



Atlantic Richfield Company
(a BP affiliated company)

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By loppjectop at 9:54 am, Apr 17, 2006

March 31, 2006

Re: ARCO Service Station # 2169
889 West Grand Avenue
Oakland, California
First Quarter 2006 Groundwater Monitoring Report
ACEH Case # 3793

"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



March 31, 2006

Mr. Don Hwang
Alameda County Environmental Health (ACEH)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

**Re: First Quarter 2006 Groundwater Monitoring Report
ARCO Service Station #2169
889 West Grand Avenue
Oakland, California
ACEH Case #3793**

Dear Mr. Hwang:

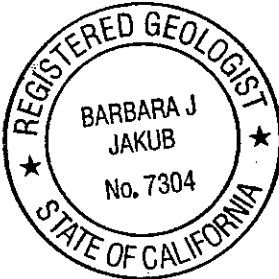
On behalf of Atlantic Richfield Company, a BP affiliated company, URS Corporation (URS) is submitting the *First Quarter 2006 Groundwater Monitoring Report* for ARCO Service Station #2169, located at 889 West Grand Avenue, Oakland, California.

If you have any questions regarding this submission, please call at (510) 874-3296.

Sincerely,

URS CORPORATION

Barbara Jakub, P.G.
Project Manager



Enclosure: First Quarter 2006 Groundwater Monitoring Report

cc: Mr. Paul Supple, Atlantic Richfield Company (RM), electronic copy uploaded to ENFOS
Mr. Rob Miller, Broadbent & Associates, Inc., electronic copy uploaded to ENFOS

R E P O R T

RECEIVED

By lopprojectop at 9:54 am, Apr 17, 2006

**FIRST QUARTER 2006
GROUNDWATER MONITORING
REPORT**

ARCO SERVICE STATION #2169
889 WEST GRAND AVENUE
OAKLAND, CALIFORNIA

Prepared for
RM

March 31, 2006

URS

URS Corporation
1333 Broadway, Suite 800
Oakland, California 94612

Date: March 31, 2006
Quarter: 1Q-06

FIRST QUARTER 2006 GROUNDWATER MONITORING REPORT

Facility No.: 2169 Address: 889 West Grand Avenue, Oakland, California
RM Environmental Business Manager: Paul Supple
Consulting Co./Contact Person: URS Corporation / Barbara Jakub
Primary Agency: Alameda County Environmental Health (ACEH)
ACEH Case No.: 3793

WORK PERFORMED THIS QUARTER (First – 2006):

1. Performed the first quarter 2006 groundwater monitoring event on February 9, 2006.
2. Prepared and submitted this First Quarter 2006 Groundwater Monitoring Report.

WORK PROPOSED FOR NEXT QUARTER (Second – 2006):

1. No environmental work is expected during the second quarter 2006.
2. Prepare and submit the Second Quarter 2006 Status Report.

SITE SUMMARY:

Current Phase of Project: GW monitoring/sampling
Frequency of Groundwater Sampling: Semi-Annually (1Q & 3Q): Wells A-1, A-5, A-6 and ADR-1
Annually (3Q): Wells A-2, AR-1, AR-2, ADR-2
Frequency of Groundwater Monitoring: Semi-Annually
Is Free Product (FP) Present On-Site: No
FP Recovered this Quarter: None - Soil Vapor Extraction System shut-down in December 2001
Cumulative FP Recovered to Date: 4.8 gallons, wells ADR-1 and ADR-2
Bulk Soil Removed This Quarter: None
Bulk Soil Removed to Date: 2,196 cubic yards of TPH impacted soil
Current Remediation Techniques: None
Approximate Depth to Groundwater: 9.02 (A-5) to 11.27 (A-3) feet
Groundwater Gradient (direction): West
Groundwater Gradient (magnitude): 0.003 feet per foot

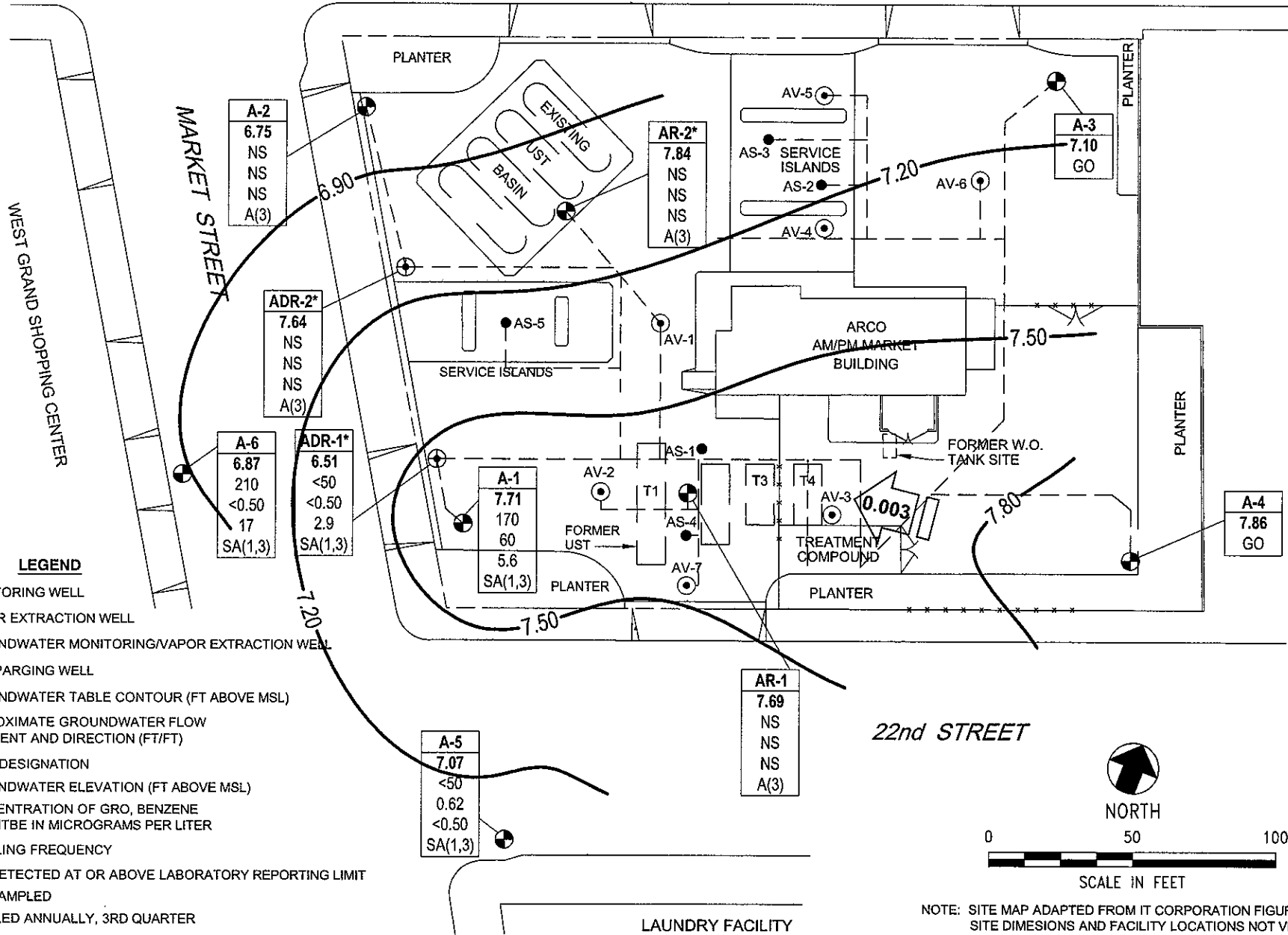
DISCUSSION:

Gasoline range organics were detected at or above the laboratory reporting limit in two of the four wells sampled this quarter at concentrations of 170 micrograms per liter ($\mu\text{g/L}$) (A-1) and 210 $\mu\text{g/L}$ (A-6). Benzene was detected at or above the laboratory reporting limit in two wells at concentrations of 0.62 $\mu\text{g/L}$ (A-5) and 60 $\mu\text{g/L}$ (A-1). Toluene, ethylbenzene, and xylenes were detected at or above their respective laboratory reporting limits in one well (A-1) at concentrations of 1.5 $\mu\text{g/L}$, 3.5 $\mu\text{g/L}$, and 5.1 $\mu\text{g/L}$, respectively. Methyl tert-butyl ether was detected at or above the laboratory reporting limit in three wells at concentrations ranging from 2.9 $\mu\text{g/L}$ (ADR-1) to 17 $\mu\text{g/L}$ (A-6). Tert-amyl methyl ether was detected at or above the laboratory reporting limit in one well (A-6) at a concentration of 1.2 $\mu\text{g/L}$. No other fuel components were detected at or above their respective laboratory reporting limits in any of the wells sampled this quarter.

ATTACHMENTS:

- Figure 1 – Groundwater Elevation Contour and Analytical Summary Map – February 9, 2006
- Table 1 – Groundwater Elevation and Analytical Data
- Table 2 – Fuel Additives Analytical Data
- Table 3 - Groundwater Gradient Data
- Attachment A – Field Procedures and Field Data Sheets
- Attachment B – Laboratory Procedures, Certified Analytical Reports, and Chain-of-Custody Records
- Attachment C – Historical Groundwater Data
- Attachment D – Error Check Reports and EDF/GEOWELL Submittal Confirmations

WEST GRAND AVENUE



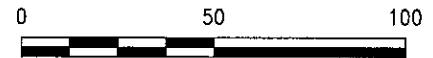
LEGEND

- MONITORING WELL
- VAPOR EXTRACTION WELL
- GROUNDWATER MONITORING/VAPOR EXTRACTION WELL
- AIR SPARGING WELL
- 7.20 GROUNDWATER TABLE CONTOUR (FT ABOVE MSL)
- APPROXIMATE GROUNDWATER FLOW GRADIENT AND DIRECTION (FT/FT)

Well	WELL DESIGNATION
ELEV	GROUNDWATER ELEVATION (FT ABOVE MSL)
GRO	CONCENTRATION OF GRO, BENZENE AND MTBE IN MICROGRAMS PER LITER
Benzene	
MTBE	
A/Q	SAMPLING FREQUENCY

 - < NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMIT
 - NS NOT SAMPLED
 - A(3) SAMPLED ANNUALLY, 3RD QUARTER
 - SA SAMPLED SEMI-ANNUALLY, 1ST & 3RD QUARTERS
 - GO GAUGED ONLY
 - * NOT USED IN CONTOURING
 - REMEDIATION PIPING

22nd STREET



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

URS	Project No. 38487558	GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP	FIGURE 1
	ARCO Service Station 2169 889 West Grand Avenue Oakland, California			First Quarter 2006 (February 9, 2006)

Table 1
Groundwater Elevation and Analytical Data
 ARCO Service Station #2169
 889 W. Grand Ave., Oakland, CA

Well No.	Date	P/ NP	Footnotes/ Comments	TOC (ft MSL)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (ft bgs)	GWE (ft MSL)	GRO/TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	pH
A-1	6/26/2000	--		14.16	9.00	25.00	10.75	3.41	---	---	---	---	---	--	---	---
	7/20/2000	--		14.16	9.00	25.00	11.01	3.15	3,900	1,100	28	12	46	25	---	---
	9/19/2000	--		14.16	9.00	25.00	11.26	2.90	4,800	2,400	27	20	57	32	---	---
	12/26/2000	--		14.16	9.00	25.00	10.96	3.20	429	104	2.85	12.2	9.91	18.7	---	---
	3/20/2001	--		14.16	9.00	25.00	9.59	4.57	<500	13.9	7.12	13.9	23.2	<25	---	---
	6/12/2001	--		14.16	9.00	25.00	10.83	3.33	140	2.2	<0.5	8.7	9.2	25	---	---
	9/23/2001	--		14.16	9.00	25.00	11.43	2.73	<50	<0.50	<0.50	<0.50	<0.50	4.5	---	---
	12/28/2001	--		14.16	9.00	25.00	8.66	5.50	930	250	7.6	21	13	<25	---	---
	3/21/2002	--		14.16	9.00	25.00	8.43	5.73	<50	<0.5	<0.5	<0.5	1.2	<2.5	---	---
	4/17/2002	--		14.16	9.00	25.00	9.36	4.80	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	8/14/2002	--	b	14.16	9.00	25.00	11.12	3.04	170	8.4	<0.5	<0.5	1.4	4.9	5.7	7.4
	11/27/2002	--	b	14.16	9.00	25.00	11.11	3.05	98	2.9	0.75	<0.5	<0.5	6.4	1.6	7.0
	2/12/2003	--	d	14.16	9.00	25.00	10.10	4.06	73	9.3	<0.50	1	0.53	2.9	2.1	7.2
	5/22/2003	--		14.16	9.00	25.00	10.18	3.98	400	88	1.6	4.6	11	4.9	1.3	7.4
	7/23/2003	--		14.16	9.00	25.00	10.85	3.31	140	3.2	<0.50	<0.50	0.56	10	10.8	7.4
	11/13/2003	P	f	14.16	9.00	25.00	11.35	2.81	<50	0.64	<0.50	<0.50	<0.50	4.2	4.3	7.75
	02/16/2004	P	f, i	16.75	9.00	25.00	9.65	7.10	99	18	<0.50	1.2	0.96	3.2	7.2	7.6
	05/06/2004	P		16.75	9.00	25.00	10.57	6.18	<50	0.73	<0.50	<0.50	<0.50	1.9	1.23	6.93
	09/02/2004	P		16.75	9.00	25.00	11.05	5.70	64	1.1	<0.50	<0.50	<0.50	1.7	12.1	8.7
	11/29/2004	P		16.75	9.00	25.00	10.50	6.25	<50	1.4	<0.50	<0.50	<0.50	<0.50	0.62	7.0
02/02/2005	P		16.75	9.00	25.00	9.18	7.57	56	14	<0.50	<0.50	0.55	5.1	3.2	7.2	
05/09/2005	P		16.75	9.00	25.00	9.28	7.47	52	7.8	<0.50	0.53	0.52	2.7	2.1	7.2	
08/11/2005	P		16.75	9.00	25.00	10.70	6.05	420	61	<0.50	1.8	1.0	4.2	3.2	6.8	
02/09/2006	P	o	16.75	9.00	25.00	9.04	7.71	170	60	1.5	3.5	5.1	5.6	1.69	7.1	
A-2	6/26/2000	--		14.55	10.00	25.00	11.27	3.28	---	---	---	---	---	--	---	---
	7/20/2000	--		14.55	10.00	25.00	11.52	3.03	<50	<0.5	<0.5	<0.5	<1.0	<3	---	---
	9/19/2000	--		14.55	10.00	25.00	11.63	2.92	---	---	---	---	---	--	---	---
	12/26/2000	--		14.55	10.00	25.00	11.44	3.11	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	3/20/2001	--		14.55	10.00	25.00	10.08	4.47	---	---	---	---	---	--	---	---
	6/12/2001	--		14.55	10.00	25.00	11.35	3.20	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	9/23/2001	--		14.55	10.00	25.00	11.92	2.63	---	---	---	---	---	--	---	---
	12/28/2001	--		14.55	10.00	25.00	9.31	5.24	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
3/21/2002	--		14.55	10.00	25.00	9.05	5.50	---	---	---	---	---	--	---	---	

Table 1

Groundwater Elevation and Analytical Data

ARCO Service Station #2169
889 W. Grand Ave., Oakland, CA

Well No.	Date	P/ NP	Footnotes/ Comments	TOC (ft MSL)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (ft bgs)	GWE (ft MSL)	GRO/ TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	pH
A-2	4/17/2002	--		14.55	10.00	25.00	9.88	4.67	52	<0.5	<0.5	<0.5	<0.5	26	---	---
	8/14/2002	--	c	14.55	10.00	25.00	11.62	2.93	<50	<0.5	<0.5	<0.5	1.2	<2.5	3.7	7.2
	11/27/2002	--		14.55	10.00	25.00	11.56	2.99	---	---	---	---	---	--	---	---
	2/12/2003	--	d	14.55	10.00	25.00	10.75	3.80	<50	<0.50	<0.50	<0.50	<0.50	12	2.9	7.1
	5/22/2003	--		14.55	10.00	25.00	10.72	3.83	---	---	---	---	---	--	---	---
	7/23/2003	--		14.55	10.00	25.00	11.39	3.16	<50	<0.50	<0.50	<0.50	<0.50	2.6	1.3	6.8
	11/13/2003	--		14.55	10.00	25.00	11.60	2.95	--	--	--	--	--	--	--	--
	02/16/2004	--	i	17.18	10.00	25.00	10.27	6.91	--	--	--	--	--	--	--	--
	05/06/2004	--		17.18	10.00	25.00	11.05	6.13	--	--	--	--	--	--	--	--
	09/02/2004	P		17.18	10.00	25.00	11.45	5.73	130	<0.50	<0.50	<0.50	<0.50	2.5	5.1	7.4
	11/29/2004	--		17.18	10.00	25.00	11.12	6.06	--	--	--	--	--	--	--	--
	02/02/2005	--		17.18	10.00	25.00	9.73	7.45	--	--	--	--	--	--	--	--
	05/09/2005	--		17.18	10.00	25.00	12.82	4.36	--	--	--	--	--	--	--	--
	08/11/2005	P	m	17.18	10.00	25.00	11.29	5.89	120	<0.50	<0.50	<0.50	<0.50	1.2	1.6	7.1
	02/09/2006	--		17.18	10.00	25.00	10.43	6.75	--	--	--	--	--	--	--	--
A-3	6/26/2000	--		15.75	9.00	29.50	11.98	3.77	---	---	---	---	---	--	---	---
	7/20/2000	--		15.75	9.00	29.50	12.21	3.54	---	---	---	---	---	--	---	---
	9/19/2000	--		15.75	9.00	29.50	12.50	3.25	---	---	---	---	---	--	---	---
	12/26/2000	--		15.75	9.00	29.50	12.17	3.58	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	3/20/2001	--		15.75	9.00	29.50	10.70	5.05	---	---	---	---	---	--	---	---
	6/12/2001	--		15.75	9.00	29.50	12.09	3.66	---	---	---	---	---	--	---	---
	9/23/2001	--		15.75	9.00	29.50	12.65	3.10	---	---	---	---	---	--	---	---
	12/28/2001	--		15.75	9.00	29.50	9.94	5.81	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	3/21/2002	--		15.75	9.00	29.50	9.69	6.06	---	---	---	---	---	--	---	---
	4/17/2002	--		15.75	9.00	29.50	10.61	5.14	---	---	---	---	---	--	---	---
	8/14/2002	--		15.75	9.00	29.50	12.27	3.48	---	---	---	---	---	--	---	---
	11/27/2002	--		15.75	9.00	29.50	12.22	3.53	---	---	---	---	---	--	---	---
	2/12/2003	--	d	15.75	9.00	29.50	11.40	4.35	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	6.9
	5/22/2003	--		15.75	9.00	29.50	11.42	4.33	---	---	---	---	---	--	---	---
	7/23/2003	--		15.75	9.00	29.50	12.00	3.75	---	---	---	---	---	--	---	---
	02/16/2004	--	g, i	18.37	9.00	29.50	10.94	7.43	--	--	--	--	--	--	--	--
	05/06/2004	--		18.37	9.00	29.50	11.75	6.62	--	--	--	--	--	--	--	--
	09/02/2004	--		18.37	9.00	29.50	12.15	6.22	--	--	--	--	--	--	--	--

Table 1

Groundwater Elevation and Analytical Data

ARCO Service Station #2169
889 W. Grand Ave., Oakland, CA

Well No.	Date	P/ NP	Footnotes/ Comments	TOC (ft MSL)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (ft bgs)	GWE (ft MSL)	GRO/ TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	pH
A-3	11/29/2004	--		18.37	9.00	29.50	11.87	6.50	--	--	--	--	--	--	--	--
	02/02/2005	--		18.37	9.00	29.50	10.42	7.95	--	--	--	--	--	--	--	--
	05/09/2005	--		18.37	9.00	29.50	10.49	7.88	--	--	--	--	--	--	--	--
	08/11/2005	--		18.37	9.00	29.50	12.02	6.35	--	--	--	--	--	--	--	--
	02/09/2006	--		18.37	9.00	29.50	11.27	7.10	--	--	--	--	--	--	--	--
A-4	6/26/2000	--		15.25	8.00	28.00	10.99	4.26	---	---	---	---	---	---	---	---
	7/20/2000	--		15.25	8.00	28.00	11.16	4.09	---	---	---	---	---	---	---	---
	9/19/2000	--		15.25	8.00	28.00	11.97	3.28	---	---	---	---	---	---	---	---
	12/26/2000	--		15.25	8.00	28.00	11.19	4.06	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	3/20/2001	--		15.25	8.00	28.00	9.81	5.44	---	---	---	---	---	---	---	---
	6/12/2001	--		15.25	8.00	28.00	11.12	4.13	---	---	---	---	---	---	---	---
	9/23/2001	--		15.25	8.00	28.00	11.63	3.62	---	---	---	---	---	---	---	---
	12/28/2001	--		15.25	8.00	28.00	8.41	6.84	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	3/21/2002	--		15.25	8.00	28.00	8.63	6.62	---	---	---	---	---	---	---	---
	4/17/2002	--		15.25	8.00	28.00	9.68	5.57	---	---	---	---	---	---	---	---
	8/14/2002	--		15.25	8.00	28.00	11.31	3.94	---	---	---	---	---	---	---	---
	11/27/2002	--		15.25	8.00	28.00	11.25	4.00	---	---	---	---	---	---	---	---
	2/12/2003	--	d	15.25	8.00	28.00	10.37	4.88	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.9	7.1
	5/22/2003	--		15.25	8.00	28.00	10.42	4.83	---	---	---	---	---	---	---	---
	7/23/2003	--		15.25	8.00	28.00	11.02	4.23	---	---	---	---	---	---	---	---
	02/16/2004	--	g, i	18.01	8.00	28.00	9.65	8.36	--	--	--	--	--	--	--	--
	05/06/2004	--		18.01	8.00	28.00	10.68	7.33	--	--	--	--	--	--	--	--
	09/02/2004	--		18.01	8.00	28.00	10.83	7.18	--	--	--	--	--	--	--	--
	11/29/2004	--		18.01	8.00	28.00	10.50	7.51	--	--	--	--	--	--	--	--
	02/02/2005	--		18.01	8.00	28.00	9.22	8.79	--	--	--	--	--	--	--	--
05/09/2005	--		18.01	8.00	28.00	8.98	9.03	--	--	--	--	--	--	--	--	
08/11/2005	--		18.01	8.00	28.00	10.99	7.02	--	--	--	--	--	--	--	--	
02/09/2006	--		18.01	8.00	28.00	10.15	7.86	--	--	--	--	--	--	--	--	
A-5	6/26/2000	--		13.51	8.00	30.00	10.04	3.47	---	---	---	---	---	---	---	---
	7/20/2000	--		13.51	8.00	30.00	10.31	3.20	730	140	11	<0.5	8.9	3	---	---
	9/19/2000	--		13.51	8.00	30.00	10.55	2.96	160	13	<0.5	2.8	1.9	<3	---	---
	12/26/2000	--		13.51	8.00	30.00	10.37	3.14	8,120	465	108	659	1,450	<250	---	---
	3/20/2001	--		13.51	8.00	30.00	8.81	4.70	7,990	1,110	473	611	1,580	<250	---	---

Table 1
Groundwater Elevation and Analytical Data
 ARCO Service Station #2169
 889 W. Grand Ave., Oakland, CA

Well No.	Date	P/ NP	Footnotes/ Comments	TOC (ft MSL)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (ft bgs)	GWE (ft MSL)	GRO/TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	pH
A-5	6/12/2001	--		13.51	8.00	30.00	10.13	3.38	450	91	18	35	95	<5.0	---	---
	9/23/2001	--		13.51	8.00	30.00	10.80	2.71	110	20	<0.5	5	5	2.7	---	---
	12/28/2001	--		13.51	8.00	30.00	8.17	5.34	320	24	2	20	27	5	---	---
	3/21/2002	--		13.51	8.00	30.00	7.78	5.73	2,500	420	85	130	350	31	---	---
	4/17/2002	--		13.51	8.00	30.00	8.68	4.83	1,300	190	36	67	210	<25	---	---
	8/14/2002	--	b	13.51	8.00	30.00	10.41	3.10	840	150	<5.0	68	41	<25	1.4	6.8
	11/27/2002	--	b	13.51	8.00	30.00	10.50	3.01	300	26	2.3	17	6	<0.5	1.16	7.2
	2/12/2003	--	d	13.51	8.00	30.00	10.81	2.70	<500	74	7	34	45	<5.0	1.0	7.3
	5/22/2003	--		13.51	8.00	30.00	9.46	4.05	500	100	9	28	47	<5.0	1.0	7.6
	7/23/2003	--		13.51	8.00	30.00	10.29	3.22	900	100	5.7	65	57	<5.0	4.5	8.4
	11/13/2003	NP	f	13.51	8.00	30.00	11.24	2.27	1,800	210	5.1	190	140	<5.0	4.3	7.32
	02/16/2004	NP	h, i	16.09	8.00	30.00	9.45	6.64	680	52	15	50	77	<0.50	5.0	7.8
	05/06/2004	P		16.09	8.00	30.00	10.28	5.81	1,500	140	13	72	110	<2.5	1.03	6.93
	09/02/2004	NP		16.09	8.00	30.00	10.78	5.31	690	69	1.3	42	35	<1.0	1.3	7.1
	11/29/2004	NP		16.09	8.00	30.00	10.05	6.04	<5,000	360	<50	190	290	<50	1.0	7.0
	02/02/2005	NP		16.09	8.00	30.00	8.37	7.72	220	31	2.3	10	13	<0.50	0.6	7.4
	05/09/2005	NP		16.09	8.00	30.00	8.45	7.64	110	1.7	<0.50	1.4	1.1	<0.50	2.5	7.6
	08/11/2005	NP		16.09	8.00	30.00	10.11	5.98	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.8	7.3
	02/09/2006	NP	o	16.09	8.00	30.00	9.02	7.07	<50	0.62	<0.50	<0.50	<0.50	<0.50	0.89	7.3
A-6	6/26/2000	--		13.51	8.00	28.50	10.09	3.42	---	---	---	---	---	--	---	---
	7/20/2000	--		13.51	8.00	28.50	10.91	2.60	170	<0.5	<0.5	0.6	2	6	---	---
	9/19/2000	--		13.51	8.00	28.50	11.27	2.24	<50	<0.5	<0.5	<0.5	<1.0	6	---	---
	12/26/2000	--		13.51	8.00	28.50	10.65	2.86	56.2	<0.5	<0.5	<0.5	<0.5	8.17	---	---
	3/20/2001	--		13.51	8.00	28.50	8.72	4.79	216	<0.5	<0.5	<0.5	1.8	19.9	---	---
	6/12/2001	--		13.51	8.00	28.50	10.80	2.71	80	0.62	<0.5	<0.5	<0.5	15	---	---
	9/23/2001	--		13.51	8.00	28.50	10.79	2.72	450	1.7	1.9	2.3	3.3	53	---	---
	12/28/2001	--		13.51	8.00	28.50	8.05	5.46	270	0.98	3.5	0.77	1.4	26	---	---
	3/21/2002	--		13.51	8.00	28.50	7.83	5.68	130	<0.5	<0.5	<0.5	<0.5	19	---	---
	4/17/2002	--		13.51	8.00	28.50	8.73	4.78	<50	<0.5	<0.5	<0.5	<0.5	16	---	---
	8/14/2002	--	b	13.51	8.00	28.50	10.43	3.08	980	4.8	2.6	2	4.9	75	1.5	7.1
	11/27/2002	--	b	13.51	8.00	28.50	10.47	3.04	280	<0.5	0.74	<0.5	<0.5	16	0.9	6.9
	2/12/2003	--	d	13.51	8.00	28.50	10.44	3.07	51	<0.50	<0.50	<0.50	<0.50	9.9	0.8	7.1
	5/22/2003	--		13.51	8.00	28.50	9.43	4.08	<50	<0.50	<0.50	<0.50	<0.50	11	1.2	8.2

Table 1

Groundwater Elevation and Analytical Data

ARCO Service Station #2169
889 W. Grand Ave., Oakland, CA

Well No.	Date	P/ NP	Footnotes/ Comments	TOC (ft MSL)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (ft bgs)	GWE (ft MSL)	GRO/TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	pH
A-6	7/23/2003	--		13.51	8.00	28.50	10.27	3.24	120	<0.50	<0.50	<0.50	<0.50	14	>20	9.6
	11/13/2003	NP	f	13.51	8.00	28.50	11.20	2.31	<50	<0.50	<0.50	<0.50	<0.50	2.3	6.2	9.0
	02/16/2004	NP	h, i	16.10	8.00	28.50	9.76	6.34	50	<0.50	<0.50	<0.50	<0.50	3.9	6.5	8.3
	05/06/2004	P		16.10	8.00	28.50	10.03	6.07	110	<0.50	<0.50	<0.50	<0.50	7.1	1.01	7.02
	09/02/2004	NP		16.10	8.00	28.50	10.47	5.63	56	<0.50	<0.50	<0.50	<0.50	4.4	3.2	7.4
	11/29/2004	NP		16.10	8.00	28.50	9.99	6.11	<50	<0.50	<0.50	<0.50	<0.50	2.9	0.92	6.9
	02/02/2005	NP		16.10	8.00	28.50	8.46	7.64	150	<0.50	<0.50	<0.50	<0.50	14	0.5	7.4
	05/09/2005	NP		16.10	8.00	28.50	8.55	7.55	93	<0.50	<0.50	<0.50	<0.50	12	3.0	7.2
	08/11/2005	NP		16.10	8.00	28.50	10.13	5.97	780	<0.50	<0.50	<0.50	<0.50	14	1.0	6.9
	02/09/2006	NP	o	16.10	8.00	28.50	9.23	6.87	210	<0.50	<0.50	<0.50	<0.50	17	1.27	6.8
ADR-1	6/26/2000	--		13.95	5.00	22.00	10.55	3.40	--	--	--	--	--	--	--	--
	7/20/2000	--		13.95	5.00	22.00	10.85	3.10	180	29	<0.5	0.8	<1.0	22	--	--
	9/19/2000	--		13.95	5.00	22.00	11.08	2.87	120	7.4	<0.5	1.2	<1.0	22	--	--
	12/26/2000	--		13.95	5.00	22.00	10.93	3.02	<50	1.29	<0.5	<0.5	<0.5	14.7	--	--
	3/20/2001	--		13.95	5.00	22.00	9.32	4.63	225	23.4	<0.5	8.71	4.13	10.8	--	--
	6/12/2001	--		13.95	5.00	22.00	10.65	3.30	250	23	0.5	13	4.2	7.5	--	--
	9/23/2001	--		13.95	5.00	22.00	11.25	2.70	<50	1.4	<0.5	<0.5	0.57	2.8	--	--
	12/28/2001	--		13.95	5.00	22.00	8.43	5.52	250	16	<0.5	1.2	4.1	6.8	--	--
	3/21/2002	--		13.95	5.00	22.00	8.27	5.68	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
	4/17/2002	--		13.95	5.00	22.00	9.17	4.78	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
	8/14/2002	--		13.95	5.00	22.00	11.88	2.07	<50	1.1	<0.5	<0.5	<0.5	<2.5	3.4	6.7
	11/27/2002	--		13.95	5.00	22.00	10.91	3.04	<50	0.54	<0.5	<0.5	<0.5	1.1	1.8	6.8
	2/12/2003	--	d	13.95	5.00	22.00	9.95	4.00	<50	<0.50	<0.50	<0.50	<0.50	0.73	1.9	7.2
	5/22/2003	--		13.95	5.00	22.00	9.86	4.09	<50	0.96	<0.50	<0.50	<0.50	3.5	1.2	7.3
	7/23/2003	--		13.95	5.00	22.00	10.59	3.36	<50	2.5	<0.50	0.56	<0.50	4	>20	9.4
	11/13/2003	--	f	13.95	5.00	22.00	11.15	2.80	<50	0.60	<0.50	<0.50	<0.50	1.6	8.5	8.2
	02/16/2004	NP	f, i	16.56	5.00	22.00	9.43	7.13	<50	<0.50	<0.50	<0.50	<0.50	1.6	5.5	9.6
	05/07/2004	NP		16.56	5.00	22.00	10.41	6.15	<500	5.3	<5.0	<5.0	<5.0	<5.0	1.72	7.0
	09/02/2004	NP		16.56	5.00	22.00	10.73	5.83	<50	<0.50	<0.50	<0.50	<0.50	0.84	18.1	8.4
	11/29/2004	NP		16.56	5.00	22.00	10.30	6.26	<50	3.0	<0.50	<0.50	<0.50	<0.50	0.77	6.9
	02/02/2005	NP		16.56	5.00	22.00	9.02	7.54	<50	<0.50	<0.50	<0.50	<0.50	3.4	0.5	7.5
	05/09/2005	NP		16.56	5.00	22.00	8.92	7.64	<50	<0.50	<0.50	<0.50	<0.50	2.6	2.9	7.3
	08/11/2005	NP		16.56	5.00	22.00	10.57	5.99	67	2.8	<0.50	<0.50	<0.50	4.0	0.6	6.0

Table 1
Groundwater Elevation and Analytical Data
 ARCO Service Station #2169
 889 W. Grand Ave., Oakland, CA

Well No.	Date	P/ NP	Footnotes/ Comments	TOC (ft MSL)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (ft bgs)	GWE (ft MSL)	GRO/ TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	pH
ADR-1	02/09/2006	NP	o	16.56	5.00	22.00	10.05	6.51	<50	<0.50	<0.50	<0.50	<0.50	2.9	1.09	7.0
ADR-2	6/26/2000	--		14.64	5.00	22.00	11.22	3.42	---	---	---	---	---	--	---	---
	7/20/2000	--		14.64	5.00	22.00	11.60	3.04	12,000	410	2.5	540	720	23	---	---
	9/19/2000	--		14.64	5.00	22.00	11.81	2.83	1,400	530	5	680	740	34	---	---
	12/26/2000	--		14.64	5.00	22.00	11.52	3.12	901	26.6	<5.0	21.4	32.5	32.8	---	---
	3/20/2001	--	j	14.64	5.00	22.00	10.10	4.54	---	---	---	---	---	--	---	---
	6/12/2001	--	j	14.64	5.00	22.00	11.41	3.23	---	---	---	---	---	--	---	---
	9/23/2001	--		14.64	5.00	22.00	11.98	2.66	5,300	370	<5.0	550	96	60	---	---
	12/28/2001	--		14.64	5.00	22.00	9.48	5.16	2,600	190	<5.0	160	29	61	---	---
	3/21/2002	--		14.64	5.00	22.00	9.10	5.54	180	6	<0.5	4.5	3.2	15	---	---
	4/17/2002	--		14.64	5.00	22.00	9.93	4.71	730	86	<0.5	13	<0.5	<25	---	---
	8/14/2002	--	b	14.64	5.00	22.00	12.09	2.55	1,300	170	<10	100	47	<50	0.9	7.0
	11/27/2002	--	b	14.64	5.00	22.00	11.66	2.98	1,800	240	3.1	120	14	74	0.6	6.9
	2/12/2003	--	d	14.64	5.00	22.00	10.74	3.90	760	120	<5.0	15	5.2	22	1.3	7.1
	5/22/2003	--		14.64	5.00	22.00	10.67	3.97	520	110	<5.0	7.1	<5.0	9.7	0.7	7.6
	7/23/2003	--		14.64	5.00	22.00	11.38	3.26	140	2.8	<0.50	5	0.98	8.4	>20	9.4
	02/16/2004	--	f, i	17.24	5.00	22.00	10.26	6.98	--	--	--	--	--	--	--	--
	05/06/2004	--		17.24	5.00	22.00	11.05	6.19	--	--	--	--	--	--	--	--
	09/02/2004	P		17.24	5.00	22.00	11.50	5.74	<500	67	<5.0	71	12	5.6	0.7	7.4
	11/29/2004	--		17.24	5.00	22.00	11.20	6.04	--	--	--	--	--	--	--	--
	02/02/2005	--		17.24	5.00	22.00	9.76	7.48	--	--	--	--	--	--	--	--
	05/09/2005	--		17.24	5.00	22.00	11.18	6.06	--	--	--	--	--	--	--	--
	08/11/2005	NP		17.24	5.00	22.00	11.30	5.94	1,900	200	<2.5	160	9.6	9.0	0.6	6.6
	02/09/2006	--		17.24	5.00	22.00	9.60	7.64	--	--	--	--	--	--	--	--
AR-1	6/26/2000	--		15.61	8.00	28.00	11.59	4.02	---	---	---	---	---	--	---	---
	7/20/2000	--		15.61	8.00	28.00	12.06	3.55	<50	<0.5	<0.5	<0.5	<1.0	6	---	---
	9/19/2000	--		15.61	8.00	28.00	11.89	3.72	<50	<0.5	<0.5	<0.5	<1.0	<3	---	---
	12/26/2000	--		15.61	8.00	28.00	11.95	3.66	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	03/20/01	--	a	15.61	8.00	28.00	---	---	---	---	---	---	---	--	---	---
	6/12/2001	--		15.61	8.00	28.00	11.87	3.74	<50	<0.5	<0.5	<0.5	<0.5	17	---	---
	9/23/2001	--		15.61	8.00	28.00	12.42	3.19	---	---	---	---	---	--	---	---
	12/28/2001	--		15.61	8.00	28.00	7.62	7.99	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	3/21/2002	--		15.61	8.00	28.00	9.37	6.24	---	---	---	---	---	--	---	---

Table 1

Groundwater Elevation and Analytical Data

ARCO Service Station #2169
889 W. Grand Ave., Oakland, CA

Well No.	Date	P/ NP	Footnotes/ Comments	TOC (ft MSL)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (ft bgs)	GWE (ft MSL)	GRO/ TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	pH
AR-1	4/17/2002	--		15.61	8.00	28.00	10.43	5.18	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	8/14/2002	--		15.61	8.00	28.00	12.08	3.53	<50	<0.5	<0.5	<0.5	1.3	<2.5	2.2	7.9
	11/27/2002	--		15.61	8.00	28.00	12.00	3.61	---	---	---	---	---	---	---	---
	2/12/2003	--	d	15.61	8.00	28.00	10.89	4.72	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.8	7.9
	5/22/2003	--		15.61	8.00	28.00	11.18	4.43	---	---	---	---	---	---	---	---
	7/23/2003	--		15.61	8.00	28.00	11.73	3.88	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.3	7.7
	11/13/2003	--		15.61	8.00	28.00	12.05	3.56	--	--	--	--	--	--	--	--
	02/16/2004	--		18.18	8.00	28.00	10.35	7.83	--	--	--	--	--	--	--	--
	05/06/2004	--		18.18	8.00	28.00	11.60	6.58	--	--	--	--	--	--	--	--
	09/02/2004	P		18.18	8.00	28.00	11.88	6.30	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	7.8
	11/29/2004	--		18.18	8.00	28.00	11.55	6.63	--	--	--	--	--	--	--	--
	02/02/2005	--		18.18	8.00	28.00	9.92	8.26	--	--	--	--	--	--	--	--
	05/09/2005	--		18.18	8.00	28.00	10.19	7.99	--	--	--	--	--	--	--	--
08/11/2005	P	n	18.18	8.00	28.00	11.80	6.38	<50	<0.50	<0.50	<0.50	<0.50	<0.50	7.4	7.6	
02/09/2006	--		18.18	8.00	28.00	10.49	7.69	--	--	--	--	--	--	--	--	
AR-2	6/26/2000	--		15.28	8.50	28.50	11.79	3.49	---	---	---	---	---	---	---	---
	7/20/2000	--		15.28	8.50	28.50	12.07	3.21	<50	<0.5	<0.5	<0.5	<1.0	<3	---	---
	9/19/2000	--		15.28	8.50	28.50	12.08	3.20	<50	<0.5	<0.5	<0.5	<1.0	<3	---	---
	12/26/2000	--		15.28	8.50	28.50	11.95	3.33	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	3/20/2001	--		15.28	8.50	28.50	10.50	4.78	---	---	---	---	---	---	---	---
	6/12/2001	--		15.28	8.50	28.50	11.73	3.55	<50	<0.5	<0.5	<0.5	<0.5	82	---	---
	9/23/2001	--		15.28	8.50	28.50	12.43	2.85	---	---	---	---	---	---	---	---
	12/28/2001	--		15.28	8.50	28.50	8.60	6.68	<50	<0.5	<0.5	<0.5	<0.5	30	---	---
	3/21/2002	--		15.28	8.50	28.50	9.49	5.79	---	---	---	---	---	---	---	---
	4/17/2002	--		15.28	8.50	28.50	10.37	4.91	<50	<0.5	<0.5	<0.5	<0.5	3.2	---	---
	8/14/2002	--		15.28	8.50	28.50	12.13	3.15	<50	<0.5	<0.5	<0.5	<0.5	<2.5	1.4	7.9
	11/27/2002	--		15.28	8.50	28.50	12.08	3.20	---	---	---	---	---	---	---	---
	2/12/2003	--	d	15.28	8.50	28.50	11.15	4.13	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	7.5
	5/22/2003	--		15.28	8.50	28.50	11.18	4.10	---	---	---	---	---	---	---	---
	7/23/2003	--		15.28	8.50	28.50	11.85	3.43	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.3	8.2
	11/13/2003	--	f	15.28	8.50	28.50	11.98	3.30	--	--	--	--	--	--	--	--
02/16/2004	--	f, i	17.87	8.50	28.50	10.69	7.18	--	--	--	--	--	--	--	--	
05/06/2004	--		17.87	8.50	28.50	11.55	6.32	--	--	--	--	--	--	--	--	

Table 1

Groundwater Elevation and Analytical Data

ARCO Service Station #2169
889 W. Grand Ave., Oakland, CA

Well No.	Date	P/ NP	Footnotes/ Comments	TOC (ft MSL)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (ft bgs)	GWE (ft MSL)	GRO/ TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	pH
AR-2	09/02/2004	--	k	17.87	8.50	28.50	--	--	--	--	--	--	--	--	--	--
	09/20/2004	NP		17.87	8.50	28.50	11.98	5.89	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.2	10.4
	11/29/2004	--		17.87	8.50	28.50	12.62	5.25	--	--	--	--	--	--	--	--
	02/02/2005	--		17.87	8.50	28.50	10.12	7.75	--	--	--	--	--	--	--	--
	05/09/2005	--		17.87	8.50	28.50	10.13	7.74	--	--	--	--	--	--	--	--
	08/11/2005	NP		17.87	8.50	28.50	11.73	6.14	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.8	7.3
	02/09/2006	--		17.87	8.50	28.50	10.03	7.84	--	--	--	--	--	--	--	--

Table 1

Groundwater Elevation and Analytical Data

ARCO Service Station #2169
889 W. Grand Ave., Oakland, CA

ABBREVIATIONS & SYMBOLS:

-- = Not analyzed/applicable/measured/available
< = Not detected at or above specified laboratory reporting limit
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 analyzed by EPA Method 8021B unless otherwise noted
NP = Well not purged prior to sampling
P = Well 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 = Well was covered by stockpiled soil and not accessible.
b = GRO/TPH-g chromatogram pattern: Gasoline C6-C10.
c = Primary and confirmation results for xylene varied by greater than 40% RPD. The values may still be useful for their intended purpose.
d = TPH-g, BTEX, and MTBE analyzed using EPA Method 8260B starting first quarter 2003.
e = Well inaccessible.
f = ORC sock in well.
g = Well removed from annual sampling schedule.
h = ORC sock removed prior to gauging.
i = Site re-survey to NAV'88 datum on January 30, 2004.
j = Sheen in well.
k = Car parked over well AR-2 during monitoring event on 9/2/04. Well was sampled 9/20/04.
m = Hydrocarbon result partly due to individual peak(s) in quant. range.
n = Possible low bias for GRO due to CCV falling outside acceptance criteria.
o = Initial analysis within holding time but failed QA/QC criteria.

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.

Top and bottom of screen depths for wells ADR-1 and ADR-2 are estimated from EMCON sampling sheets.

Values for DO and pH were obtained through field measurements.

The data within this table collected prior to August 2002 was provided to URS by RM and their previous consultants. URS has not verified the accuracy of this information.

Table 2

Fuel Additives Analytical Data
 ARCO Service Station #2169
 889 W. Grand Ave., Oakland, CA

Well Number	Date Sampled	Ethanol (µg/L)	TBA (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Footnotes/ Comments
A-1	2/12/2003	<40	<20	2.9	<0.50	<0.50	<0.50	---	---	
	5/22/2003	<100	<20	4.9	<0.50	<0.50	<0.50	---	---	
	7/23/2003	<100	<20	10	<0.50	<0.50	<0.50	<0.50	<0.50	
	11/13/2003	<100	<20	4.2	<0.50	<0.50	<0.50	--	--	
	02/16/2004	<100	<20	3.2	<0.50	<0.50	<0.50	<0.50	<0.50	
	05/06/2004	<100	<20	1.9	<0.50	<0.50	<0.50	<0.50	<0.50	
	09/02/2004	<100	<20	1.7	<0.50	<0.50	<0.50	<0.50	<0.50	
	11/29/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	02/02/2005	<100	<20	5.1	<0.50	<0.50	<0.50	<0.50	<0.50	a
	05/09/2005	<100	<20	2.7	<0.50	<0.50	<0.50	<0.50	<0.50	
A-1	08/11/2005	<100	<20	4.2	<0.50	<0.50	<0.50	<0.50	<0.50	a
	02/09/2006	<300	<20	5.6	<0.50	<0.50	<0.50	<0.50	<0.50	b
A-2	2/12/2003	<40	<20	12	<0.50	<0.50	<0.50	---	---	
	5/22/2003	---	---	--	---	---	---	---	---	
	7/23/2003	<100	<20	2.6	<0.50	<0.50	<0.50	<0.50	<0.50	
	09/02/2004	<100	<20	2.5	<0.50	<0.50	<0.50	<0.50	<0.50	
	08/11/2005	<100	<20	1.2	<0.50	<0.50	<0.50	<0.50	<0.50	a
A-3	2/12/2003	<40	<20	<0.50	<0.50	<0.50	<0.50	---	---	
	5/22/2003	---	---	--	---	---	---	---	---	
	7/23/2003	---	---	--	---	---	---	---	---	
A-4	2/12/2003	<40	<20	<0.50	<0.50	<0.50	<0.50	---	---	
	5/22/2003	---	---	--	---	---	---	---	---	
	7/23/2003	---	---	--	---	---	---	---	---	
A-5	2/12/2003	<400	<200	<5.0	<5.0	<5.0	<5.0	---	---	
	5/22/2003	<1,000	<200	<5.0	<5.0	<5.0	<5.0	---	---	
	7/23/2003	<1,000	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	11/13/2003	<1,000	<200	<5.0	<5.0	<5.0	<5.0	--	--	
	02/16/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	05/06/2004	<500	<100	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
	09/02/2004	<200	<40	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
11/29/2004	<10,000	<2,000	<50	<50	<50	<50	<50	<50		

Table 2

Fuel Additives Analytical Data
ARCO Service Station #2169
889 W. Grand Ave., Oakland, CA

Well Number	Date Sampled	Ethanol (µg/L)	TBA (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Footnotes/Comments
A-5	02/02/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	05/09/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	08/11/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a
	02/09/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b
A-6	2/12/2003	<40	<20	9.9	<0.50	<0.50	<0.50	---	---	
	5/22/2003	<100	<20	11	<0.50	<0.50	0.6	---	---	
	7/23/2003	<100	<20	14	<0.50	<0.50	0.54	<0.50	<0.50	
	11/13/2003	<100	<20	2.3	<0.50	<0.50	<0.50	--	--	
	02/16/2004	<100	<20	3.9	<0.50	<0.50	<0.50	<0.50	<0.50	
	05/06/2004	<100	<20	7.1	<0.50	<0.50	<0.50	<0.50	<0.50	
	09/02/2004	<100	<20	4.4	<0.50	<0.50	<0.50	<0.50	<0.50	
	11/29/2004	<100	<20	2.9	<0.50	<0.50	<0.50	<0.50	<0.50	
	02/02/2005	<100	<20	14	<0.50	<0.50	0.91	<0.50	<0.50	a
	05/09/2005	<100	<20	12	<0.50	<0.50	0.66	<0.50	<0.50	
	08/11/2005	<100	<20	14	<0.50	<0.50	2.2	<0.50	<0.50	a
	02/09/2006	<300	<20	17	<0.50	<0.50	1.2	<0.50	<0.50	b
	ADR-1	2/12/2003	<40	<20	0.73	<0.50	<0.50	<0.50	---	---
5/22/2003		<100	<20	3.5	<0.50	<0.50	<0.50	---	---	
7/23/2003		<100	<20	4	<0.50	<0.50	<0.50	<0.50	<0.50	
11/13/2003		<100	<20	1.6	<0.50	<0.50	<0.50	--	--	
02/16/2004		<100	<20	1.6	<0.50	<0.50	<0.50	<0.50	<0.50	
05/07/2004		<1,000	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
09/02/2004		<100	<20	0.84	<0.50	<0.50	<0.50	<0.50	<0.50	
11/29/2004		<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
02/02/2005		<100	<20	3.4	<0.50	<0.50	<0.50	<0.50	<0.50	a
05/09/2005		<100	<20	2.6	<0.50	<0.50	<0.50	<0.50	<0.50	
08/11/2005		<100	<20	4.0	<0.50	<0.50	<0.50	<0.50	<0.50	a
02/09/2006		<300	<20	2.9	<0.50	<0.50	<0.50	<0.50	<0.50	b
ADR-2		2/12/2003	<400	<200	22	<5.0	<5.0	<5.0	---	---
	5/22/2003	<1,000	<200	9.7	<5.0	<5.0	<5.0	---	---	
	7/23/2003	<100	<20	8.4	<0.50	<0.50	<0.50	<0.50	<0.50	
	09/02/2004	<1,000	<200	5.6	<5.0	<5.0	<5.0	<5.0	<5.0	

Table 2

Fuel Additives Analytical Data

ARCO Service Station #2169

889 W. Grand Ave., Oakland, CA

Well Number	Date Sampled	Ethanol (µg/L)	TBA (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Footnotes/ Comments
ADR-2	08/11/2005	<500	<100	9.0	<2.5	<2.5	<2.5	<2.5	<2.5	a
AR-1	2/12/2003	<40	<20	<0.50	<0.50	<0.50	<0.50	---	---	
	5/22/2003	---	---	--	---	---	---	---	---	
	7/23/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	09/02/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	08/11/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
AR-2	2/12/2003	<40	<20	<0.50	<0.50	<0.50	<0.50	---	---	
	5/22/2003	---	---	--	---	---	---	---	---	
	7/23/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	09/20/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	08/11/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a

Table 2

Fuel Additives Analytical Data

ARCO Service Station #2169
889 W. Grand Ave., Oakland, CA

ABBREVIATIONS & SYMBOLS:

-- = Not analyzed/applicable/measured/available

< = 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 = Calibration verification was within method limits but outside contract limits for ethanol.

b = Initial analysis within holding time but failed QA/QC criteria.

NOTES:

All volatile organic compounds analyzed using EPA Method 8260B.

The data within this table collected prior to August 2002 was provided to URS by RM and their previous consultants. URS has not verified the accuracy of this information.

Table 3

Groundwater Gradient Data
ARCO Service Station #2169
889 W. Grand Ave., Oakland, CA

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
7/20/2000	Northwest	0.004
9/19/2000	West-Northwest	0.003
12/26/2000	Northwest	0.004
3/20/2001	Northwest	0.003
6/12/2001	Northwest	0.004
9/23/2001	Northwest	0.004
12/28/2001	Variable	Variable
3/21/2002	Northwest	0.004
4/17/2002	Northwest	0.003
8/14/2002	West	0.003
11/27/2002	West	0.003
2/12/2003	South	0.005
5/22/2003	West to Northwest	0.002 to 0.003
7/23/2003	Southwest to Northwest	0.005 to 0.004
11/13/2003	Southwest	0.009
2/16/2004	Southwest	0.009
5/6/2004	Southwest	0.004
9/2/2004	West-Northwest	0.005
11/29/2004	West to Southwest	0.005 to 0.006
2/2/2005	Northwest to Southwest	0.005
5/9/2005	Northwest	0.01
8/11/2005	West	0.004
2/9/2006	West	0.003

Source: The data within this table collected prior to August 2002 was provided to URS by RM and their previous consultants. URS has not verified the accuracy of this information.

ATTACHMENT A
FIELD PROCEDURES AND FIELD DATA SHEETS

FIELD PROCEDURES

Sampling Procedures

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

WELL GAUGING DATA

Project # 060209-DR2 Date 2/9/06 Client Area 2769

Site 889 W. Grand Ave. Oakland CA

Well ID	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	NPE
A-1	3					9.04	23.70	↓	Purge
A-2	3					10.43	24.65		6.0
A-3	3					11.27	28.47		—
A-4	3					10.15	27.73		—
A-5	2					9.02	24.18		5'
A-6	2					9.23	26.95		5'
AR-1	6					10.49	27.70		6.0
AR-2	4					10.03	28.65		6.0
ADR-1	4					10.05	20.56		5'
ADR-2	4					9.60	25.86		6.0

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 060209. DA 2	Station # 2169
Sampler: DR	Date: 2/9/06
Well I.D.: A - 1	Well Diameter: 2 (3) 4 6 8
Total Well Depth: 23.70	Depth to Water: 9.04
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>RVC</u> Grade	D.O. Meter (if req'd): <u>YST</u> HACH

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

Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Positive Air Displacement <input type="checkbox"/> Electric Submersible <input type="checkbox"/> Extraction Pump Other: _____	Sampling Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> 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.

5.4	x	3	=	16.2	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or μ S)	Gals. Removed	Observations
1155	68.9	7.1	1058	5.4	light cloudy
1200	69.3	7.1	1007	10.8	"
1205	69.6	7.1	989	16.2	"

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: 16.2
Sampling Time: 1210	Sampling Date: 2/9/06
Sample I.D.: A - 1	Laboratory: Pace <u>Sequoia</u> Other _____
Analyzed for: <u>GRO</u> BTEX MTBE DRO	Other: Oxy's, FDS, 1,2 Dct, Ethanol
D.O. (if req'd):	Pre-purge: _____ mg/L
	Post-purge: <u>1.69</u> mg/L
O.R.P. (if req'd):	Pre-purge: _____ mV
	Post-purge: _____ mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 060209-DQ2	Station # 2169
Sampler: DR	Date: 2/9/06
Well I.D.: A - 5	Well Diameter: <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 6 <input type="checkbox"/> 8
Total Well Depth: DR 24.18	Depth to Water: 9.02
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <input checked="" type="checkbox"/> PVC Grade	D.O. Meter (if req'd): <input checked="" type="checkbox"/> YSI HACH

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

Purge Method: <input checked="" type="checkbox"/> Bailer <input type="checkbox"/> Disposable Bailer <input type="checkbox"/> Positive Air Displacement <input type="checkbox"/> Electric Submersible <input type="checkbox"/> Extraction Pump Other: _____	Sampling Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Extraction Port Other: _____
---	---

Top of Screen: 5' If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

_____	X	_____	=	_____	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or μ S)	Gals. Removed	Observations
1110	62.9	7.3	1015	—	clear

Did well dewater? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Gallons actually evacuated: _____
Sampling Time: 1110	Sampling Date: 2/9/06
Sample I.D.: A - 5	Laboratory: Pace <input checked="" type="checkbox"/> Sequoia Other _____
Analyzed for: <input checked="" type="checkbox"/> GRO <input checked="" type="checkbox"/> BTEX MTBE DRO	Other: Oxy's, EDB, 1,2 DCA, Ethanol
D.O. (if req'd):	Pre-purge: _____ mg/L Post-purge: 0.89 mg/L
O.R.P. (if req'd):	Pre-purge: _____ mV Post-purge: _____ mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 060209-D92	Station # 2169
Sampler: DR	Date: 2/9/06
Well I.D.: A - 6	Well Diameter: <input checked="" type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 6 <input type="radio"/> 8
Total Well Depth: 26.95	Depth to Water: 9.23
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <input checked="" type="radio"/> PVC Grade	D.O. Meter (if req'd): <input checked="" type="radio"/> YSB HACH

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

Purge Method: Bailer Sampling Method: Bailer

Disposable Bailer Disposable Bailer

Positive Air Displacement Extraction Port

Electric Submersible Other: _____

Extraction Pump

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.

_____	X	_____	=	_____	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or μ S)	Gals. Removed	Observations
1050	67.3	6.8	1039	—	clear / odor

Did well dewater? Yes No Gallons actually evacuated: _____

Sampling Time: 1050 Sampling Date: 2/9/06

Sample I.D.: A - 6 Laboratory: Pace Sequoia Other _____

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	1.27	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV	mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 060209-DQ2	Station # 2169
Sampler: DR	Date: 2/9/06
Well I.D.: ADR-1	Well Diameter: 2 3 (4) 6 8
Total Well Depth: 20.56	Depth to Water: 10.05
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>RVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

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

Purge Method: <u>Bailer</u> Disposable Bailer Positive Air Displacement Electric Submersible Extraction Pump Other: _____	Sampling Method: <u>Bailer</u> Disposable Bailer Extraction Port Other: _____
--	---

Top of Screen: 5' If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

_____	X	_____	=	_____	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or <u>µS</u>)	Gals. Removed	Observations
1130	67.9	7.0	1176	—	clear

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: _____
Sampling Time: 1130	Sampling Date: 2/9/06
Sample I.D.: ADR-1	Laboratory: Pace Sequoia Other _____
Analyzed for: <u>GRO</u> BTEX MTBE DRO	Other: <u>Oxy's, FDS, 1,2 DCA, Ethanol</u>
D.O. (if req'd):	Pre-purge: _____ mg/L
	Post-purge: <u>1.09</u> 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 BP GEM OIL COMPANY FACILITIES IN THE STATE OF CALIFORNIA. THE NON-HAZARDOUS PURGE- WATER WHICH HAS BEEN RECOVERED FROM GROUND- WATER WELLS IS COLLECTED BY THE CONTRACTOR, MADE UP INTO LOADS OF APPROPRIATE SIZE AND HAULED BY DILLARD ENVIRONMENTAL TO THE ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY IN LIVERMORE, CALIFORNIA.

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

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

2169

Station #

889 W. Grand Ave. Oakland CA

Station Address

Total Gallons Collected From Groundwater Monitoring Wells:

16.2

added equip. _____
rinse water _____

any other adjustments _____

TOTAL GALS. RECOVERED 16.2

loaded onto BTS vehicle # 41

BTS event #

time date

060209-DR2

1235 2/9/06

signature D. [Signature]

REC'D AT _____ time _____ date _____

unloaded by _____
signature _____

ATTACHMENT B

**LABORATORY PROCEDURES,
CERTIFIED ANALYTICAL REPORTS,
AND CHAIN-OF-CUSTODY RECORDS**

LABORATORY PROCEDURES

Laboratory Procedures

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



28 February, 2006

Barbara Jakub
URS Corporation [Arco]
1333 Broadway, Suite 800
Oakland, CA 94612

RE: ARCO #2169, Oakland, CA
Work Order: MPB0725

Enclosed are the results of analyses for samples received by the laboratory on 02/13/06 17:40. 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.

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

Project: ARCO #2169, Oakland, CA
Project Number: G0C2D-0010
Project Manager: Barbara Jakub

MPB0725
Reported:
02/28/06 18:22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
A-1	MPB0725-01	Water	02/09/06 12:10	02/13/06 17:40
A-5	MPB0725-02	Water	02/09/06 11:10	02/13/06 17:40
A-6	MPB0725-03	Water	02/09/06 10:50	02/13/06 17:40
ADR-1	MPB0725-04	Water	02/09/06 11:30	02/13/06 17:40
TB-2169-02092006	MPB0725-05	Water	02/09/06 00:00	02/13/06 17:40

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.

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

 Project: ARCO #2169, Oakland, CA
 Project Number: G0C2D-0010
 Project Manager: Barbara Jakub

 MPB0725
 Reported:
 02/28/06 18:22

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-1 (MPB0725-01) Water Sampled: 02/09/06 12:10 Received: 02/13/06 17:40									
tert-Amyl methyl ether	ND	0.50	ug/l	1	6B27009	02/27/06	02/27/06	EPA 8260B	
Benzene	60	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	3.5	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	5.6	0.50	"	"	"	"	"	"	
Toluene	1.5	0.50	"	"	"	"	"	"	
Xylenes (total)	5.1	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	170	50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		81 %	60-135	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		90 %	70-120	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		80 %	65-130	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		94 %	70-120	"	"	"	"	"	
A-5 (MPB0725-02) Water Sampled: 02/09/06 11:10 Received: 02/13/06 17:40									
tert-Amyl methyl ether	ND	0.50	ug/l	1	6B27009	02/27/06	02/27/06	EPA 8260B	
Benzene	0.62	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	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		77 %	60-135	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		87 %	70-120	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		83 %	65-130	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		87 %	70-120	"	"	"	"	"	

Sequoia Analytical - Morgan Hill

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.

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

 Project: ARCO #2169, Oakland, CA
 Project Number: GOC2D-0010
 Project Manager: Barbara Jakub

 MPB0725
 Reported:
 02/28/06 18:22

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-6 (MPB0725-03) Water									CK
Sampled: 02/09/06 10:50 Received: 02/13/06 17:40									
tert-Amyl methyl ether	1.2	0.50	ug/l	1	6B27009	02/27/06	02/27/06	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	17	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	210	50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		78 %	60-135	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		103 %	70-120	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		85 %	65-130	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		111 %	70-120	"	"	"	"	"	
ADR-1 (MPB0725-04) Water									CK
Sampled: 02/09/06 11:30 Received: 02/13/06 17:40									
tert-Amyl methyl ether	ND	0.50	ug/l	1	6B27009	02/27/06	02/27/06	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	2.9	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		77 %	60-135	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		91 %	70-120	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		83 %	65-130	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		90 %	70-120	"	"	"	"	"	

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

 Project: ARCO #2169, Oakland, CA
 Project Number: G0C2D-0010
 Project Manager: Barbara Jakub

 MPB0725
 Reported:
 02/28/06 18:22

**Volatile Organic Compounds by EPA Method 8260B - Quality Control
Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 6B27009 - EPA 5030B P/T / EPA 8260B
Blank (6B27009-BLK1)

Prepared & Analyzed: 02/27/06

tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	"							
tert-Butyl alcohol	ND	5.0	"							
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	"							
Gasoline Range Organics (C4-C12)	ND	50	"							

Surrogate: 1,2-Dichloroethane-d4

4.02

"

5.00

80 60-135

Surrogate: Toluene-d8

4.27

"

5.00

85 70-120

Surrogate: Dibromofluoromethane

4.23

"

5.00

85 65-130

Surrogate: 4-Bromofluorobenzene

4.47

"

5.00

89 70-120

Laboratory Control Sample (6B27009-BS1)

Prepared & Analyzed: 02/27/06

tert-Amyl methyl ether	14.9	0.50	ug/l	16.3		91	80-115			
Benzene	4.65	0.50	"	5.04		92	65-115			
tert-Butyl alcohol	159	5.0	"	169		94	75-150			
Di-isopropyl ether	15.4	0.50	"	16.2		95	75-125			
1,2-Dibromoethane (EDB)	17.2	0.50	"	16.6		104	85-120			
1,2-Dichloroethane	14.0	0.50	"	15.5		90	85-130			
Ethanol	181	300	"	165		110	70-135			
Ethyl tert-butyl ether	14.0	0.50	"	16.4		85	75-130			
Ethylbenzene	7.13	0.50	"	7.28		98	75-135			
Methyl tert-butyl ether	6.57	0.50	"	7.84		84	65-125			
Toluene	35.3	0.50	"	38.0		93	85-120			
Xylenes (total)	37.6	0.50	"	40.8		92	85-125			
Gasoline Range Organics (C4-C12)	455	50	"	440		103	60-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.15		"	5.00		83	60-135			
<i>Surrogate: Toluene-d8</i>	4.64		"	5.00		93	70-120			
<i>Surrogate: Dibromofluoromethane</i>	4.20		"	5.00		84	65-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	4.88		"	5.00		98	70-120			

Sequoia Analytical - Morgan Hill

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.

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

 Project: ARCO #2169, Oakland, CA
 Project Number: GOC2D-0010
 Project Manager: Barbara Jakub

 MPB0725
 Reported:
 02/28/06 18:22

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 6B27009 - EPA 5030B P/T / EPA 8260B

Matrix Spike (6B27009-MS1)	Source: MPB0617-04	Prepared & Analyzed: 02/27/06								
tert-Amyl methyl ether	1440	50	ug/l	1630	ND	88	80-115			
Benzene	448	50	"	504	ND	89	65-115			
tert-Butyl alcohol	20200	500	"	16900	1900	108	75-120			
Di-isopropyl ether	1480	50	"	1620	ND	91	75-125			
1,2-Dibromoethane (EDB)	1730	50	"	1660	ND	104	85-120			
1,2-Dichloroethane	1420	50	"	1550	ND	92	85-130			
Ethanol	12700	10000	"	16500	ND	77	70-135			
Ethyl tert-butyl ether	1330	50	"	1640	ND	81	75-130			
Ethylbenzene	705	50	"	728	ND	97	75-135			
Methyl tert-butyl ether	5300	50	"	784	5000	38	65-125			BB, LN
Toluene	3370	50	"	3800	ND	89	85-120			
Xylenes (total)	3720	50	"	4080	ND	91	85-125			
Gasoline Range Organics (C4-C12)	44300	5000	"	44000	5500	88	60-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>4.20</i>		<i>"</i>	<i>5.00</i>		<i>84</i>	<i>60-135</i>			
<i>Surrogate: Toluene-d8</i>	<i>4.50</i>		<i>"</i>	<i>5.00</i>		<i>90</i>	<i>70-120</i>			
<i>Surrogate: Dibromofluoromethane</i>	<i>4.09</i>		<i>"</i>	<i>5.00</i>		<i>82</i>	<i>65-130</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>4.85</i>		<i>"</i>	<i>5.00</i>		<i>97</i>	<i>70-120</i>			

Matrix Spike Dup (6B27009-MSD1)	Source: MPB0617-04	Prepared & Analyzed: 02/27/06								
tert-Amyl methyl ether	1410	50	ug/l	1630	ND	87	80-115	2	15	
Benzene	448	50	"	504	ND	89	65-115	0	20	
tert-Butyl alcohol	20300	500	"	16900	1900	109	75-120	0.5	25	
Di-isopropyl ether	1520	50	"	1620	ND	94	75-125	3	15	
1,2-Dibromoethane (EDB)	1690	50	"	1660	ND	102	85-120	2	15	
1,2-Dichloroethane	1360	50	"	1550	ND	88	85-130	4	20	
Ethanol	18000	30000	"	16500	ND	109	70-135	35	35	
Ethyl tert-butyl ether	1310	50	"	1640	ND	80	75-130	2	25	
Ethylbenzene	746	50	"	728	ND	102	75-135	6	15	
Methyl tert-butyl ether	5170	50	"	784	5000	22	65-125	2	20	BB, LN
Toluene	3480	50	"	3800	ND	92	85-120	3	20	
Xylenes (total)	3890	50	"	4080	ND	95	85-125	4	20	
Gasoline Range Organics (C4-C12)	44500	5000	"	44000	5500	89	60-140	0.5	25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>3.95</i>		<i>"</i>	<i>5.00</i>		<i>79</i>	<i>60-135</i>			
<i>Surrogate: Toluene-d8</i>	<i>4.43</i>		<i>"</i>	<i>5.00</i>		<i>89</i>	<i>70-120</i>			
<i>Surrogate: Dibromofluoromethane</i>	<i>4.01</i>		<i>"</i>	<i>5.00</i>		<i>80</i>	<i>65-130</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>4.83</i>		<i>"</i>	<i>5.00</i>		<i>97</i>	<i>70-120</i>			

Sequoia Analytical - Morgan Hill

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.



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

Project: ARCO #2169, Oakland, CA
Project Number: G0C2D-0010
Project Manager: Barbara Jakub

MPB0725
Reported:
02/28/06 18:22

Notes and Definitions

CK Initial analysis within holding time but failed QA/QC criteria

BB, LN Sample > 4x spike concentration.

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

Project Name: Analytical for QMR Sampling
 BP BU/AR Region/Enfos Segment: BP > Americas > West Coast > Retail > WCBU > CA > Central > 2169 > HistoricalBL
 State or Lead Regulatory Agency: California Regional Water Quality Control Board - San Fr
 Requested Due Date (mm/dd/yy): 10 Day TAT

On-site Time:	Temp:
Off-site Time:	Temp:
Sky Conditions: <u>Clear</u>	
Meteorological Events:	
Wind Speed:	Direction:

Lab Name: <u>Sequoia</u>	BP/AR Facility No.: <u>2169</u>	Consultant/Contractor: <u>URS</u>
Address: <u>885 Jarvis Drive</u> <u>Morgan Hill, CA 95037</u>	BP/AR Facility Address: <u>889 W. Grand Ave., Oakland, CA 94607</u>	Address: <u>1333 Broadway, Suite 800</u> <u>Oakland, CA 94612</u>
Lab PM: <u>Lisa Race / Katt Min</u>	California Global ID No.: <u>T0600100112</u>	Consultant/Contractor Project No.: <u>38487531</u>
Tele/Fax: <u>408.782.8156 / 408.782.6308</u>	Enfos Project No.: <u>G0C2D-0010</u>	Consultant/Contractor PM: <u>Barb Jakub</u>
BP/AR PM Contact: <u>Paul Supple</u>	Provision or RCOP: <u>Provision</u>	Tele/Fax: <u>510.874.3296 / 510.874.3268</u>
Address: <u>P.O. Box 6549</u> <u>Moraga, CA 94570</u>	Phase/WBS: <u>04 - Mon/Remed by Natural Attenuation</u>	Report Type & QC Level: <u>Level 1 with EDF</u>
Tele/Fax: <u>925.299.8891 / 925.299.8872</u>	Sub Phase/Task: <u>03 - Analytical</u>	E-mail BDD To: <u>Donna Cosper@urscorp.com</u>
	Cost Element: <u>05 - Subcontracted Costs</u>	Invoice to: <u>Atlantic Richfield Company</u>

Lab Bottle Order No: 2169				Matrix			Laboratory No.	No. of Containers	Preservative					Requested Analysis					Sample Point Lat/Long and Comments					
Item No.	Sample Description	Time	Date	Soil/Solid	Water/Liquid	Air			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	Methanol	GRO / ETX (8260)	MTBE, TAME, ETBE	DIBP, TBA (8260)	EDB, 1,2-DCA (8260)	Ethanol (8260)						
1	A-1	1210	2/1/06		X		MPB0725	3			X		X	X	X									
2	A-5	1110	↓		X		02	↓			X		X	X	X									
3	A-6	1050	↓		X		03	↓			X		X	X	X									
4	ADR-1	1130	↓		X		04	↓			X		X	X	X									
5	TB-2169-02092006		↓		X		05	2																On hold
6																								
7																								
8																								
9																								
10																								

Sampler's Name:	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
<u>Devin Reynolds</u>	<u>[Signature]</u>	<u>2/1/06</u>	<u>1543</u>	<u>[Signature]</u>	<u>2/1/06</u>	<u>1543</u>
<u>Blaine Tech Services</u>	<u>[Signature]</u>	<u>2/2/06</u>	<u>1645</u>	<u>[Signature]</u>	<u>2/1/06</u>	<u>1645</u>
Shipment Date:	<u>[Signature]</u>	<u>2/2/06</u>	<u>1740</u>	<u>[Signature]</u>	<u>2/1/06</u>	<u>1740</u>
Shipment Method:						
Shipment Tracking No:						

Special Instructions:

Body Seals In Place Yes No Temp Blank Yes No Cooler Temperature on Receipt 2.3 °C Trip Blank Yes No

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: Albion URS
 REC. BY (PRINT): EB
 WORKORDER: MPD0725

DATE REC'D AT LAB: 2-13-06
 TIME REC'D AT LAB: 1740
 DATE LOGGED IN: 2/16/06

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

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present / Absent Intact / Broken*									<div style="position: absolute; top: 0; left: 0; right: 0; bottom: 0; border: 1px solid black; transform: rotate(45deg); opacity: 0.5;"> No COC 2/13/06 </div>
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*									
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: <u>2.3 C</u> Corrected Temp: <u>2.3 C</u> 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.

ATTACHMENT C
HISTORICAL GROUNDWATER DATA

Table 1
Historical Groundwater Elevation and Analytical Data
Petroleum Hydrocarbons and Their Constituents
1995 - Present***

ARCO Service Station 2169
889 West Grand Avenue, Oakland, California

Well Number	Date Gauged	FOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation (ft-MSL)	Date Sampled	TPH					MTRB 8021B* (ug/L)	MTBE (ug/L)	TPH Diesel (ug/L)	Dissolved Oxygen (mg/L)	Purged/ Not Purged (P/NP)
							Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)					
A-1	03-24-95	14.16	8.10	ND	6.06	03-24-95	1,200	230	39	34	66	--	--	160		
A-1	06-05-95	14.16	11.13	ND	3.03	06-05-95	1,500	310	27	36	76	--	--	710		
A-1	08-17-95	14.16	11.71	ND	2.45	08-18-95	1,600	470	35	48	110	120	--	240		
A-1	12-04-95	14.16	12.28	ND	1.88	12-04-95	1,200	240	17	25	56	--	--			
A-1	03-01-96	14.16	8.78	ND	5.38	03-13-96	1,300	300	74	29	73	120	--			
A-1	05-29-96	14.16	9.85	ND	4.31	05-29-96	Not sampled: well sampled semi-annually, during the first and third quarters					100	--	--		
A-1	08-29-96	14.16	11.08	ND	3.08	08-29-96	1,200	320	5.9	25	27	110	--	--		
A-1	11-21-96	14.16	10.54	ND	3.62	11-21-96	Not sampled: well sampled semi-annually, during the first and third quarters						--	--		
A-1	03-26-97	14.16	10.55	ND	3.61	03-26-97	<50	0.8	<0.5	<0.5	<0.5	64	--	--		
A-1	05-21-97	14.16	11.10	ND	3.06	05-21-97	Not sampled: well sampled semi-annually, during the first and third quarters						--	--		
A-1	08-08-97	14.16	11.32	ND	2.84	08-08-97	91	7	<0.5	0.5	3.9	<60	--	--		
A-1	11-18-97	14.16	3.46	ND	10.70	11-18-97	54	<0.5	<0.5	<0.5	0.6	27	--	--		
A-1	02-20-98	14.16	7.10	ND	7.06	02-23-98	590	160	22	15	28	70	--	--		
A-1	05-11-98	14.16	9.87	ND	4.29	05-11-98	280	26	<0.5	0.8	2.3	6	--	--		
A-1	07-30-98	14.16	10.73	ND	3.43	07-30-98	1,000	210	5	<5	38	<30	--	--		
A-1	10-08-98	14.16	11.15	ND	3.01	10-08-98	3,100	740	11	<10	24	<60	--	--		
A-1	02-18-99	14.16	8.00	ND	6.16	02-18-99	510	87	7.1	6.4	13	52	--	--		
A-1	05-26-99	14.16	10.60	ND	3.56	05-26-99	240	26	<0.5	1.2	6.2	34	--	--		
A-1	08-23-99	14.16	11.22	ND	2.94	08-23-99	79	3.9	0.6	<0.5	1.7	38	--	--		
A-1	10-27-99	14.16	11.37	ND	2.79	10-27-99	110	2.2	<0.5	<0.5	<1	25	--	--	0.68	NP
A-1	01-31-00	14.16	9.44	ND	4.72	01-31-00	<50	<0.5	<0.5	<0.5	<1	<3	--	--	0.80	NP
													--	--	1.0	NP

Table 1
Historical Groundwater Elevation and Analytical Data
Petroleum Hydrocarbons and Their Constituents
1995 - Present^(A)

ARCO Service Station 2169
889 West Grand Avenue, Oakland, California

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation (ft-MSL)	Date Sampled	TPH Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8260 (µg/L)	TPH Diesel (µg/L)	Dissolved Oxygen (mg/L)	Purged/Not Purged (P/NP)
A-2	03-24-95	14.55	8.64	ND	5.91	03-24-95	<50	<0.5	<0.5	<0.5	<0.5					
A-2	06-05-95	14.55	11.72	ND	2.83	06-05-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--		
A-2	08-17-95	14.55	12.35	ND	2.20	08-17-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--		
A-2	12-04-95	14.55	12.74	ND	1.81	12-04-95	<50	<0.5	<0.5	<0.5	<0.5	12	--	--		
A-2	03-01-96	14.55	9.34	ND	5.21	03-13-96	<50	<0.5	<0.5	<0.5	<0.5	--	--	--		
A-2	05-29-96	14.55	10.40	ND	4.15	05-29-96	<50	<0.5	0.6	<0.5	<0.5	13	<9	--		
A-2	08-29-96	14.55	11.50	ND	3.05	08-29-96	<50	<0.5	<0.5	<0.5	<0.5	<20	--	--		
A-2	11-21-96	14.55	11.06	ND	3.49	11-21-96	<50	<0.5	<0.5	<0.5	<0.5	<39	--	--		
A-2	03-26-97	14.55	11.12	ND	3.43	03-26-97	<50	<0.5	<0.5	<0.5	<0.5	<30	--	--		
A-2	05-21-97	14.55	11.58	ND	2.97	05-21-97	<50	<0.5	<0.5	<0.5	<0.5	<20	--	--		
A-2	08-08-97	14.55	11.82	ND	2.73	08-08-97	Not sampled: well sampled semi-annually, during the first and third quarters									
A-2	11-18-97	14.55	3.33	ND	11.22	11-18-97	<50	<0.5	<0.5	<0.5	<0.5	<20	--	--		
A-2	02-20-98	14.55	7.68	ND	6.87	02-20-98	Not sampled: well sampled semi-annually, during the first and third quarters									
A-2	05-11-98	14.55	10.45	ND	4.10	05-11-98	<50	<0.5	<0.5	<0.5	<0.5	17	--	--		
A-2	07-30-98	14.55	11.23	ND	3.32	07-30-98	Not sampled									
A-2	10-08-98	14.55	11.62	ND	2.93	10-08-98	Not sampled: well sampled semi-annually, during the first and second quarters									
A-2	02-18-99	14.55	8.62	ND	5.93	02-18-99	Not sampled: well sampled semi-annually, during the first and second quarters									
A-2	05-26-99	14.55	11.16	ND	3.39	05-26-99	93	<0.5	<0.5	<0.5	<1	26	--	--		
A-2	08-23-99	14.55	11.69	ND	2.86	08-23-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--		
A-2	10-27-99	14.55	11.88	ND	2.67	10-27-99	Not sampled: well sampled semi-annually, during the first and second quarters									
A-2	01-31-00	14.55	10.17	ND	4.38	01-31-00	<50	<0.5	<0.5	<0.5	<1	<3	--	--	0.59	
															0.59	
															1.0	NP

Table 1
**Historical Groundwater Elevation and Analytical Data
 Petroleum Hydrocarbons and Their Constituents
 1995 - Present*****

ARCO Service Station 2169
 889 West Grand Avenue, Oakland, California

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation (ft-MSL)	Date Sampled	TPH Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Bhyl. benzene (ug/L)	Total Xylenes (ug/L)	MTBE 8021B* (ug/L)	MTBE 8260 (ug/L)	TPH Diesel (ug/L)	Dissolved Oxygen (mg/L)	Purged/ Not Purged (PNP)
A-3	03-24-95	15.75	8.83	ND	6.92	03-24-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--		
A-3	06-05-95	15.75	12.44	ND	3.31	06-05-95	Not sampled; well sampled annually									
A-3	08-17-95	15.75	13.04	ND	2.71	08-17-95	Not sampled; well sampled annually									
A-3	12-04-95	15.75	13.57	ND	2.18	12-04-95	Not sampled; well sampled annually									
A-3	03-01-96	15.75	9.90	ND	5.85	03-01-96	Not sampled; well sampled annually									
A-3	05-29-96	15.75	11.08	ND	4.67	05-29-96	<50	<0.5	<0.5	<0.5	<0.5	∇	--	--		
A-3	08-29-96	15.75	12.38	ND	3.37	08-29-96	Not sampled; well sampled annually									
A-3	11-21-96	15.75	11.86	ND	3.89	11-21-96	Not sampled; well sampled annually									
A-3	03-26-97	15.75	11.81	ND	3.94	03-26-97	Not sampled; well sampled annually									
A-3	05-21-97	15.75	12.35	ND	3.40	05-21-97	<50	<0.5	<0.5	<0.5	<0.5	∇	--	--		
A-3	08-08-97	15.75	12.62	ND	3.13	08-08-97	Not sampled; well sampled annually									
A-3	11-18-97	15.75	3.75	ND	12.00	11-18-97	Not sampled; well sampled annually									
A-3	02-20-98	15.75	8.06	ND	7.69	02-20-98	Not sampled; well sampled annually									
A-3	05-11-98	15.75	11.19	ND	4.56	05-11-98	<50	<0.5	<0.5	<0.5	<0.5	∇	--	--		
A-3	07-30-98	15.75	12.03	ND	9.70	07-30-98	Not sampled; well sampled annually									
A-3	10-08-98	15.75	12.49	ND	3.32	10-08-98	Not sampled; well sampled annually									
A-3	02-18-99	15.75	9.05	ND	6.70	02-18-99	Not sampled; well sampled annually									
A-3	05-26-99	15.75	11.93	ND	3.82	05-26-99	Not sampled; well sampled annually									
A-3	08-23-99	15.75	12.57	ND	3.18	08-23-99	<50	<0.5	<0.5	<0.5	<0.5	∇	--	--		
A-3	10-27-99	15.75	12.65	ND	3.10	10-27-99	Not sampled; well sampled annually									
A-3	01-31-00	15.75	9.55	ND	6.20	01-31-00	Not sampled; well sampled annually								0.88	
							<50	<0.5	<0.5	<0.5	<1	9	--	--	1.0	NP

Table 1
Historical Groundwater Elevation and Analytical Data
Petroleum Hydrocarbons and Their Constituents
1995 - Present***

ARCO Service Station 2169
888 West Grand Avenue, Oakland, California

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation (ft-MSL)	Date Sampled	TPH Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B+ (µg/L)	MTBE 8260 (µg/L)	TPH Diesel (µg/L)	Dissolved Oxygen (mg/L)	Purged/Not Purged (P/NP)	
A-5	03-24-95	13.51	7.40	ND	6.11	03-24-95	3,300	200	310	130	460	..	..	..
A-5	06-05-95	13.51	10.43	ND	3.08	06-05-95	57,000	2,700	4,600	1,500	6,800	..	..	..
A-5	08-17-95	13.51	11.15	ND	2.36	08-18-95	34,000	1,600	2,700	1,100	5,100	..	..	..
A-5	12-04-95	13.51	11.42	ND	2.09	12-04-95	61	<0.5	<0.5	<0.5	<0.5	<28	..	..	
A-5	03-01-96	13.51	8.11	ND	5.40	03-13-96	11,000	860	960	380	1,600	..	..	..
A-5	05-29-96	13.51	9.30	ND	4.21	05-29-96	19,000	1,600	1,900	880	3,300	<100	..	..	
A-5	08-29-96	13.51	10.60	ND	2.91	08-29-96	7,700	490	450	260	990	<100	..	..	
A-5	11-21-96	13.51	10.05	ND	3.46	11-21-96	8,000	450	350	340	1,100	<30	..	..	
A-5	03-26-97	13.51	9.87	ND	3.64	03-26-97	3,100	190	140	130	340	<30	..	..	
A-5	05-21-97	13.51	10.25	ND	3.26	05-21-97	16,000	1,300	900	700	2,700	<30	..	..	
A-5	08-08-97	13.51	10.42	ND	3.09	08-08-97	9,000	690	240	440	1,300	<30	..	..	
A-5	11-18-97	13.51	Not surveyed: well inaccessible														
A-5	02-20-98	13.51	Not surveyed: well inaccessible														
A-5	05-11-98	13.51	Not surveyed: well inaccessible														
A-5	07-30-98	13.51	Not surveyed: well inaccessible														
A-5	10-08-98	13.51	Not surveyed: well inaccessible														
A-5	02-18-99	13.51	7.63	ND	5.88												
A-5	05-26-99	13.51	9.85	ND	3.66	02-18-99	<50	0.8	<0.5	<0.5	1.5	<10	..	..	
A-5	08-23-99	13.51	10.60	ND	2.91	05-26-99	1,700	240	41	110	330	<12	..	..	
A-5	10-27-99	13.51	10.72	ND	2.79	08-23-99	560	65	3	30	52	<6	..	..	
A-5	01-31-00	13.51	9.37	ND	4.14	10-27-99	480	93	1.0	16	19	<6	0.73	NP	
						01-31-00	Not sampled: well was inaccessible								0.65	NP	

Table 1
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Petroleum Hydrocarbons and Their Constituents
1995 - Present***

ARCO Service Station 2169
889 West Grand Avenue, Oakland, California

Well Number	Date Ougged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation (ft-MSL)	Date Sampled	TPH Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE 8021B* (ug/L)	MTBE 8260 (ug/L)	TPH Diesel (ug/L)	Dissolved Oxygen (mg/L)	Purged/Not Purged (P/NP)
A-6	03-24-95	13.51	7.89	ND	5.62	03-24-95	120	<0.5	<1	<0.5	<1.5	..	..	..
A-6	06-05-95	13.51	10.06	ND	3.45	06-05-95	160	<0.5	<0.6	<0.5	<0.5	..	..	..
A-6	08-17-95	13.51	11.10	ND	2.41	08-18-95	530	<0.5	<0.5	<2.4	<4.2	6	..	..
A-6	12-04-95	13.51	11.52	ND	1.99	12-04-95	28,000	1,600	1,800	880	3,600	..	..	..
A-6	03-01-96	13.51	8.21	ND	5.30	03-13-96	1,400	<3	<15	<7	<10	<20	..	..
A-6	05-29-96	13.51	9.25	ND	4.26	05-29-96	410	<2	<2	<2	<2	3	..	..
A-6	08-29-96	13.51	10.52	ND	2.99	08-29-96	80	<0.5	<0.5	<0.5	<0.5	6	..	..
A-6	11-21-96	13.51	10.54	ND	2.97	11-21-96	62	<0.5	<0.5	<0.5	<0.5	12	..	..
A-6	03-26-97	13.51	9.93	ND	3.58	03-26-97	110	<0.5	0.8	1	1.4	15	..	..
A-6	05-21-97	13.51	10.54	ND	2.97	05-21-97	600	0.6	0.6	<2	2.7	<3	..	..
A-6	08-08-97	13.51	10.77	ND	2.74	08-08-97	850	<0.5	<0.5	6.1	<0.5	4	..	..
A-6	11-18-97	13.51	3.41	ND	10.10	11-18-97	690	<2	<1	3	2	7	..	..
A-6	02-20-98	13.51	6.73	ND	6.78	02-20-98	60	<0.5	0.6	1.3	0.5	4	..	..
A-6	05-11-98	13.51	9.26	ND	4.25	05-11-98	140	<0.5	0.7	0.6	<0.5	6	..	..
A-6	07-30-98	13.51	10.12	ND	3.39	07-30-98	910	<2	<2	3	7	34	..	..
A-6	10-08-98	13.51	10.53	ND	2.98	10-08-98	1,300	<2	4	3	4	21	..	..
A-6	02-18-99	13.51	7.50	ND	6.01	02-18-99	150	<0.5	<0.5	1.4	1.7	35	..	..
A-6	05-26-99	13.51	10.00	ND	3.51	05-26-99	100	<0.5	<0.5	<0.5	<0.5	17	..	..
A-6	08-23-99	13.51	10.70	ND	2.81	08-23-99	98	0.6	<0.5	1.1	4.3	13	..	..	2.42	NP
A-6	10-27-99	13.51	11.00	ND	2.51	10-27-99	<50	<0.5	<0.5	<0.5	<1	7	..	..	13.23	NP
A-6	01-31-00	13.51	9.31	ND	4.20	01-31-00	<50	<0.5	<0.5	<0.5	<1	9	..	..	1.0	NP

Table 1
Historical Groundwater Elevation and Analytical Data
Petroleum Hydrocarbons and Their Constituents
1995 - Present***

ARCO Service Station 2169
889 West Grand Avenue, Oakland, California

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation (ft-MSL)	Date Sampled	TPH Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MIBE 8021B* (µg/L)	MIBE 8260 (µg/L)	TPH Diesel (µg/L)	Dissolved Oxygen (mg/L)	Purged/Not Purged (P/NP)
AR-1	03-24-95	15.61	7.25	ND	8.36	03-24-95										
AR-1	06-05-95	15.61	11.37	ND	4.24	06-05-95	270	14	0.6	2.5	2.1	--	--			
AR-1	08-17-95	15.61	12.40	ND	3.21	08-17-95	190	10	<0.5	0.8	0.5	--	--	130		
AR-1	12-04-95	15.61	12.90	ND	2.71	12-04-95	960	810	12	4.5	150	14	--	580		
AR-1	03-01-96	15.61	8.19	ND	7.42	03-01-96	<50	1.5	<0.5	<0.5	0.8	--	--	<50		
AR-1	05-29-96	15.61	10.41	ND	5.20	03-13-96	150	3.8	0.5	1.4	1.3	<3	--	--		
AR-1	08-29-96	15.61	12.12	ND	3.49	08-29-96	Not sampled: well sampled semi-annually, during the first and third quarters									
AR-1	11-21-96	15.61	11.52	ND	4.09	11-21-96	<50	<0.5	<0.5	<0.5	0.8	<3	--	--		
AR-1	03-26-97	15.61	11.33	ND	4.28	03-26-97	Not sampled: well sampled semi-annually, during the first and third quarters									
AR-1	05-21-97	15.61	12.02	ND	3.59	05-21-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--		
AR-1	08-08-97	15.61	12.31	ND	3.30	08-08-97	Not sampled: well sampled semi-annually, during the first and third quarters									
AR-1	11-18-97	15.61	3.97	ND	11.64	11-18-97	<50	0.7	<0.5	1	<0.5	<3	--	--		
AR-1	02-20-98	15.61	6.42	ND	9.19	02-20-98	Not sampled: well sampled semi-annually, during the first and third quarters									
AR-1	05-11-98	15.61	10.93	ND	4.68	05-11-98	<200	<2	<2	<2	160	--	--			
AR-1	07-30-98	15.61	11.82	ND	3.79	07-30-98	<50	<0.5	<0.5	<0.5	<0.5	4	--	--		
AR-1	10-08-98	15.61	12.24	ND	3.37	10-08-98	<50	<0.5	<0.5	<0.5	<0.5	6	--	--		
AR-1	02-18-99	15.61	7.75	ND	7.86	02-18-99	<50	<0.5	<0.5	<0.5	<0.5	6	--	--		
AR-1	05-26-99	15.61	11.62	ND	3.99	05-26-99	<50	<0.5	<0.5	<0.5	<0.5	<10	--	--		
AR-1	08-23-99	15.61	9.32	ND	6.29	08-23-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--		
AR-1	10-27-99	15.61	12.14	ND	3.47	10-27-99	Not sampled: well sampled semi-annually, during the first and second quarters									
AR-1	01-31-00	15.61	Not surveyed; well inaccessible													

Table 1
Historical Groundwater Elevation and Analytical Data
Petroleum Hydrocarbons and Their Constituents
1995 - Present**

ARCO Service Station 2169
889 West Grand Avenue, Oakland, California

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation (ft-MSL)	Date Sampled	TPH							Purged/ Not Purged (Y/NP)	
							Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8260 (µg/L)		TPH Diesel (µg/L)
AR-2	03-24-95	15.28	9.13	ND	6.15	03-24-95	<50	6.2	<0.5	<0.5	0.6	--	--	<50	
AR-2	06-05-95	15.28	12.09	ND	3.19	06-05-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	<50	
AR-2	08-17-95	15.28	12.78	ND	2.50	08-18-95	<50	<0.5	<0.5	<0.5	<0.5	4	--	<50	
AR-2	12-04-95	15.28	11.44	ND	3.84	12-13-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	<50	
AR-2	03-01-96	15.28	9.83	ND	5.45	03-13-96	190	26	2.6	3.3	13	200	--	--	
AR-2	05-29-96	15.28	10.97	ND	4.31	05-29-96	Not sampled; well sampled semi-annually, during the first and third quarters							--	
AR-2	08-29-96	15.28	12.20	ND	3.08	08-29-96	<50	<0.5	<0.5	<0.5	<0.5	95	--	--	
AR-2	11-21-96	15.28	11.57	ND	3.71	11-21-96	Not sampled; well sampled semi-annually, during the first and third quarters							--	
AR-2	03-26-97	15.28	11.60	ND	3.68	03-26-97	<50	<0.5	<0.5	<0.5	<0.5	9	--	--	
AR-2	05-21-97	15.28	12.12	ND	3.16	05-21-97	Not sampled; well sampled semi-annually, during the first and third quarters							--	
AR-2	08-08-97	15.28	12.35	ND	2.93	08-08-97	<50	<0.5	<0.5	<0.5	<0.5	3	--	--	
AR-2	11-18-97	15.28	3.48	ND	11.80	11-18-97	Not sampled; well sampled semi-annually, during the first and third quarters							--	
AR-2	02-20-98	15.28	8.00	ND	7.28	02-20-98	<50	<0.5	<0.5	<0.5	<0.5	43	--	--	
AR-2	05-11-98	15.28	10.97	ND	4.51	05-11-98	<50	<0.5	<0.5	<0.5	<0.5	3	--	--	
AR-2	07-30-98	15.28	11.76	ND	3.52	07-30-98	<50	<0.5	<0.5	<0.5	<0.5	3	--	--	
AR-2	10-08-98	15.28	12.17	ND	3.11	10-08-98	<50	<0.5	<0.5	<0.5	<0.5	3	--	--	
AR-2	02-18-99	15.28	9.17	ND	6.11	02-18-99	<50	<0.5	<0.5	<0.5	<0.5	3	--	--	
AR-2	05-26-99	15.28	11.72	ND	3.56	05-26-99	<50	<0.5	<0.5	<0.5	<1.0	<10	--	--	
AR-2	08-23-99	15.28	12.31	ND	2.97	08-23-99	<50	<0.5	<0.5	<0.5	<0.5	3	--	--	
AR-2	10-27-99	15.28	12.42	ND	2.86	10-27-99	Not sampled; well sampled semi-annually, during the first and second quarters							0.61	
AR-2	01-31-00	15.28	10.31	ND	4.97	01-31-00	Not sampled								

Table 1
 Historical Groundwater Elevation and Analytical Data
 Petroleum Hydrocarbons and Their Constituents
 1995 - Present**

ARCO Service Station 2169
 889 West Grand Avenue, Oakland, California

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation (ft-MSL)	Date Sampled	TPH Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8260 (µg/L)	TPH Diesel (µg/L)	Dissolved Oxygen (mg/L)	Purged/Not Purged (P/NP)	
ADR-1	03-24-95	13.95	8.04	0.01	** 5.92												
ADR-1	06-05-95	13.95	11.02	ND	2.93	03-24-95	Not sampled: well contained floating product										
ADR-1	08-17-95	13.95	11.86	ND	2.09	06-03-95	23,000	310	420	300	1,900	--	--	13,000			
ADR-1	12-04-95	13.95	10.05	ND	3.90	08-18-95	4,400	150	120	95	620	120	--	4,500			
ADR-1	03-01-96	13.95	8.76	ND	5.19	12-13-95	8,800	100	130	120	990	--	--	--			
ADR-1	05-29-96	13.95	9.74	ND	4.21	03-13-96	89,000	370	1,000	840	3,100	<500	--	--			
ADR-1	08-29-96	13.95	10.77	ND	3.18	05-30-96	27,000	230	380	370	2,700	<100	--	--			
ADR-1	11-21-96	13.95	10.49	ND	3.46	08-29-96	5,300	190	58	76	470	85	--	--			
ADR-1	03-26-97	13.95	10.37	ND	3.58	11-21-96	1,900	82	21	32	270	110	--	--			
ADR-1	05-21-97	13.95	10.90	ND	3.05	03-26-97	1,300	260	6	39	27	95	--	--			
ADR-1	08-08-97	13.95	11.12	ND	2.83	05-21-97	2,100	300	18	37	200	79	--	--			
ADR-1	11-18-97	13.95	3.47	ND	10.48	08-08-97	3,900	620	49	110	470	<200	--	--			
ADR-1	02-20-98	13.95	Not surveyed: well inaccessible				11-18-97	18,000	900	140	360	2,700	<60	--	--		
ADR-1	05-11-98	13.95	Not surveyed: well inaccessible														
ADR-1	07-30-98	13.95	Not surveyed: well inaccessible														
ADR-1	10-08-98	13.95	Not surveyed: well inaccessible														
ADR-1	02-18-99	13.95	7.80	ND	6.15												
ADR-1	05-26-99	13.95	10.40	ND	3.55	02-18-99	200	4.4	<0.5	1.3	1.3	43	--	--			
ADR-1	08-23-99	13.95	10.70	ND	3.25	05-26-99	160	10	<0.5	1.7	1.8	43	--	--			
ADR-1	10-27-99	13.95	10.82	ND	3.13	08-23-99	7,400	310	16	210	970	18	--	--	0.37	NP	
ADR-1	01-31-00	13.95	9.21	ND	4.74	10-27-99	5,000	210	6.3	180	490	5	--	--	0.73	NP	
						01-31-00	290	3.6	<0.5	1.1	<1	26	--	--	1.0	NP	

Table 1
 Historical Groundwater Elevation and Analytical Data
 Petroleum Hydrocarbons and Their Constituents
 1995 - Present^{***}

ARCO Service Station 2189
 889 West Grand Avenue, Oakland, California

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation (ft-MSL)	Date Sampled	TPH Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MIBE 8260 (µg/L)	TPH Diesel (µg/L)	Dissolved Oxygen (mg/L)	Purged/Not Purged (P/NP)
ADR-2	03-24-95	14.64	8.41	>3.00	NR[1]	03-24-95	Not sampled: well contained floating product									
ADR-2	06-05-95	14.64	11.45	>3.00	NR[1]	06-05-95	Not sampled: well contained floating product									
ADR-2	08-17-95	14.64	12.10	0.03	** 2.56	08-17-95	Not sampled: well contained floating product									
ADR-2	12-04-95	14.64	10.93	0.03	** 3.73	12-13-95	Not sampled: well contained floating product									
ADR-2	03-01-96	14.64	8.74	ND	5.90	03-13-96	29,000	1,100	1,200	710	3,800	<500	--	--		
ADR-2	05-29-96	14.64	10.43	ND	4.21	05-29-96	33,000	510	500	470	2,300	120	--	--		
ADR-2	08-29-96	14.64	11.64	ND	3.00	08-29-96	8,000	230	180	150	750	53	--	--		
ADR-2	11-21-96	14.64	11.23	ND	3.41	11-21-96	15,000	630	440	390	2,100	75	--	--		
ADR-2	03-26-97	14.64	11.13	ND	3.51	03-26-97	6,100	320	23	180	460	32	--	--		
ADR-2	05-21-97	14.64	11.64	ND	3.00	05-21-97	6,100	380	22	210	320	<30	--	--		
ADR-2	08-08-97	14.64	11.85	ND	2.79	08-08-97	8,400	380	35	230	910	<30	--	--		
ADR-2	11-18-97	14.64	3.33	ND	6.97	11-18-97	11,000	210	29	300	1,200	<60	--	--		
ADR-2	02-20-98	14.64	7.67	ND	4.17	02-20-98	4,700	320	30	130	360	20	--	--		
ADR-2	07-30-98	14.64	Not surveyed; well inaccessible			05-11-98	Not sampled									
ADR-2	10-08-98	14.64	11.67	ND	2.97	10-08-98	Not sampled									
ADR-2	02-18-99	14.64	Not surveyed; well inaccessible													
ADR-2	05-26-99	14.64	11.02	ND	3.62	05-26-99	5,900	670								
ADR-2	08-23-99	14.64	9.82	ND	4.82	08-23-99	9,100	570	5	340	104	16	--	--		
ADR-2	10-27-99	14.64	9.85	Sheen	4.79	10-27-99	Not sampled: sheen present		12	410	1,000	28	--	--	0.50	NP
ADR-2	01-31-00	14.64	10.15	ND	4.49	01-31-00	7,700	280	3.4	370	390	23	--	--	0.65	NP
															2.0	NP

**Table 1
Historical Groundwater Elevation and Analytical Data
Petroleum Hydrocarbons and Their Constituents
1995 - Present****

**ARCO Service Station 2169
889 West Grand Avenue, Oakland, California**

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation (ft-MSL)	Date Sampled	TPH Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl. benzene (µg/L)	Total Xylenes (µg/L)	MIBE 8021B* (µg/L)	MTBE 8260 (µg/L)	TPH Diesel (µg/L)	Dissolved Oxygen (mg/L)	Purged/ Not Purged (P/NP)
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TOC: top of casing

ft-MSL: elevation in feet, relative to mean sea level

TPH: total petroleum hydrocarbons, California DFB LUFT Method

BTEX: benzene, toluene, ethylbenzene, total xylenes by EPA method 8021B. (EPA method 8020 prior to 10/21/99)

MTBE: Methyl tert-butyl ether

µg/L: micrograms per liter

mg/L: milligrams per liter

ND: none detected

NR: not reported; data not available or not measurable

--: not analyzed or not applicable

C: denotes concentration not present at or above laboratory detection limit stated to the right

(1): well contained more than 3 feet of floating product; exact product thickness and groundwater elevation could not be measured

*: EPA method 8020 prior to 10/27/99

** [corrected elevation (Z')] = Z + (h * 0.73) where: Z = measured elevation, h = floating product thickness, 0.73 = density ratio of oil to water

***: For previous historical groundwater elevation data please refer to Fourth Quarter 1995 Groundwater Monitoring Program Results and Remediation System Performance Evaluation Report, ARCO Service Station 2169, 889 West Grand Avenue, Oakland, California, (EMCON, March 4, 1996).

Table 2
Groundwater Flow Direction and Gradient

ARCO Service Station 2169
889 West Grand Avenue, Oakland, California

Date Measured	Average Flow Direction	Average Hydraulic Gradient
03-24-95	Northwest	0.009
06-05-95	Northwest	0.002
08-17-95	West	0.001
12-04-95	North-Northwest	0.002
03-01-96	Northwest	0.003
05-29-96	Northwest	0.002
08-29-96	West	0.002
11-21-96	West-Northwest	0.002
03-26-97	Northwest	0.002
05-21-97	North-Northwest	0.002
08-08-97	North-Northwest	0.002
11-18-97	North-Northwest	0.003
02-20-98	North	0.013
05-11-98	North	0.03
07-30-98	North	0.002
10-08-98	North-Northwest	0.002
02-18-99	Northwest	0.008
05-26-99	North-Northwest	0.003
08-23-99	Variable	Variable
10-27-99	Variable	Variable
01-31-00	West-Northwest	0.006

ATTACHMENT D

**ERROR CHECK REPORTS AND
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ARCO # 02169	<u>Regional Board - Case #: 01-0120</u>
889 GRAND AVE W	SAN FRANCISCO BAY RWQCB (REGION 2)
OAKLAND, CA 94607	<u>Local Agency (lead agency) - Case #: 3793</u>
	ALAMEDA COUNTY LOP - (AG)

SAMPLE DETECTIONS REPORT

# FIELD POINTS SAMPLED	4
# FIELD POINTS WITH DETECTIONS	4
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	2
SAMPLE MATRIX TYPES	WATER

METHOD QA/QC REPORT

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

QA/QC FOR 8021/8260 SERIES SAMPLES

TECHNICAL HOLDING TIME VIOLATIONS	68
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

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

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ARCO # 02169 889 GRAND AVE W OAKLAND, CA 94607	Regional Board - Case #: 01-0120 SAN FRANCISCO BAY RWQCB (REGION 2) Local Agency (lead agency) - Case #: 3793 ALAMEDA COUNTY LOP - (AG)
---	--

CONF #	TITLE	QUARTER
3368133604	1Q 2006 BP/ARCO 2169 EDF	Q1 2006
SUBMITTED BY	SUBMIT DATE	STATUS
Srijesh Thapa	3/13/2006	PENDING REVIEW

SAMPLE DETECTIONS REPORT

# FIELD POINTS SAMPLED	4
# FIELD POINTS WITH DETECTIONS	4
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	2
SAMPLE MATRIX TYPES	WATER

METHOD QA/QC REPORT

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

QA/QC FOR 8021/8260 SERIES SAMPLES

TECHNICAL HOLDING TIME VIOLATIONS	68
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

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

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N T0600100112	A-2	ACT	2/9/2006		10.43 ✓	24.65 ✓	UNK
N T0600100112	A-3	ACT	2/9/2006		11.27 ✓	28.47 ✓	
N T0600100112	A-4	ACT	2/9/2006		10.15 ✓	27.73 ✓	UNK
N T0600100112	A-5	ACT	2/9/2006		9.02 ✓	24.18 ✓	
N T0600100112	A-6	ACT	2/9/2006		9.23 ✓	26.95 ✓	UNK
N T0600100112	ADR-1	ACT	2/9/2006		10.05 ✓	20.56 ✓	
N T0600100112	ADR-2	ACT	2/9/2006		9.6 ✓	25.86 ✓	UNK
N T0600100112	AR-1	ACT	2/9/2006		10.49 ✓	27.7 ✓	
N T0600100112	AR-2	ACT	2/9/2006		10.03 ✓	28.65 ✓	UNK

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