



Atlantic Richfield Company
(a BP affiliated company)

P.O. Box 6549
Moraga, California 94570
Phone: (925) 299-8891
Fax: (925) 299-8872



RECEIVED

By lopprojectop at 11:12 am, Apr 17, 2006

April 12, 2006

Re: Former BP Service Station # 11102
100 MacArthur Boulevard
Oakland, California
First Quarter 2006 Groundwater Monitoring Report
ACEH Case # 1108

"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



April 12, 2006

Mr. Don Hwang
Copy Submitted Electronically
Alameda County Environmental Health (ACEH)
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-8577

**Re: First Quarter 2006 Groundwater Monitoring Report
Former BP Service Station #11102
100 MacArthur Boulevard
Oakland, California
ACEH Case # 1108**

Dear Mr. Hwang:

On behalf of the Atlantic Richfield Company, a BP affiliated company, URS Corporation (URS) is submitting the *First Quarter 2006 Groundwater Monitoring Report* for Former BP Service Station #11102, located at 100 MacArthur Boulevard, Oakland, California.

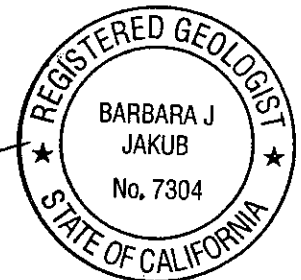
If you have any questions regarding this submission, please call (510) 874-1758.

Sincerely,

URS CORPORATION

Lynelle T. Onishi
Project Manager

Barbara J. Jakub, P.G.
Senior Geologist



Enclosure: First Quarter 2006 Groundwater Monitoring Report

cc: Mr. Chris Jimmerson, Delta Environmental Consultants, electronic copy uploaded to ENFOS
Ms. Shelby Lathrop, ConocoPhillips, electronic copy uploaded to URS ftp server
Mr. Rob Miller, Broadbent & Associates, Inc., electronic copy uploaded to ENFOS
Mr. Paul Supple, Atlantic Richfield Company (RM), electronic copy uploaded to ENFOS

REPORT

RECEIVED

By loprojectop at 11:12 am, Apr 17, 2006

FIRST QUARTER 2006 GROUNDWATER MONITORING REPORT

FORMER BP SERVICE STATION #11102
100 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

Prepared for
RM

April 12, 2006

URS

URS Corporation
1333 Broadway, Suite 800
Oakland, California 94612

Date: April 12, 2006
Quarter: 1Q 06

FIRST QUARTER 2006 GROUNDWATER MONITORING REPORT

Facility No.: 11102 Address: 100 MacArthur Boulevard, Oakland, CA
RM Environmental Business Manager: Paul Supple
Consulting Co./Contact Person: URS Corporation/ Lynelle Onishi
Primary Agency: Alameda County Environmental Health (ACEH)
Primary Agency Case #: 1108

WORK PERFORMED THIS QUARTER (First – 2006):

1. Performed the first quarter 2006 groundwater monitoring event on January 17, 2006.

WORK PROPOSED FOR NEXT QUARTER (Second – 2006):

1. Prepare and submit this First Quarter 2006 Groundwater Monitoring Report.
2. Perform the second quarter 2006 groundwater monitoring event.
3. Prepare and submit a Supplemental Soil and Water Investigation Report.
4. Broadbent and Associates, Inc. to prepare and submit the Second Quarter 2006 Groundwater Monitoring Report.

SITE SUMMARY:

Current Phase of Project:	<u>GW monitoring/sampling</u>
Frequency of Groundwater Sampling:	<u>Quarterly: Wells MW-1 through MW-3</u>
Frequency of Groundwater Monitoring:	<u>Quarterly</u>
Is Free Product Present On-Site:	<u>No</u>
Current Remediation Techniques:	<u>None</u>
Approximate Depth to Groundwater:	<u>10.70 (MW-2) to 11.59 (MW-3) feet</u>
Groundwater Gradient (direction):	<u>West</u>
Groundwater Gradient (magnitude):	<u>0.04 feet per foot</u>

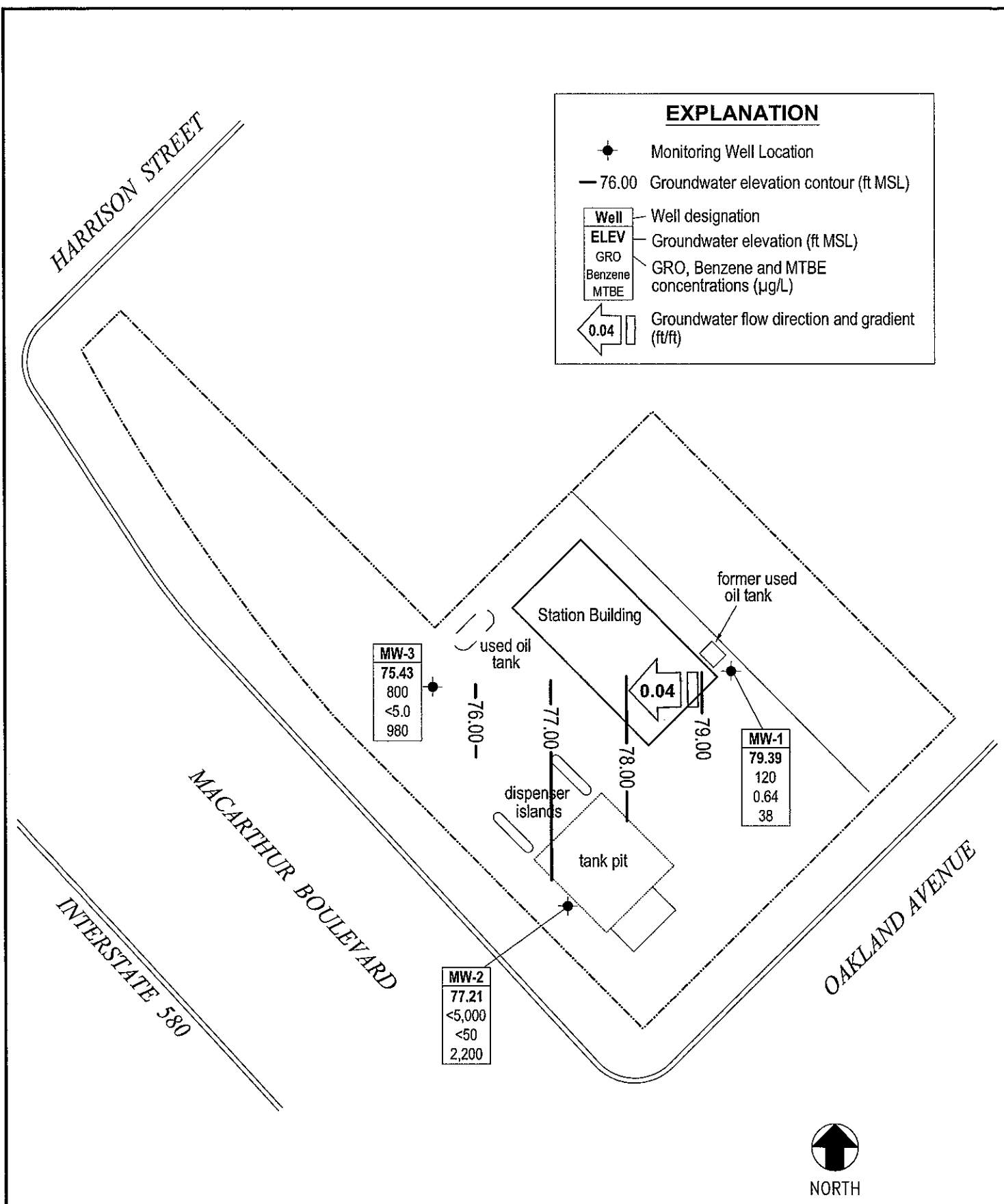
DISCUSSION:

Gasoline range organics were detected at or above the laboratory reporting limit in two of the three wells sampled this quarter at concentrations of 120 micrograms per liter ($\mu\text{g/L}$) (MW-1) and 800 $\mu\text{g/L}$ (MW-3). Benzene and xylenes were detected at or above their respective laboratory reporting limits in one well (MW-1) at concentrations of 0.64 $\mu\text{g/L}$ and 0.56 $\mu\text{g/L}$, respectively. Methyl tert-butyl ether was detected at or above the laboratory reporting limit in all three wells at concentrations ranging from 38 $\mu\text{g/L}$ (MW-1) to 2,200 $\mu\text{g/L}$ (MW-2). Tert-butyl alcohol was detected at or above the laboratory reporting limit in all three wells at concentrations ranging from 200 $\mu\text{g/L}$ (MW-3) to 8,400 $\mu\text{g/L}$ (MW-2). Tert-amyl methyl ether was detected at or above the laboratory reporting limit in two wells at concentrations of 0.54 $\mu\text{g/L}$ (MW-1) and 13 $\mu\text{g/L}$ (MW-3). No other fuel components were detected at or above their respective laboratory reporting limits in any of the wells sampled this quarter.

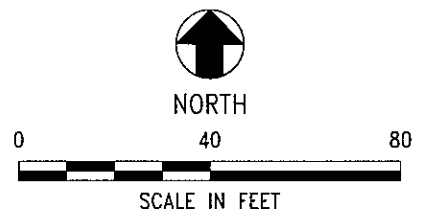
ATTACHMENTS:

- Figure 1 – Groundwater Elevation Contour and Analytical Summary Map – January 17, 2006
- Table 1 – Groundwater Elevation and Analytical Data
- Table 2 – Fuel Additives Analytical Data
- Attachment A – Field Procedures and Field Data Sheets
- Attachment B – Laboratory Procedures, Certified Analytical Reports, and Chain-of-Custody Records
- Attachment C – Error Check Reports and EDF/Geowell Submittal Confirmations

Mar 03, 2006 - 12:08pm
 X:\x_env\workspace\BP_GEM\GIS\Drawings\1102-1\006-GW.dwg



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



URS	Project No. 38487449	GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP First Quarter 2006 (January 17, 2006)	FIGURE 1
	Former BP Service Station #11102 100 MacArthur Boulevard Oakland, California		

Table 1

Groundwater Elevation and Analytical Data
Former BP Station #11102
100 MacArthur Blvd., Oakland, CA

Well No.	Date	P/ NP	Foot Note	TOC (ft MSL)	DTW (ft bgs)	Product Thickness (feet)	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)	Lab	pH	DRO/ TPH-d (µg/L)	TOG (µg/L)	HVOC (µg/L)
MW-1	11/4/1989	--	--	90.20	13.21	--	76.99	<500	3.4	0.6	<0.3	<0.3	--	--	SAL	--	<50	<5000	---
	11/11/1989	--	--	90.20	13.32	--	76.88	--	--	--	--	--	--	--	---	--	--	---	---
	4/3/1990	--	--	90.20	12.46	--	77.74	820	64	1.9	23	34	--	--	ANA	--	--	---	---
	7/30/1990	--	--	90.20	12.92	--	77.28	190	11	<5.0	<5.0	<5.0	--	--	ANA	--	<50	<5000	---
	11/20/1990	--	--	90.20	14.08	--	76.12	50	2.4	<0.3	<0.3	<0.3	--	--	SAL	--	79	<5000	---
	3/1/1991	--	--	90.20	13.61	--	76.59	<100	0.9	<0.3	<0.3	0.3	--	--	SAL	--	<1000	14,000	---
	8/19/1991	--	--	90.20	15.74	--	74.46	370	35	0.73	6.4	5.6	--	--	SEQ	--	<50	<5000	---
	11/13/1991	--	--	90.20	14.08	--	76.12	60	0.68	<0.3	<0.3	<0.3	--	--	SEQ	--	<50	<5000	---
	2/24/1992	--	--	90.20	12.52	--	77.68	140	3.9	0.66	1.2	3.8	--	--	SEQ	--	100	<5000	---
	5/19/1992	--	--	90.20	11.80	--	78.40	4,200	440	21	250	37	--	--	SEQ	--	910	<5000	---
	6/17/1992	--	--	90.20	12.01	--	78.19	4,000	350	14	150	17	--	--	SEQ	--	560	<5000	---
	7/22/1992	--	--	90.20	12.42	--	77.78	4,000	<5.0	19	210	61	--	--	ANA	--	--	---	---
	8/14/1992	--	--	90.20	12.75	--	77.45	2,400	330	20	150	47	--	--	SEQ	--	1,700	<5000	---
	11/11/1992	--	--	90.20	13.69	--	76.51	260	30	3.4	7.6	6.8	--	--	ANA	--	92	<5000	---
	6/7/1993	--	c	90.20	--	--	--	3,700	120	12	26	9.5	--	--	PACE	--	--	---	---
	6/7/1993	--	--	90.20	10.93	--	79.27	3,400	98	11	21	7.6	--	--	PACE	--	440	---	---
	12/2/1993	--	--	90.20	12.72	--	77.48	1,100	8.3	3.6	0.6	1.5	--	--	PACE	--	120	<5000	---
	6/22/1994	--	c, d	90.20	--	--	--	2,100	30	3.2	2	15	2,000	--	PACE	--	--	---	---
	6/22/1994	--	d	90.20	11.81	--	78.39	2,100	32	3.8	2.2	17	4,000	3.2	PACE	--	<50	<5000	---
	1/10/1995	--	c	90.20	--	--	--	<500	120	<5	5	<10	--	--	ATI	--	--	---	---
	1/10/1995	--	--	90.20	10.97	--	79.23	<500	120	<5	<5	<10	--	3.9	ATI	--	420	---	---
	6/21/1995	--	c,e	90.20	--	--	--	3,600	<13	<5.0	<5.0	<10	--	--	ATI	--	--	---	---
	6/21/1995	--	--	90.20	9.38	--	80.82	4,700	16	<5.0	<5.0	<10	--	6.7	ATI	--	1,300	2,900	0.6
	12/27/1995	--	--	90.20	11.55	--	78.65	430	<2.5	<2.5	<2.5	<5.0	1,200	6.3	ATI	--	2,100	640	---
	6/13/1996	--	--	90.20	9.28	--	80.92	3,200	51	<12	<12	<12	4,000	6.3	SPL	--	920	2,000	---
	12/4/1996	--	f	90.20	11.91	--	78.29	1,400	6.2	<5	<5	<5	2,600	6.7	SPL	--	280	2,000	6
	6/10/1997	--	c	90.20	--	--	--	7,700	14	<25	<25	<25	13,000	--	SPL	--	--	---	---
	6/10/1997	--	--	90.20	8.97	--	81.23	7,900	12	<10	<10	<10	15,000	6	SPL	--	1,700	<5	ND
	12/12/1997	--	--	90.20	11.37	--	78.83	440	8.8	<1.0	2.6	9.4	6,700	5.5	SPL	--	760	1,200	ND
	6/18/1998	--	--	90.20	8.02	--	82.18	7,500	<2.5	<5.0	<5.0	<5.0	5,600	4.9	SPL	--	2,900	<5	ND
	3/9/1999	--	--	90.20	9.80	--	80.40	32,000	100	16	72	110	49,000	--	SPL	--	--	---	---
	9/28/1999	--	--	90.20	10.78	--	79.42	1,000	<5.0	<5.0	<5.0	<5.0	730	--	SPL	--	--	---	<1.0

Table 1

Groundwater Elevation and Analytical Data

Former BP Station #11102
100 MacArthur Blvd., Oakland, CA

Well No.	Date	P/ NP	Foot Note	TOC (ft MSL)	DTW (ft bgs)	Product Thickness (feet)	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)	Lab	pH	DRO/ TPH-d (µg/L)	TOG (µg/L)	HVOC (µg/L)
MW-1	10/14/1999	--	--	90.20	10.84	--	79.36	--	--	--	--	--	--	--	SPL	--	660	--	--
	3/27/2000	--	--	90.20	9.83	--	80.37	4,300	160	19	37	43	28,000	--	PACE	--	--	--	--
	9/28/2000	--	--	90.20	11.33	--	78.87	2,700	10	2.6	1.1	2.7	28,000	--	PACE	--	--	--	--
	3/8/2001	--	--	90.20	10.96	--	79.24	8,200	23.5	6.09	5.23	8.97	11,600	--	PACE	--	--	--	--
	9/21/2001	--	--	90.20	12.07	--	78.13	6,000	37.9	<0.5	<0.5	<1.5	7,370	--	PACE	--	--	--	--
	2/28/2002	--	--	90.20	10.48	--	79.72	6,400	60.8	<5.0	6.43	<10	7,750	--	PACE	--	--	--	--
	9/6/2002	--	--	90.20	11.20	--	79.00	1,400	<5.0	<5.0	<5.0	<5.0	6,000	--	SEQ	--	--	--	--
	2/19/2003	--	h	90.20	11.29	--	78.91	<10000	<100	110	<100	<100	4,500	--	SEQ	--	--	--	--
	7/14/2003	--	--	90.20	11.18	--	79.02	710	11	<10	<10	<10	940	--	SEQ	--	--	--	--
	01/14/2004	--	--	90.20	11.74	--	78.46	<500	<5.0	<5.0	<5.0	<5.0	220	--	SEQM	6.6	--	--	--
	04/23/2004	P	l	90.20	11.95	--	78.25	470	3.4	<2.5	<2.5	<2.5	150	--	SEQM	6.7	--	--	--
	07/01/2004	P	--	90.20	11.52	--	78.68	360	<2.5	<2.5	<2.5	<2.5	96	--	SEQM	6.0	--	--	--
	10/28/2004	P	--	90.20	12.56	--	77.64	390	0.94	<0.50	<0.50	<0.50	43	--	SEQM	6.2	--	--	--
	01/10/2005	P	--	90.20	11.85	--	78.35	490	17	<2.5	5.8	5.4	85	--	SEQM	7.6	--	--	--
	04/13/2005	P	--	90.20	10.00	--	80.20	1,000	27	<2.5	<2.5	25	48	--	SEQM	6.6	--	--	--
	07/11/2005	P	--	90.20	9.27	--	80.93	180	<0.50	<0.50	<0.50	<0.50	36	--	SEQM	7.7	--	--	--
	10/17/2005	P	--	90.20	10.96	--	79.24	140	<0.50	<0.50	<0.50	<0.50	20	--	SEQM	8.0	--	--	--
	01/17/2006	P	--	90.20	10.81	--	79.39	120	0.64	<0.50	<0.50	0.56	38	--	SEQM	6.5	--	--	--
MW-2	11/4/1989	--	--	87.91	15.84	--	72.07	<500	6.5	<0.3	<0.3	<0.3	--	--	SAL	--	--	--	--
	11/11/1989	--	--	87.91	14.75	--	73.16	--	--	--	--	--	--	--	--	--	--	--	--
	4/3/1990	--	--	87.91	15.25	--	72.66	<500	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
	7/30/1990	--	--	87.91	15.59	--	72.32	61	6.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
	11/20/1990	--	--	87.91	17.81	--	70.10	<50	0.3	<0.3	<0.3	<0.3	--	--	SAL	--	--	--	--
	3/1/1991	--	--	87.91	17.11	--	70.80	<100	0.4	<0.3	<0.3	<0.3	--	--	SAL	--	--	--	--
	8/19/1991	--	--	87.91	17.97	--	69.94	<30	<0.3	<0.3	<0.3	<0.3	--	--	SEQ	--	--	--	--
	11/13/1991	--	--	87.91	16.76	--	71.15	38	0.32	<0.3	<0.3	<0.3	--	--	SEQ	--	--	--	--
	2/24/1992	--	--	87.91	15.07	--	72.84	<50	<0.5	<0.5	<0.5	0.58	--	--	SEQ	--	--	--	--
	5/19/1992	--	--	87.91	14.70	--	73.21	<50	0.55	<0.5	<0.5	<0.5	--	--	SEQ	--	--	--	--
	7/22/1992	--	--	87.91	15.60	--	72.31	90	1.3	0.6	0.9	1.9	--	--	ANA	--	--	--	--
	8/14/1992	--	--	87.91	15.88	--	72.03	--	--	--	--	--	--	--	--	--	--	--	--
	11/11/1992	--	c	87.91	--	--	--	65	3.2	<0.5	<0.5	1	--	--	ANA	--	--	--	--
	11/11/1992	--	--	87.91	16.19	--	71.72	52	2.8	<0.5	<0.5	0.9	--	--	ANA	--	--	--	--

Table 1
Groundwater Elevation and Analytical Data
 Former BP Station #11102
 100 MacArthur Blvd., Oakland, CA

Well No.	Date	P/ NP	Foot Note	TOC (ft MSL)	DTW (ft bgs)	Product Thickness (feet)	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)	Lab	pH	DRO/ TPH-d (µg/L)	TOG (µg/L)	HVOC (µg/L)
MW-2	6/7/1993	--	--	87.91	14.42	--	73.49	1,200	14	2.8	1.9	1.71	--	--	PACE	--	--	---	---
	12/2/1993	--	c, d	87.91	--	--	--	2,100	32	3.8	2.2	17	3,700	--	PACE	--	--	---	---
	12/2/1993	--	d	87.91	14.94	--	72.97	790	3.4	0.5	10	<0.5	3,700	--	PACE	--	--	---	---
	6/22/1994	--	d	87.91	14.25	--	73.66	110	<0.5	<0.5	<0.5	<0.5	120	3.9	PACE	--	--	---	---
	1/10/1995	--	--	87.91	13.64	--	74.27	<50	<0.5	<0.5	0.6	1	--	4.3	ATI	--	--	---	---
	6/21/1995	--	--	87.91	11.66	--	76.25	4,700	<10	<10	<10	<20	--	7.8	ATI	--	--	---	---
	12/27/1995	--	c	87.91	--	--	--	6,300	<25	<25	<25	<50	19,000	--	ATI	--	--	---	---
	12/27/1995	--	--	87.91	13.11	--	74.80	6,100	<25	<25	<25	<50	20,000	6.7	ATI	--	--	---	---
	6/13/1996	--	c	87.91	--	--	--	8,700	<5	<5	<5	<5	13,000	--	SPL	--	--	---	---
	6/13/1996	--	--	87.91	10.86	--	77.05	8,300	<2.5	<2.5	<2.5	<2.5	13,000	6.5	SPL	--	--	---	---
	12/4/1996	--	c	87.91	--	--	--	5,900	<2.5	<5	<5	<5	11,000	--	SPL	--	--	---	---
	12/4/1996	--	--	87.91	13.03	--	74.88	5,900	<2.5	<5	<5	<5	11,000	6.3	SPL	--	--	---	---
	6/10/1997	--	--	87.91	10.04	--	77.87	<50	<0.5	<1.0	<1.0	<1.0	<10	5.8	SPL	--	--	---	---
	12/12/1997	--	--	87.91	12.44	--	75.47	<50	<0.5	<1.0	<1.0	<1.0	<10	5.7	SPL	--	--	---	---
	6/18/1998	--	c	87.91	--	--	--	<50	<0.5	<1.0	<1.0	<1.0	<10	--	SPL	--	--	---	---
	6/18/1998	--	--	87.91	8.89	--	79.02	50	<0.5	<1.0	<1.0	<1.0	<10	5.3	SPL	--	--	---	---
	3/9/1999	--	--	87.91	10.20	--	77.71	15,000	<5.0	<5.0	<5.0	<5.0	23,000	--	SPL	--	--	---	---
	9/28/1999	--	--	87.91	11.81	--	76.10	36,000	<5.0	12	7	26	35,000	--	SPL	--	--	---	<5.0
	10/14/1999	--	--	87.91	10.27	--	77.64	--	--	--	--	--	--	--	SPL	--	100	---	---
	3/27/2000	--	--	87.91	9.98	--	77.93	1,300	<0.5	<0.5	0.51	<0.5	5,800	--	PACE	--	--	---	---
	9/28/2000	--	--	87.91	11.40	--	76.51	1,600	1.8	1.7	0.54	2.2	15,000	--	PACE	--	--	---	---
	3/8/2001	--	--	87.91	11.16	--	76.75	20,000	<0.5	<0.5	<0.5	<0.5	29,100	--	PACE	--	--	---	---
	9/21/2001	--	--	87.91	11.65	--	76.26	5,000	<0.5	<0.5	<0.5	<1.5	6,110	--	PACE	--	--	---	---
	2/28/2002	--	--	87.91	9.86	--	78.05	3,200	35.1	<0.5	<0.5	<1.0	4,620	--	PACE	--	--	---	---
	9/6/2002	--	--	87.91	12.32	--	75.59	1,900	<10	<10	<10	<10	15,000	--	SEQ	--	--	---	---
	2/19/2003	--	h	87.91	11.63	--	76.28	45,000	<250	<250	<250	<250	32,000	--	SEQ	--	--	---	---
	7/14/2003	--	--	87.91	12.07	--	75.84	9,300	<500	<500	<500	<500	24,000	--	SEQ	--	--	---	---
	01/14/2004	P	--	87.91	11.45	--	76.46	<50,000	<500	<500	<500	<500	21,000	--	SEQM	6.9	--	--	--
	04/23/2004	P	l	87.91	11.45	--	76.46	5,100	<250	<250	<250	<250	22,000	--	SEQM	6.8	--	--	--
	07/01/2004	P	--	87.91	12.32	--	75.59	<5,000	<50	<50	<50	<50	5,200	--	SEQM	5.6	--	--	--
	10/28/2004	P	--	87.91	13.02	--	74.89	8,500	<50	<50	<50	<50	6,800	--	SEQM	6.2	--	--	--
	01/10/2005	P	--	87.91	14.38	--	73.53	<25,000	<250	<250	<250	<250	7,100	--	SEQM	7.6	--	--	--

Table 1

Groundwater Elevation and Analytical Data

Former BP Station #11102
100 MacArthur Blvd., Oakland, CA

Well No.	Date	P/ NP	Foot Note	TOC (ft MSL)	DTW (ft bgs)	Product Thickness (feet)	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)	Lab	pH	DRO/ TPH-d (µg/L)	TOG (µg/L)	HVOC (µg/L)
MW-2	04/13/2005	P	--	87.91	14.03	--	73.88	<5,000	<50	<50	<50	<50	5,300	--	SEQM	6.6	--	--	--
	07/11/2005	P	--	87.91	11.25	--	76.66	<5,000	<50	<50	<50	<50	5,300	--	SEQM	7.5	--	--	--
	10/17/2005	P	--	87.91	12.48	--	75.43	<5,000	<50	<50	<50	<50	2,500	--	SEQM	8.2	--	--	--
	01/17/2006	P	--	87.91	10.70	--	77.21	<5,000	<50	<50	<50	<50	2,200	--	SEQM	7.0	--	--	--
MW-3	11/4/1989	--	--	87.02	15.40	--	71.62	<500	<0.3	<0.3	<0.3	<0.3	--	--	SAL	--	--	---	---
	11/11/1989	--	--	87.02	14.10	--	72.92	--	--	--	--	--	--	--	---	--	--	---	---
	4/3/1990	--	--	87.02	13.90	--	73.12	<100	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	---	---
	7/30/1990	--	--	87.02	13.77	--	73.25	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	<5000	---
	11/20/1990	--	--	87.02	14.67	--	72.35	<50	0.3	0.8	0.4	1.5	--	--	SAL	--	--	---	---
	3/1/1991	--	--	87.02	15.22	--	71.80	<100	0.4	<0.3	<0.3	<0.3	--	--	SAL	--	--	---	---
	8/19/1991	--	--	87.02	13.15	--	73.87	<30	<0.3	<0.3	<0.3	<0.3	--	--	SEQ	--	--	---	---
	11/13/1991	--	--	87.02	15.66	--	71.36	<30	<0.3	<0.3	<0.3	<0.3	--	--	SEQ	--	--	---	---
	2/24/1992	--	--	87.02	15.01	--	72.01	<50	0.65	1.4	0.66	4.4	--	--	SEQ	--	--	---	---
	5/19/1992	--	--	87.02	15.52	--	71.50	<50	<0.5	<0.5	<0.5	<0.5	--	--	SEQ	--	--	---	---
	7/22/1992	--	--	87.02	15.63	--	71.39	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	<50	<5000	---
	8/14/1992	--	--	87.02	13.57	--	73.45	--	--	--	--	--	--	--	---	--	--	---	---
	11/11/1992	--	--	87.02	14.13	--	72.89	<50	<0.5	0.7	<0.5	1.3	--	--	ANA	--	--	---	---
	6/7/1993	--	--	87.02	12.13	--	74.89	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	---	---
	12/2/1993	--	--	87.02	13.29	--	73.73	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	---	---
	6/22/1994	--	--	87.02	12.78	--	74.24	<50	<0.5	<0.5	<0.5	<0.5	--	2.9	PACE	--	--	---	---
	1/10/1995	--	--	87.02	12.01	--	75.01	<50	<0.5	<0.5	<0.5	<1	--	3.8	ATI	--	--	---	---
	6/21/1995	--	--	87.02	11.57	--	75.45	<50	<0.50	<0.50	<0.50	<1.0	--	7.4	ATI	--	--	---	---
	12/27/1995	--	--	87.02	13.47	--	73.55	<50	<0.50	<0.50	<0.50	<1.0	5.7	7.3	ATI	--	--	---	---
	6/13/1996	--	--	87.02	11.22	--	75.80	60	<0.5	<0.5	<0.5	<0.5	<10	6.8	SPL	--	--	---	---
12/4/1996	--	--	87.02	13.28	--	73.74	<50	<0.5	<1	<1	<1	<10	6.7	SPL	--	--	---	---	
6/10/1997	--	--	87.02	10.22	--	76.80	<50	<0.5	<1.0	<1.0	<1.0	<10	6.1	SPL	--	--	---	---	
12/12/1997	--	c		87.02	--	--	--	<50	<0.5	<1.0	<1.0	<1.0	<10	--	SPL	--	--	---	---
12/12/1997	--	--		87.02	12.61	--	74.41	<50	<0.5	<1.0	<1.0	<1.0	<10	5.6	SPL	--	--	---	---
6/18/1998	--	--		87.02	12.80	--	74.22	--	--	--	--	--	--	--	---	--	--	---	---
6/18/1998	--	--		87.02	9.07	--	77.95	50	<0.5	<1.0	<1.0	<1.0	<10	5.3	SPL	--	--	---	---
9/28/1999	--	--		87.02	13.76	--	73.26	--	--	--	--	--	--	--	---	--	--	---	---
3/27/2000	--	--		87.02	13.77	--	73.25	<50	<0.5	<0.5	<0.5	<0.5	1.6	--	PACE	--	--	---	---

Table 1

Groundwater Elevation and Analytical Data
Former BP Station #11102
100 MacArthur Blvd., Oakland, CA

Well No.	Date	P/ NP	Foot Note	TOC (ft MSL)	DTW (ft bgs)	Product Thickness (feet)	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)	Lab	pH	DRO/ TPH-d (µg/L)	TOG (µg/L)	HVOC (µg/L)
MW-3	9/28/2000	--	--	87.02	11.28	--	75.74	<50	<0.5	7.4	<0.5	1.3	2	--	PACE	--	--	---	---
	3/8/2001	--	--	87.02	11.75	--	75.27	<50	<0.5	<0.5	<0.5	<0.5	60.4	--	PACE	--	--	---	---
	9/21/2001	--	--	87.02	11.33	--	75.69	<50	<0.5	<0.5	<0.5	<1.5	8.18	--	PACE	--	--	---	---
	2/28/2002	--	--	87.02	10.86	--	76.16	<50	<0.5	<0.5	<0.5	<1.0	25.5	--	PACE	--	--	---	---
	9/6/2002	--	--	87.02	12.73	--	74.29	<50	1.2	<0.5	<0.5	1	16	--	SEQ	--	--	---	---
	2/19/2003	--	h	87.02	11.72	--	75.30	<500	<5.0	<5.0	<5.0	<5.0	110	--	SEQ	--	--	---	---
	7/14/2003	--	--	87.02	13.76	--	73.26	<50	<0.50	<0.50	<0.50	0.67	28	--	SEQ	--	--	---	---
	01/14/2004	P	--	87.02	14.83	--	72.19	550	<5.0	<5.0	<5.0	<5.0	380	--	SEQM	8.1	--	--	--
	04/23/2004	P	l	87.02	13.17	--	73.85	<200	<25	<25	<25	<25	560	--	SEQM	6.8	--	--	--
	07/01/2004	P	--	87.02	15.19	--	71.83	<50	<0.50	<0.50	<0.50	0.50	48	--	SEQM	6.4	--	--	--
	10/28/2004	P	--	87.02	15.50	--	71.52	<500	<5.0	<5.0	<5.0	<5.0	290	--	SEQM	6.3	--	--	--
	01/10/2005	P	--	87.02	15.00	--	72.02	<50	<0.50	<0.50	<0.50	<0.50	18	--	SEQM	7.6	--	--	--
	04/13/2005	P	--	87.02	14.34	--	72.68	<50	<0.50	<0.50	<0.50	<0.50	9.0	--	SEQM	7.1	--	--	--
	07/11/2005	P	k	87.02	10.82	--	76.20	130	<1.0	<1.0	<1.0	<1.0	120	--	SEQM	7.8	--	--	--
	10/17/2005	P	--	87.02	11.84	--	75.18	<250	<2.5	<2.5	<2.5	<2.5	260	--	SEQM	8.5	--	--	--
	01/17/2006	P	--	87.02	11.59	--	75.43	800	<5.0	<5.0	<5.0	<5.0	980	--	SEQM	7.2	--	--	--
QC-2	11/11/1992	--	g	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	---	---
	6/7/1993	--	g	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	---	---
	12/2/1993	--	g	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	---	---
	6/22/1994	--	g	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	---	---
	1/10/1995	--	g	--	--	--	--	<50	<0.5	<0.5	<0.5	<1	--	--	ATI	--	--	---	---
	6/21/1995	--	g	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--	ATI	--	--	---	---
	12/27/1995	--	g	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	ATI	--	--	---	---
	6/13/1996	--	g	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<10	--	SPL	--	--	---	---

Table 1
Groundwater Elevation and Analytical Data
Former BP Station #11102
100 MacArthur Blvd., Oakland, CA

ABBREVIATIONS & SYMBOLS:

--- = Not analyzed/applicable/measured/available
< = Not detected at or above laboratory reporting limit
BTEX = Benzene, toluene, ethylbenzene and xylenes
DO = Dissolved oxygen
DRO = Diesel range organics
DTW = Depth to water in ft bgs
ft bgs = feet below ground surface
ft MSL = feet above mean sea level
GRO = Gasoline range organics, range C4-C12
GWE = Groundwater elevation measured in ft MSL
HVOC = Halogenated volatile organic compounds
mg/L = Milligrams per liter
MTBE = Methyl tert butyl ether
NP = Well not purged prior to sampling
P = Well purged prior to sampling
TOC = Top of casing measured in ft MSL
TOG = Total oil and grease
TPH-d = Total petroleum hydrocarbons as diesel
TPH-g = Total petroleum hydrocarbons as gasoline
µg/L = Micrograms per liter
ANA = Anamatrix, Inc.
PACE = Pace, Inc.
ATI = Analytical Technologies, Inc.
SAL = Superior Analytical Laboratory
SPL = Southern Petroleum Laboratories
SEQ/SEQM = Sequoia Analytical/Sequoia Morgan Hill Laboratories

FOOTNOTES:

c = Blind duplicate.
d = A copy of the documentation for this data is included in Appendix C of Alisto report 10-076-06-002.
e = Tetrachloroethene
f = Trans-1,2-Dichloroethene
g = Travel blank.
h = TPH-g, BTEX and MTBE analyzed by EPA Method 8260B beginning on 1st Quarter Sampling event (2/19/03)
k = The hydrocarbon result was partly due to individual peaks in the quantification range (GRO).
l = GRO analyzed by EPA Method 8015B.

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
pH and DO are 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
Former BP Station #11102
100 MacArthur Blvd., 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
MW-1	7/14/2003	<2000	2,700	940	<20	<20	<20	--	--	
	01/14/2004	<1,000	2,500	220	<5.0	<5.0	<5.0	<5.0	<5.0	
	04/23/2004	<500	2,500	150	<2.5	<2.5	<2.5	<2.5	<2.5	
	07/01/2004	<500	2,000	96	<2.5	<2.5	<2.5	<2.5	<2.5	
	10/28/2004	<5.0	1,500	43	<0.50	<0.50	0.58	<0.50	<0.50	
	01/10/2005	<500	1,900	85	<2.5	<2.5	<2.5	<2.5	<2.5	
	04/13/2005	<500	1,400	48	<2.5	<2.5	<2.5	<2.5	<2.5	
	07/11/2005	<100	550	36	<0.50	<0.50	<0.50	<0.50	<0.50	
	10/17/2005	<100	450	20	<0.50	<0.50	<0.50	<0.50	<0.50	a
	01/17/2006	<300	260	38	<0.50	<0.50	0.54	<0.50	<0.50	
MW-2	7/14/2003	<100000	<20000	24,000	<1000	<1000	<1000	--	--	
	01/14/2004	<100,000	<20,000	21,000	<500	<500	<500	<500	<500	
	04/23/2004	<50,000	11,000	22,000	<250	<250	420	<250	<250	
	07/01/2004	<10,000	2,900	5,200	<50	<50	110	<50	<50	
	10/28/2004	<5.0	6,700	6,800	<50	<50	120	<50	<50	
	01/10/2005	<50,000	<10,000	7,100	<250	<250	<250	<250	<250	
	04/13/2005	<10,000	5,300	5,300	<50	<50	95	<50	<50	
	07/11/2005	<10,000	9,000	5,300	<50	<50	99	<50	<50	
	10/17/2005	<10,000	5,200	2,500	<50	<50	<50	<50	<50	a
	01/17/2006	<30,000	8,400	2,200	<50	<50	<50	<50	<50	
MW-3	7/14/2003	<100	<20	28	<1.0	<1.0	<1.0	--	--	
	01/14/2004	<1,000	<200	380	<5.0	<5.0	<5.0	<5.0	<5.0	
	04/23/2004	<5,000	<1,000	560	<25	<25	<25	<25	<25	
	07/01/2004	<100	<20	48	<0.50	<0.50	0.52	<0.50	<0.50	
	10/28/2004	<5.0	<200	290	<5.0	<5.0	<5.0	<5.0	<5.0	
	01/10/2005	<100	<20	18	<0.50	<0.50	<0.50	<0.50	<0.50	
	04/13/2005	<100	<20	9.0	<0.50	<0.50	<0.50	<0.50	<0.50	
	07/11/2005	<200	<40	120	<1.0	<1.0	1.4	<1.0	<1.0	a
	10/17/2005	<500	<100	260	<2.5	<2.5	4.2	<2.5	<2.5	a
	01/17/2006	<3,000	200	980	<5.0	<5.0	13	<5.0	<5.0	

Table 2

Fuel Additives Analytical Data

Former BP Station #11102
100 MacArthur Blvd., Oakland, CA

SYMBOLS & ABBREVIATIONS:

-- = Not analyzed/applicable/measured/available

< = Not detected at or above the laboratory reporting limit.

1,2-DCA = 1,2-Dichloroethane

DIPE = Di-isopropyl ether

EDB = 1,2-Dibromoethane

ETBE = Ethyl tert-butyl ether

MTBE = Methyl tert-butyl ether

TAME = tert-Amyl methyl ether

TBA = tert-Butyl alcohol

µg/L = Micrograms per Liter

FOOTNOTES:

a = The calibration verification for ethanol was within the method limits but outside the contract limits.

NOTES:

All volatile organic compounds were analyzed using EPA Method 8260B.

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 TeflonTM 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.

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>060117-SL1</u>	Station # <u>1102</u>
Sampler: <u>SHAWN</u>	Date: <u>01/17/06</u>
Well I.D.: <u>MW-1</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth: <u>32.10</u>	Depth to Water: <u>10.81</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade.	D.O. Meter (if req'd): 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: 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.

<u>13.8</u>	x	<u>3</u>	=	<u>41.4</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or <u>uS</u>)	Gals. Removed	Observations
<u>0906</u>	<u>61.5</u>	<u>6.1</u>	<u>668</u>	<u>13.8</u>	<u>clear</u>
<u>0909</u>	<u>64.0</u>	<u>6.3</u>	<u>634</u>	<u>27.6</u>	"
<u>0913</u>	<u>65.0</u>	<u>6.5</u>	<u>690</u>	<u>41.4</u>	"

Did well dewater? Yes No Gallons actually evacuated: 41.4

Sampling Time: 0920 Sampling Date: 01/17/06

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

Analyzed for: GRP BTEX MTBE DRO Oxy's 1,2-DC EDB Ethanol Other: _____

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

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 060117-SL1	Station # 11102
Sampler: Shawn	Date: 01/17/06
Well I.D.: MW-2	Well Diameter: 2 3 4 6 8
Total Well Depth: 32.39	Depth to Water: 10.70
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade.	D.O. Meter (if req'd): 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: Bailer Sampling Method: Bailer
 Disposable Bailer Disposable Bailer
 Positive Air Displacement Extraction Port
 Electric Submersible Other: _____
 Extraction Pump

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.

14.1	x	3	=	42.3	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or μ S)	Gals. Removed	Observations
0955	65.0	6.6	720	14.1	clear
0958	66.5	6.5	702	28.2	cloudy
					well dewatered @ 30 gal DTW = 30.45
1015	65.0	7.0	2188		DTW = 30.13

Did well dewater? Yes No Gallons actually evacuated: **30 gal**

Sampling Time: **1015** Sampling Date: **01/17/06**

Sample I.D.: **MW-2** Laboratory: Pace **Sequoia** Other _____

Analyzed for: GRO BTEX MTBE DRO Oxy's (2-DCM) BDB Ethanol Other: _____

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

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 060117-SL1	Station # 11102
Sampler: Shawn	Date: 01/17/06
Well I.D.: MW-3	Well Diameter: 2 3 4 6 8
Total Well Depth: 32.42	Depth to Water: 11.59
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade.	D.O. Meter (if req'd): 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: 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.

13.5	x	3	=	201.5 40.5
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Conductivity (mS or μ S)	Gals. Removed	Observations
0928	66.2	6.7	682	13.5	clear, odor
0931	68.3	7.1	670	27.0	" "
0934	69.0	7.2	643	40.5	# cloudy.

Did well dewater? Yes No Gallons actually evacuated: **40.5**

Sampling Time: **0945** Sampling Date: **01/17/06**

Sample I.D.: **MW-3** Laboratory: Pace **Sequoia** Other _____

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	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 BLAINE 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:

11102

Station #

100 MacArthur Blvd Oakland

Station Address

Total Gallons Collected From Groundwater Monitoring Wells:

110

added equip. _____
rinse water _____

any other adjustments _____

TOTAL GALS. RECOVERED 110

loaded onto BTS vehicle # 22

BTS event #

time date
1015 01/17/06

signature

S L R

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.



10 February, 2006

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

RE: BP Heritage #11102, Oakland, CA
Work Order: MPA1104

Enclosed are the results of analyses for samples received by the laboratory on 01/18/06 15:15. 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:BP Heritage #11102, Oakland, CA Project Number:G07T9-0020 Project Manager:Lynelle Onishi	MPA1104 Reported: 02/10/06 11:09
---	--	--

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MPA1104-01	Water	01/17/06 09:20	01/18/06 15:15
MW-2	MPA1104-02	Water	01/17/06 10:15	01/18/06 15:15
MW-3	MPA1104-03	Water	01/17/06 09:45	01/18/06 15:15
TB-11102-01172006	MPA1104-04	Water	01/17/06 00:00	01/18/06 15:15

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:BP Heritage #11102, Oakland, CA
 Project Number:G07T9-0020
 Project Manager:Lynelle Onishi

 MPA1104
 Reported:
 02/10/06 11:09

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MPA1104-01) Water Sampled: 01/17/06 09:20 Received: 01/18/06 15:15									
tert-Amyl methyl ether	0.54	0.50	ug/l	1	6A30003	01/30/06	01/30/06	EPA 8260B	
Benzene	0.64	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	260	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	38	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	0.56	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	120	50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98 %	60-135	"	"	"	"	"	
MW-2 (MPA1104-02) Water Sampled: 01/17/06 10:15 Received: 01/18/06 15:15									
tert-Amyl methyl ether	ND	50	ug/l	100	6A30003	01/30/06	01/30/06	EPA 8260B	
Benzene	ND	50	"	"	"	"	"	"	
tert-Butyl alcohol	8400	2000	"	"	"	"	"	"	
Di-isopropyl ether	ND	50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	50	"	"	"	"	"	"	
Ethanol	ND	30000	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	50	"	"	"	"	"	"	
Ethylbenzene	ND	50	"	"	"	"	"	"	
Methyl tert-butyl ether	2200	50	"	"	"	"	"	"	
Toluene	ND	50	"	"	"	"	"	"	
Xylenes (total)	ND	50	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	5000	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94 %	60-135	"	"	"	"	"	



URS Corporation [Arco] 1333 Broadway, Suite 800 Oakland CA, 94612	Project:BP Heritage #11102, Oakland, CA Project Number:G07T9-0020 Project Manager:Lynelle Onishi	MPA1104 Reported: 02/10/06 11:09
---	--	--

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (MPA1104-03) Water Sampled: 01/17/06 09:45 Received: 01/18/06 15:15									
tert-Amyl methyl ether	13	5.0	ug/l	10	6A30003	01/30/06	01/30/06	EPA 8260B	
Benzene	ND	5.0	"	"	"	"	"	"	
tert-Butyl alcohol	200	200	"	"	"	"	"	"	
Di-isopropyl ether	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
Ethanol	ND	3000	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	980	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	5.0	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	800	500	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		91 %		60-135	"	"	"	"	

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

 Project:BP Heritage #11102, Oakland, CA
 Project Number:G07T9-0020
 Project Manager:Lynelle Onishi

 MPA1104
 Reported:
 02/10/06 11:09

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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 6A30003 - EPA 5030B P/T / EPA 8260B
Blank (6A30003-BLK1)

Prepared & Analyzed: 01/30/06

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	"							
Gasoline Range Organics (C4-C12)	ND	50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.33		"	2.50		93	60-135			

Laboratory Control Sample (6A30003-BS1)

Prepared & Analyzed: 01/30/06

tert-Amyl methyl ether	15.2	0.50	ug/l	16.3		93	80-115			
Benzene	5.76	0.50	"	5.04		114	65-115			
tert-Butyl alcohol	147	20	"	169		87	75-150			
Di-isopropyl ether	16.4	0.50	"	16.2		101	75-125			
1,2-Dibromoethane (EDB)	15.9	0.50	"	16.6		96	85-120			
1,2-Dichloroethane	16.4	0.50	"	15.5		106	85-130			
Ethanol	204	300	"	165		124	70-135			
Ethyl tert-butyl ether	15.5	0.50	"	16.4		95	75-130			
Ethylbenzene	7.30	0.50	"	7.28		100	75-135			
Methyl tert-butyl ether	7.44	0.50	"	7.84		95	65-125			
Toluene	39.4	0.50	"	38.0		104	85-120			
Xylenes (total)	42.1	0.50	"	40.8		103	85-125			
Gasoline Range Organics (C4-C12)	483	50	"	440		110	60-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.32		"	2.50		93	60-135			



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

Project:BP Heritage #11102, Oakland, CA
Project Number:G07T9-0020
Project Manager:Lynelle Onishi

MPA1104
Reported:
02/10/06 11:09

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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 6A30003 - EPA 5030B P/T / EPA 8260B

Matrix Spike (6A30003-MS1)	Source: MPA1104-02			Prepared & Analyzed: 01/30/06						
tert-Amyl methyl ether	1530	50	ug/l	1630	37	92	80-115			
Benzene	533	50	"	504	ND	106	65-115			
tert-Butyl alcohol	16800	2000	"	16900	8400	50	75-120			LN
Di-isopropyl ether	1600	50	"	1620	ND	99	75-125			
1,2-Dibromoethane (EDB)	1610	50	"	1660	ND	97	85-120			
1,2-Dichloroethane	1680	50	"	1550	ND	108	85-130			
Ethanol	13300	30000	"	16500	ND	81	70-135			
Ethyl tert-butyl ether	1530	50	"	1640	ND	93	75-130			
Ethylbenzene	693	50	"	728	ND	95	75-135			
Methyl tert-butyl ether	3030	50	"	784	2200	106	65-125			
Toluene	3760	50	"	3800	ND	99	85-120			
Xylenes (total)	4030	50	"	4080	ND	99	85-125			
Gasoline Range Organics (C4-C12)	46200	5000	"	44000	1800	101	60-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.38		"	2.50		95	60-135			

Matrix Spike Dup (6A30003-MSD1)	Source: MPA1104-02			Prepared & Analyzed: 01/30/06						
tert-Amyl methyl ether	1550	50	ug/l	1630	37	93	80-115	1	15	
Benzene	577	50	"	504	ND	114	65-115	8	20	
tert-Butyl alcohol	20100	2000	"	16900	8400	69	75-120	18	25	LN
Di-isopropyl ether	1650	50	"	1620	ND	102	75-125	3	15	
1,2-Dibromoethane (EDB)	1640	50	"	1660	ND	99	85-120	2	15	
1,2-Dichloroethane	1690	50	"	1550	ND	109	85-130	0.6	20	
Ethanol	23700	30000	"	16500	ND	144	70-135	56	35	LM
Ethyl tert-butyl ether	1570	50	"	1640	ND	96	75-130	3	25	
Ethylbenzene	731	50	"	728	ND	100	75-135	5	15	
Methyl tert-butyl ether	3050	50	"	784	2200	108	65-125	0.7	20	
Toluene	3950	50	"	3800	ND	104	85-120	5	20	
Xylenes (total)	4250	50	"	4080	ND	104	85-125	5	20	
Gasoline Range Organics (C4-C12)	48000	5000	"	44000	1800	105	60-140	4	25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.42		"	2.50		97	60-135			



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

Project:BP Heritage #11102, Oakland, CA
Project Number:G07T9-0020
Project Manager:Lynelle Onishi

MPA1104
Reported:
02/10/06 11:09

Notes and Definitions

LN MS and/or MSD below acceptance limits. See Blank Spike(LCS).
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

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: URS 11102
 REC. BY (PRINT) E. Fallin
 WORKORDER: MPA 1104

DATE REC'D AT LAB: 1/18/06
 TIME REC'D AT LAB: 1515
 DATE LOGGED IN: 1-19-06

For Regulatory Purposes?
 DRINKING WATER YES/NO (NO)
 WASTE WATER YES/NO (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 / <u>Absent</u> Intact / Broken*									EBF 1/18/06 SEE COC
2. Chain-of-Custody <u>Present</u> / Absent*									
3. Traffic Reports or Packing List: Present / <u>Absent</u>									
4. Airbill: Airbill / Sticker Present / <u>Absent</u>									
5. Airbill #:									
6. Sample Labels: <u>Present</u> / Absent									
7. Sample IDs: <u>Listed</u> / Not Listed on Chain-of-Custody									
8. Sample Condition: <u>Intact</u> / Broken* / Leaking*									
9. Does information on chain-of-custody, traffic reports and sample labels agree? <u>Yes</u> / No*									
10. Sample received within hold time? <u>Yes</u> / No*									
11. Adequate sample volume received? <u>Yes</u> / No*									
12. Proper preservatives used? <u>Yes</u> / No*									
13. Trip Blank / Temp Blank Received? (circle which, if yes) <u>Yes</u> / No*									
14. Read Temp: <u>5.3 °C</u> Corrected Temp: <u>5.3 °C</u> Is corrected temp 4 +/-2°C? <u>Yes</u> / No**									

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

ATTACHMENT C

**ERROR CHECK REPORTS AND EDF/GEOWELL SUBMITTAL
CONFIRMATIONS**

Electronic Submittal Information

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

SUCCESSFUL GEO_WELL CHECK - NO ERRORS

<u>ORGANIZATION NAME:</u>	URS Corporation-Oakland Office
<u>USER NAME:</u>	URSCORP-OAKLAND
<u>DATE CHECKED:</u>	3/7/2006 2:08:06 PM

Processing is complete. No errors were found!
You may now proceed to the [upload](#) page.

[Back to Main Menu](#)

Logged in as URSCORP-OAKLAND (CONTRACTOR)

CONTACT SITE [ADMINISTRATOR](#).

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: 1Q 2006 BP/ARCO 11102
GEOWELL

Submittal Date/Time: 3/7/2006 2:09:43 PM

**Confirmation
Number:** 4852264225

[Back to Main Menu](#)

Logged in as URSCORP-OAKLAND
(CONTRACTOR)

[CONTACT SITE ADMINISTRATOR.](#)

Electronic Submittal Information

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

SUCCESSFUL EDF CHECK - NO ERRORS

<u>ORGANIZATION NAME:</u>	URS Corporation-Oakland Office
<u>USER NAME:</u>	URSCORP-OAKLAND
<u>DATE CHECKED:</u>	3/7/2006 2:11:02 PM
<u>GLOBAL ID:</u>	T0600100908
<u>FILE UPLOADED:</u>	BP#11102-EDF-MPA1104.zip

No errors were found in your EDF upload file.

If you want to submit this file to the SWRCB, choose the "Upload EDD" option in the above menu and follow the instructions.

When you complete the submittal process, you will be given a confirmation number for your submittal.

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

BP	<u>Regional Board - Case #: 01-0985</u>
100 MACARTHUR BLVD	SAN FRANCISCO BAY RWQCB (REGION 2)
OAKLAND, CA 94610	
	<u>Local Agency (lead agency) - Case #: 1108</u>
	ALAMEDA COUNTY LOP - (RWS)

SAMPLE DETECTIONS REPORT

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

METHOD QA/QC REPORT

METHODS USED	8260FA
TESTED FOR REQUIRED ANALYTES?	N
MISSING PARAMETERS NOT TESTED:	
- 8260FA REQUIRES DBFM TO BE TESTED	
- 8260FA REQUIRES BR4FBZ TO BE TESTED	
- 8260FA REQUIRES BZMED8 TO BE TESTED	
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-	Y
---	---

135%
 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

Logged in as URSCORP-OAKLAND (CONTRACTOR)

CONTACT SITE ADMINISTRATOR.

Electronic Submittal Information

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

Your EDF file has been successfully uploaded!

Confirmation Number: 8192794084
Date/Time of Submittal: 3/7/2006 2:11:36 PM
Facility Global ID: T0600100908
Facility Name: BP
Submittal Title: 1Q 2006 BP/ARCO 11102 EDF
Submittal Type: GW Monitoring Report

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

BP 100 MACARTHUR BLVD OAKLAND, CA 94610	Regional Board - Case #: 01-0985 SAN FRANCISCO BAY RWQCB (REGION 2) Local Agency (lead agency) - Case #: 1108 ALAMEDA COUNTY LOP - (RWS)
--	---

CONF #	TITLE	QUARTER
8192794084	1Q 2006 BP/ARCO 11102 EDF	Q1 2006
SUBMITTED BY	SUBMIT DATE	STATUS
Srijesh Thapa	3/7/2006	PENDING REVIEW

SAMPLE DETECTIONS REPORT

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

METHOD QA/QC REPORT

METHODS USED	8260FA
TESTED FOR REQUIRED ANALYTES?	N
MISSING PARAMETERS NOT TESTED:	
- 8260FA REQUIRES DBFM TO BE TESTED	
- 8260FA REQUIRES BR4FBZ TO BE TESTED	
- 8260FA REQUIRES BZMED8 TO BE TESTED	
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

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

Logged in as URSCORP-OAKLAND (CONTRACTOR)

CONTACT SITE ADMINISTRATOR.