200
Tel: 916.679.2000
Fax: 916.679.2833

FIELD AND LABORATORY PROCEDURES

Sampling Procedures

Sampling equipment is thoroughly cleaned prior to the collection of each sample. The sampling procedure for each well includes measuring the water level and checking for the presence of separate-phase hydrocarbons (SPH), using either an electronic indicator and a clear Teflon® bailer or an oil-water interface probe. If the measured water level in the well is below the top of screen, the well may be sampled without purging. For non-purge wells, one set of water quality parameters are collected and the well is sampled with a disposable bailer. Wells not containing SPH that do not qualify as non-purge wells are purged of approximately three casing volumes of water (or to dryness) using a submersible pump, centrifugal pump, gas displacement pump, or bailer. The equipment and purging methods used for the current sampling event are noted on the attached field data sheets. During purging, temperature, pH, electrical conductivity, and dissolved oxygen are monitored in order to document that these parameters are stable prior to collecting samples. After purging, water levels are allowed to partially recover. Groundwater samples (both purge and no-purge) are collected using a clean disposable Teflon® bailer, placed into appropriate EPA-approved containers, labeled, logged onto chain-of-custody documents, and transported on ice to a California state-certified laboratory.

Decontamination Procedures

Prior to sampling each well, reels and pumps will be decontaminated with a steam cleaner. Sensitive equipment such as the water level sounder are sprayed with a non-phosphate soap and deionized water solution and rinsed with deionized water. All water used for equipment decontamination is collected and contained in a truck-mounted water tank.

Laboratory Procedures

The groundwater samples are analyzed for the presence of GRO (gasoline range organics C4 – C12) by using EPA Method 8015B due to capacity issues at the laboratory; benzene, toluene, ethylbenzene, total xylenes, 1,2-DCA, and EDB are analyzed by EPA Method 8260, and lead is analyzed by EPA Method 6010B. The methods of analysis for the groundwater samples are documented in the certified laboratory analytical report.

Purge and Rinsate Water Disposal

Water generated during well sampling and equipment cleaning is pumped into a truck-mounted water tank. The water is transported to the Blaine Tech Services holding facility in Roseville, California, for temporary storage. The water is then transported by Dillard Environmental Services to the Altamont Landfill and Resource Recovery Facility in Altamont, California for disposal.

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19 October, 2006

Lynelle Onishi
URS Corporation [Arco]
1333 Broadway, Suite 800
Oakland, CA 94612

RE: ARCO #4977, Castro Valley, CA
Work Order: MPJ0276

Enclosed are the results of analyses for samples received by the laboratory on 09/29/06 18:30. 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.

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URS Corporation [Arco]	Project: ARCO #4977, Castro Valley, CA	MPJ0276
1333 Broadway, Suite 800	Project Number: G0C2H-0013	**Reported:**
Oakland CA, 94612	Project Manager: Lynelle Onishi	10/19/06 12:47

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MPJ0276-01	Water	09/29/06 14:05	09/29/06 18:30
MW-2	MPJ0276-02	Water	09/29/06 14:30	09/29/06 18:30
MW-3	MPJ0276-03	Water	09/29/06 14:15	09/29/06 18:30
TB-4977-09292006	MPJ0276-04	Water	09/29/06 00:00	09/29/06 18:30

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 intact custody seals.

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1333 Broadway, Suite 800	Project Number: G0C2H-0013	**Reported:**
Oakland CA, 94612	Project Manager: Lynelle Onishi	10/19/06 12:47

Total Purgeable Hydrocarbons by GC/MS (CA LUFT)

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MPJ0276-01) Water Sampled: 09/29/06 14:05 Received: 09/29/06 18:30									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	6J12013	10/12/06	10/12/06	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		*87 %*	*60-145*		"	"	"	"	
MW-2 (MPJ0276-02) Water Sampled: 09/29/06 14:30 Received: 09/29/06 18:30									
Gasoline Range Organics (C4-C12)	**24000**	2500	ug/l	50	6J12013	10/12/06	10/13/06	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		*89 %*	*60-145*		"	"	"	"	
MW-3 (MPJ0276-03) Water Sampled: 09/29/06 14:15 Received: 09/29/06 18:30									
Gasoline Range Organics (C4-C12)	**220**	50	ug/l	1	6J12013	10/12/06	10/13/06	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		*79 %*	*60-145*		"	"	"	"	

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1333 Broadway, Suite 800	Project Number: G0C2H-0013	**Reported:**
Oakland CA, 94612	Project Manager: Lynelle Onishi	10/19/06 12:47

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MPJ0276-01) Water Sampled: 09/29/06 14:05 Received: 09/29/06 18:30									
tert-Amyl methyl ether	ND	0.50	ug/l	1	6J12013	10/12/06	10/12/06	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	300	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**5.2**	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*90 %*	*75-130*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*87 %*	*60-145*		"	"	"	"	
Surrogate: Toluene-d8		*93 %*	*70-130*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92 %*	*60-120*		"	"	"	"	
MW-2 (MPJ0276-02) Water Sampled: 09/29/06 14:30 Received: 09/29/06 18:30									
tert-Amyl methyl ether	ND	25	ug/l	50	6J12013	10/12/06	10/13/06	EPA 8260B	
Benzene	**530**	25	"	"	"	"	"	"	
tert-Butyl alcohol	ND	1000	"	"	"	"	"	"	
Di-isopropyl ether	ND	25	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	25	"	"	"	"	"	"	
1,2-Dichloroethane	ND	25	"	"	"	"	"	"	
Ethanol	ND	15000	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	25	"	"	"	"	"	"	
Ethylbenzene	**1300**	25	"	"	"	"	"	"	
Methyl tert-butyl ether	**86**	25	"	"	"	"	"	"	
Toluene	ND	25	"	"	"	"	"	"	
Xylenes (total)	**1800**	25	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*90 %*	*75-130*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*89 %*	*60-145*		"	"	"	"	
Surrogate: Toluene-d8		*95 %*	*70-130*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95 %*	*60-120*		"	"	"	"	

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URS Corporation [Arco]	Project: ARCO #4977, Castro Valley, CA	MPJ0276
1333 Broadway, Suite 800	Project Number: G0C2H-0013	Reported:
Oakland CA, 94612	Project Manager: Lynelle Onishi	10/19/06 12:47

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (MPJ0276-03) Water Sampled: 09/29/06 14:15 Received: 09/29/06 18:30									
tert-Amyl methyl ether	ND	0.50	ug/l	1	6J12013	10/12/06	10/13/06	EPA 8260B	
Benzene	**0.86**	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	**55**	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	**2.2**	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**14**	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	**0.58**	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*92 %*	*75-130*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*79 %*	*60-145*		"	"	"	"	
Surrogate: Toluene-d8		*95 %*	*70-130*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*89 %*	*60-120*		"	"	"	"	

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1333 Broadway, Suite 800	Project Number: G0C2H-0013	**Reported:**
Oakland CA, 94612	Project Manager: Lynelle Onishi	10/19/06 12:47

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6J12013 - EPA 5030B P/T / LUFT GCMS										
Blank (6J12013-BLK1)				Prepared & Analyzed: 10/12/06						
Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Surrogate: 1,2-Dichloroethane-d4	*2.19*		"	*2.50*		*88*	*60-145*			
Laboratory Control Sample (6J12013-BS1)				Prepared & Analyzed: 10/12/06						
Gasoline Range Organics (C4-C12)	540	50	ug/l	700		77	75-140			
Surrogate: 1,2-Dichloroethane-d4	*2.13*		"	*2.50*		*85*	*60-145*			
Laboratory Control Sample (6J12013-BS2)				Prepared & Analyzed: 10/12/06						
Gasoline Range Organics (C4-C12)	439	50	ug/l	440		100	75-140			
Surrogate: 1,2-Dichloroethane-d4	*2.08*		"	*2.50*		*83*	*60-145*			
Matrix Spike (6J12013-MS1)	**Source: MPJ0276-01**			Prepared: 10/12/06 Analyzed: 10/13/06						
Gasoline Range Organics (C4-C12)	680	50	ug/l	700	ND	97	75-140			
Surrogate: 1,2-Dichloroethane-d4	*2.24*		"	*2.50*		*90*	*60-145*			
Matrix Spike Dup (6J12013-MSD1)	**Source: MPJ0276-01**			Prepared: 10/12/06 Analyzed: 10/13/06						
Gasoline Range Organics (C4-C12)	637	50	ug/l	700	ND	91	75-140	7	20	
Surrogate: 1,2-Dichloroethane-d4	*2.24*		"	*2.50*		*90*	*60-145*			

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1333 Broadway, Suite 800	Project Number: G0C2H-0013	**Reported:**
Oakland CA, 94612	Project Manager: Lynelle Onishi	10/19/06 12:47

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
Batch 6J12013 - EPA 5030B P/T / EPA 8260B										
Blank (6J12013-BLK1)				Prepared & Analyzed: 10/12/06						
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	"							
Surrogate: Dibromofluoromethane	*2.25*		"	*2.50*		*90*	*75-130*			
Surrogate: 1,2-Dichloroethane-d4	*2.19*		"	*2.50*		*88*	*60-145*			
Surrogate: Toluene-d8	*2.32*		"	*2.50*		*93*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*2.29*		"	*2.50*		*92*	*60-120*			
Laboratory Control Sample (6J12013-BS1)				Prepared & Analyzed: 10/12/06						
tert-Amyl methyl ether	8.63	0.50	ug/l	10.0		86	65-135			
Benzene	9.17	0.50	"	10.0		92	70-125			
tert-Butyl alcohol	196	20	"	200		98	60-135			
Di-isopropyl ether	8.66	0.50	"	10.0		87	70-130			
1,2-Dibromoethane (EDB)	9.44	0.50	"	10.0		94	80-125			
1,2-Dichloroethane	8.22	0.50	"	10.0		82	75-125			
Ethanol	224	300	"	200		112	15-150			
Ethyl tert-butyl ether	8.46	0.50	"	10.0		85	65-130			
Ethylbenzene	8.90	0.50	"	10.0		89	70-130			
Methyl tert-butyl ether	8.83	0.50	"	10.0		88	50-140			
Toluene	9.09	0.50	"	10.0		91	70-120			
Xylenes (total)	27.4	0.50	"	30.0		91	80-125			
Surrogate: Dibromofluoromethane	*2.31*		"	*2.50*		*92*	*75-130*			
Surrogate: 1,2-Dichloroethane-d4	*2.13*		"	*2.50*		*85*	*60-145*			
Surrogate: Toluene-d8	*2.35*		"	*2.50*		*94*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*2.39*		"	*2.50*		*96*	*60-120*			

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1333 Broadway, Suite 800	Project Number: G0C2H-0013	**Reported:**
Oakland CA, 94612	Project Manager: Lynelle Onishi	10/19/06 12:47

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
Batch 6J12013 - EPA 5030B P/T / EPA 8260B										
Matrix Spike (6J12013-MS1)	**Source: MPJ0276-01**			Prepared: 10/12/06 Analyzed: 10/13/06						
tert-Amyl methyl ether	11.7	0.50	ug/l	10.0	ND	117	65-135			
Benzene	11.8	0.50	"	10.0	0.14	117	70-125			
tert-Butyl alcohol	252	20	"	200	ND	126	60-135			
Di-isopropyl ether	11.4	0.50	"	10.0	ND	114	70-130			
1,2-Dibromoethane (EDB)	12.9	0.50	"	10.0	ND	129	80-125			LM
1,2-Dichloroethane	10.9	0.50	"	10.0	ND	109	75-125			
Ethanol	172	300	"	200	ND	86	15-150			
Ethyl tert-butyl ether	11.5	0.50	"	10.0	ND	115	65-130			
Ethylbenzene	11.3	0.50	"	10.0	ND	113	70-130			
Methyl tert-butyl ether	18.2	0.50	"	10.0	5.2	130	50-140			
Toluene	11.5	0.50	"	10.0	ND	115	70-120			
Xylenes (total)	34.8	0.50	"	30.0	ND	116	80-125			
Surrogate: Dibromofluoromethane	*2.37*		"	*2.50*		*95*	*75-130*			
Surrogate: 1,2-Dichloroethane-d4	*2.24*		"	*2.50*		*90*	*60-145*			
Surrogate: Toluene-d8	*2.34*		"	*2.50*		*94*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*2.40*		"	*2.50*		*96*	*60-120*			
Matrix Spike Dup (6J12013-MSD1)	**Source: MPJ0276-01**			Prepared: 10/12/06 Analyzed: 10/13/06						
tert-Amyl methyl ether	11.0	0.50	ug/l	10.0	ND	110	65-135	6	25	
Benzene	11.2	0.50	"	10.0	0.14	111	70-125	5	15	
tert-Butyl alcohol	242	20	"	200	ND	121	60-135	4	35	
Di-isopropyl ether	10.9	0.50	"	10.0	ND	109	70-130	4	35	
1,2-Dibromoethane (EDB)	12.1	0.50	"	10.0	ND	121	80-125	6	15	
1,2-Dichloroethane	10.3	0.50	"	10.0	ND	103	75-125	6	10	
Ethanol	152	300	"	200	ND	76	15-150	12	35	
Ethyl tert-butyl ether	11.0	0.50	"	10.0	ND	110	65-130	4	35	
Ethylbenzene	10.7	0.50	"	10.0	ND	107	70-130	5	15	
Methyl tert-butyl ether	16.9	0.50	"	10.0	5.2	117	50-140	7	25	
Toluene	10.9	0.50	"	10.0	ND	109	70-120	5	15	
Xylenes (total)	32.7	0.50	"	30.0	ND	109	80-125	6	15	
Surrogate: Dibromofluoromethane	*2.40*		"	*2.50*		*96*	*75-130*			
Surrogate: 1,2-Dichloroethane-d4	*2.24*		"	*2.50*		*90*	*60-145*			
Surrogate: Toluene-d8	*2.36*		"	*2.50*		*94*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*2.35*		"	*2.50*		*94*	*60-120*			

TestAmerica
ANALYTICAL TESTING CORPORATION

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.testamericainc.com

URS Corporation [Arco]	Project: ARCO #4977, Castro Valley, CA	MPJ0276
1333 Broadway, Suite 800	Project Number: G0C2H-0013	**Reported:**
Oakland CA, 94612	Project Manager: Lynelle Onishi	10/19/06 12:47

Notes and Definitions

LM	MS and/or MSD above acceptance limits. See Blank Spike(LCS).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Chain of Custody Record

Page 1 of 1

Project Name: Analytical for QMR sampling
BP BU/AR Region/Enfos Segment: BP > Americas > West Coast > Retail > WCBU > CA > Central > 4977 > HistoricalBL
State or Lead Regulatory Agency: California Regional Water Quality Control Board - San Fra
Requested Due Date (mm/dd/yy): 10 Day TAT

On-site Time: 1245		Temp:	
Off-site Time: 1445		Temp:	
Sky Conditions:			
Meteorological Events:			
Wind Speed:		Direction:	

Lab Name: Sequoia	BP/AR Facility No.: 4977	Consultant/Contractor: URS
Address: 885 Jarvis Drive, Morgan Hill, CA 95037	BP/AR Facility Address: 2770 Castro Valley Blvd., Castro Valley, CA 9	Address: 1333 Broadway, Suite 800, Oakland, CA 94612
Lab PM: Lisa Race / Katt Min	Site Lat/Long: 37.694794 / -122.084	Consultant/Contractor Project No.: 38487536
Tele/Fax: 408.782.8156 / 408.782.6308	California Global ID No.: T0600100089	Consultant/Contractor PM: Barb Jakub
BP/AR PM Contact: Paul Supple	Enfos Project No.: G0C2H-0013	Tele/Fax: 510.874.3296 / 510.874.3268
Address: P.O. Box 6549, Moraga, CA 94570	Provision or RCOP: Provision	Report Type & QC Level: Level 1 with EDF
Tele/Fax: 925.299.8891 / 925.299.8872	Phase/WBS: 04 - Mon/Remed by Natural Attenuation	E-mail EDD To: jane_field@urscorp.com
Lab Bottle Order No: 4977	Sub Phase/Task: 03 - Analytical	Invoice to: Atlantic Richfield Company
	Cost Element: 05 - Subcontracted Costs	

MPJ0276

Item No.	Sample Description	Time	Date	Soil/Solid	Water/Liquid	Air	Laboratory No.	No. of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol	GRO / BTEX (8260)	MTBE, TAME, ETBE DIPE, TBA (8260)	EDB, 1,2-DCA (8260)	Ethanol (8260)						Sample Point Lat/Long and Comments
1	MW-1	1405	9/29/06		X		01	3				X		X	X	X	X						
2	MW-2	1430	↓		↓		02	3				↓		X	X	X	X						
3	MW-3	1415	↓		↓		03	3				↓		X	X	X	X						
4	TB-4977-09292006	—	↓		↓		04	2				↓											on hold
5																							
6																							
7																							
8																							
9																							
10																							

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Will Crow	Will Crow	9/29/06	1705	[signature]	9/29/06	1705
Sampler's Company: Blaine Tech	[signature]	9/29/06	1730	[signature]	9/29/06	1730
Shipment Date:	[signature]	9/29	1830	[signature]	9/29	1830
Shipment Method:						
Shipment Tracking No:						

Special Instructions: CC to ~~rhmiller~~ BPEDF r@broadbentinc.com

Custody Seals In Place Yes ✓ No   Temp Blank Yes ✓ No   Cooler Temperature on Receipt 5.0 °F/C   Trip Blank Yes X No

Distribution: White Copy - Laboratory / Yellow Copy - BP/Atlantic Richfield Co. / Pink Copy - Consultant/Contractor

BP COC Rev. 4 10/1/04

TEST AMERICA SAMPLE RECEIPT LOG

CLIENT NAME: BP 4977
REC. BY (PRINT) [illegible]
WORKORDER: MPJ0276

DATE REC'D AT LAB: 9/29/06
TIME REC'D AT LAB: 1830
DATE LOGGED IN: 10-5-06

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

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present / Absent Intact / Broken*								
2. Chain-of-Custody Present / Absent*								
3. Traffic Reports or Packing List: Present / Absent								
4. Airbill: Airbill / Sticker Present / Absent								
5. Airbill #:								
6. Sample Labels: Present / Absent								
7. Sample IDs: Listed / Not Listed on Chain-of-Custody								
8. Sample Condition: Intact / Broken* / Leaking*								
9. Does information on chain-of-custody, traffic reports and sample labels agree? Yes / No*			9/29/06					
10. Sample received within hold time? Yes / No*								
11. Adequate sample volume received? Yes / No*								
12. Proper preservatives used? Yes / No*								
13. Trip Blank / Temp Blank Received? (circle which, if yes) Yes / No*								
14. Read Temp: 5.0c Corrected Temp: 1-c Is corrected temp 4 +/-2°C? Yes / No**								

(Acceptance range for samples requiring thermal pres.)
**Exception (if any): METALS / DFF ON ICE or Problem COC

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

Chain of Custody Record

Project Name: Analytical for QMR sampling
BP BU/AR Region/Enfos Segment: BP > Americas > West Coast > Retail > WCBU > CA > Central > 4977 > HistoricalBL
State or Lead Regulatory Agency: California Regional Water Quality Control Board - San Fra
Requested Due Date (mm/dd/yy): 10 Day TAT

On-site Time: 1245	Temp:
Off-site Time: 1445	Temp:
Sky Conditions:	
Meteorological Events:	
Wind Speed:	Direction:

Lab Name: Sequoia	BP/AR Facility No.: 4977	Consultant/Contractor: URS
Address: 885 Jarvis Drive	BP/AR Facility Address: 2770 Castro Valley Blvd., Castro Valley, CA	Address: 1333 Broadway, Suite 800
Morgan Hill, CA 95037	Site Lat/Long: 37.694794 / -122.084	Oakland, CA 94612
Lab PM: Lisa Race / Katt Min	California Global ID No.: T0600100089	Consultant/Contractor Project No.: 38487536
Tele/Fax: 408.782.8156 / 408.782.6308	Enfos Project No.: G0C2H-0013	Consultant/Contractor PM: Barb Jakub
BP/AR PM Contact: Paul Supple	Provision or RCOP: Provision	Tele/Fax: 510.874.3296 / 510.874.3268
Address: P.O. Box 6549	Phase/WBS: 04 - Mon/Remed by Natural Attenuation	Report Type & QC Level: Level 1 with EDF
Moraga, CA 94570	Sub Phase/Task: 03 - Analytical	E-mail EDD To: jane_field@urscorp.com
Tele/Fax: 925.299.8891 / 925.299.8872	Cost Element: 05 - Subcontracted Costs	Invoice to: Atlantic Richfield Company

Lab Bottle Order No: 4977

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: DRO / BTEX (8260)	Requested Analysis: MTBE, TAME, HTBE DIPE, TBA (8260)	Requested Analysis: EDB, 1,2-DCA (8260)	Requested Analysis: Ethanol (8260)	Sample Point Lat/Long and Comments
1	MW-1	1405	9/29/06		X			3				X		X	X	X	X	
2	MW-2	1430	"		"			3				"		X	X	X	X	
3	MW-3	1415	"		"			3				"		X	X	X	X	
4	TB-4977-092906	—	"		"			2				"						on hold
5																		
6																		
7																		
8																		
9																		
10																		

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: [illegible]	[signature]	9/29/06	1705	[signature]	9/30/06	1705
Sampler's Company: [illegible]	[signature]	9/29/06	1730	[signature]	9/29/06	1730
Shipment Date:						
Shipment Method:						
Shipment Tracking No:						

Special Instructions: CC to ~~[illegible]~~@broadbentinc.com
EDF

Custody Seals In Place Yes ___ No ___ Temp Blank Yes ___ No ___ Cooler Temperature on Receipt ___ °F/C Trip Blank Yes ___ No ___

Distribution: White Copy - Laboratory / Yellow Copy - BP/Atlantic Richfield Co. / Pink Copy - Consultant/Contractor

WELL GAUGING DATA

Project # 060929-WC-2 Date 9/29/06 Client URS@Arco 4977

Site 2770 Castro Valley Blvd., Castro Valley

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-1	1245	4					8.85	15.05		
MW-2	1250	4	odor				6.85	14.70		
MW-3	1247	4					7.38	15.14		

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 060929-WC-2	Station # 4977
Sampler: WC	Date: 9/29/06
Well I.D.: MW-1	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 15.05	Depth to Water: 8.85
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (SSG YSI) HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Extraction Pump / Other: _____

Sampling Method: Bailer / (Disposable Bailer) / Extraction Port / Other: _____

Top of Screen: _____

If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

4.0 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 12 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
1304	71.6	6.8	1187	4	clear
1304	well dewatered			@ 4	gallons
1403	70.6	6.7	1234	DTW=12.26	cloudy

Did well dewater? (Yes) No — Gallons actually evacuated: 4

Sampling Time: 1405 — Sampling Date: 9/29/06

Sample I.D.: MW-1 — Laboratory: Pace (Sequoia) Other _____

Analyzed for: GRO BTEX MTBE DRO Oxy's 1,2-DCA EDB Ethanol — Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	2.35	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 060929-WC-1	Station # 4977
Sampler: WC	Date: 9-29-06
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: 14.70	Depth to Water: 6.85
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) 556 HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / (Electric Submersible) / Extraction Pump / Other: _____

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Other: _____

Top of Screen: _____

If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

5.1 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 15.3 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
1319	7.33	6.7	790	5	odor/clear
well dewatered @				8 gallons	
1428	72.8	6.7	685	DTW=8.13	odor/clear

Did well dewater? (Yes) No — Gallons actually evacuated: 8

Sampling Time: 1430 — Sampling Date: 9-29-06

Sample I.D.: MW-2 — Laboratory: Pace Sequoia (Other) TA

Analyzed for: GRO BTEX MTBE DRO Oxy's 1,2-DCA EDB Ethanol — Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	1.36	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 060929-MC-1	Station # ARCO 4927
Sampler: MC	Date: 9-29-06
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: 15.14	Depth to Water: 7.38
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: ~~PVC~~ Grade	D.O. Meter (if req'd): (YSI) 556 HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1 47
3"	0.37	Other	radius² * 0.163

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Extraction Pump / Other: _____

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Other: _____

Top of Screen: _____ If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

5 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 15 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
1315	74.8	7.0	739	5	clear
1317	75.6	6.8	737	10	"
well dewatered @ 10 gallons.					
1412	74.2	7.0	742	DTW=8.49	clear

Did well dewater? Yes / No — Gallons actually evacuated: 10

Sampling Time: 1415 — Sampling Date: 9-29-06

Sample I.D.: MW-3 — Laboratory: Pace Sequoia (Other) TA

Analyzed for: GRO BTEX MTBE DRO Oxy's 1,2-DCA EDB Ethanol — Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	1.95	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

BP GEM OIL COMPANY TYPE **A** BILL OF LADING

SOURCE RECORD **BILL OF LADING** FOR NON-HAZARDOUS PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT ATLANTIC RICHFIELD COMPANY (ARC) A BP AFFILIATED COMPANY FACILITIES IN THE STATE OF CALIFORNIA. THE NON-HAZARDOUS PURGEWATER WHICH HAS BEEN RECOVERED FROM GROUNDWATER WELLS IS COLLECTED BY THE CONTRACTOR, MADE UP INTO LOADS OF APPROPRIATE SIZE AND HAULED BY AN ARC DIRECT BILL WASTE TRANSPORTER TO AN ARC APPROVED DISPOSAL FACILITY.

The contractor performing this work is BLAINE TECH SERVICES, INC. (BTS), 1680 Rogers Avenue, San Jose, CA 95112 (phone [408] 573-0555), 4731 Pell Drive #5, Sacramento, CA 95838. Blaine Tech Services, Inc. is authorized by ARC to recover, collect, apportion into loads the Non-Hazardous Well Purgewater that is drawn from wells at the ARC facility indicated below and deliver that purgewater to BTS. Transport routing of the Non-Hazardous Well Purgewater may be direct from one ARC facility to the designated destination point; from one ARC facility to the designated destination point via another ARC facility; from a ARC facility to the designated destination point via the contractor's facility, or any combination thereof. The Non-Hazardous Well Purgewater is and remains the property of ARC.

This **Source Record BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the ARC facility described below:

4977

Station #

2720 Castro Valley Blvd, Castro Valley

Station Address

Total Gallons Collected From Groundwater Monitoring Wells:

22 gal

added equip. rinse water 2 gal

any other adjustments X

TOTAL GALS. RECOVERED 24 gal

loaded onto BTS vehicle # 64

BTS event #	time	date
060929-we-1	1445	9/29/06

signature

* *

REC'D AT	time	date
Blaine Tech	1630	9/29/06

unloaded by

signature

WELLHEAD INSPECTION CHECKLIST
BP / GEM

Date 9/29/06

Site Address 2770 Castro Valley Blvd, Castro Valley

Job Number 060929-wc-2 Technician Will

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
MW-1	Y							
MW-2	X							
MW-3	X							

NOTES:

APPENDIX B

GEOTRACKER UPLOAD CONFIRMATION

Electronic Submittal Information

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

Your EDF file has been successfully uploaded!

Confirmation Number: 8218799173
Date/Time of Submittal: 10/26/2006 10:39:18 AM
Facility Global ID: T0600100089
Facility Name: ARCO #4977
Submittal Title: 3Q 06 GW MONITORING
Submittal Type: GW Monitoring Report

Click here to view the detections report for this upload.

ARCO #4977
2770 CASTRO VALLEY
CASTRO VALLEY, CA 94546

Regional Board - Case #: 01-0097
SAN FRANCISCO BAY RWQCB (REGION 2)
Local Agency (lead agency) - Case #: RO0002436
ALAMEDA COUNTY LOP - **(SP)**

CONF #	TITLE	QUARTER
8218799173	3Q 06 GW MONITORING	Q3 2006

SUBMITTED BY	SUBMIT DATE	STATUS
Broadbent & Associates, Inc.	10/26/2006	PENDING REVIEW

SAMPLE DETECTIONS REPORT

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

METHOD QA/QC REPORT

METHODS USED	8260FA,8260TPH
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%	Y
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	Y

SOIL SAMPLES FOR 8021/8260 SERIES

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

FIELD QC SAMPLES

SAMPLE	COLLECTED	DETECTIONS > REPDL
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

Logged in as BROADBENT-C (CONTRACTOR) CONTACT SITE ADMINISTRATOR.

#4977

Electronic Submittal Information

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

UPLOADING A GEO_WELL FILE

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

Submittal Title:	**3Q 06 GEO_WELL**
Submittal Date/Time:	**10/26/2006 10:35:23 AM**
Confirmation Number:	4101348698

Back to Main Menu

Logged in as BROADBENT-C
(CONTRACTOR)

CONTACT SITE ADMINISTRATOR.