RO-346

URS

Alameda County
JUL 24 2003
Environmental Health

July 18, 2003

Ms. Eva Chu
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Room 250
Alameda, CA 94502-6577

Re: **Second Quarter 2003 Groundwater Monitoring Report**
Former BP Service Station #11105
3519 Castro Valley Boulevard
Castro Valley, California
URS Project #38486236

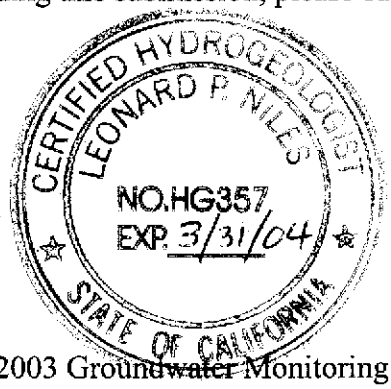
Dear Ms. Chu:

On behalf of the Group Environmental Management Company (a BP affiliated company), URS Corporation (URS) is submitting the *Second Quarter 2003 Groundwater Monitoring Report* for the Former BP Service Station #11105, located at 3519 Castro Valley Boulevard, Castro Valley, California.

If you have any questions regarding this submission, please call me at (510) 874-1720.

Sincerely,

URS CORPORATION



Leonard P. Niles

Leonard P. Niles, R.G./C.H.G.
Senior Geologist

Enclosure: Second Quarter 2003 Groundwater Monitoring Report

cc: Paul Supple, ARCO, P.O. Box 6549, Moraga, CA 94549
Ade Fagorala, San Francisco Bay Regional Water Quality Control Board, 1515 Clay Street, Suite 1400, Oakland, CA 94612
Azim Shakoori, Castro Valley Chevron, 3519 Castro Valley Boulevard, Castro Valley, CA, 94546
Anthony Farcich, Farcich Family Property Trust, 20707 Tuxedo Court, Castro Valley, CA, 94552
Roger Papler, SOMA Environmental Engineering Inc., 2680 Bishop Drive, Suite 203, San Ramon, CA 94583

URS Corporation
500 12th Street, Suite 200
Oakland, CA 94607-4014
Tel: 510.893.3600
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REPORT

SECOND QUARTER 2003 GROUNDWATER MONITORING

FORMER BP SERVICE STATION #11105
3519 CASTRO VALLEY BOULEVARD
CASTRO VALLEY, CALIFORNIA

Prepared for
BP GEM

July 18, 2003

URS
URS Corporation
500 12th Street, Suite 200
Oakland, California 94607

38486236

Date: July 18, 2003

Quarter: 2Q 03

BP GEM QUARTERLY GROUNDWATER MONITORING REPORT

Facility No.:	11105	Address:	3519 Castro Valley Boulevard, Castro Valley, California
BP Environmental Engineer:			Paul Supple
Consulting Co./Contact Person:			URS Corporation / Leonard Niles
Consultant Project No.:			38486236
Primary Agency/Regulatory ID No.:			Alameda County Health Care Services Agency

WORK PERFORMED THIS QUARTER (Second – 2003):

1. Performed second quarter groundwater monitoring event on June 17, 2003.
2. Prepared and submitted first quarter 2003 groundwater monitoring report.

WORK PROPOSED FOR NEXT QUARTER (Third – 2003):

1. Perform third quarter 2003 groundwater monitoring event (by new consultant).
2. Prepare and submit second quarter 2003 groundwater monitoring report.
3. Prepare and submit subsurface investigation workplan (by new consultant)

Current Phase of Project:	GW monitoring/sampling
Frequency of Groundwater Sampling:	ESE-1 through ESE-3, quarterly; ESE-5 and MW-7, semi-annual (1^{st} and 3^{rd} Quarter)
Frequency of Groundwater Monitoring:	Quarterly
Is Free Product (FP) Present On-Site:	No
Current Remediation Techniques:	None currently
Approximate Depth to Groundwater:	6.75 (ESE-5) to 10.19 (ESE-2) feet
Groundwater Gradient (direction):	Southeast to southwest
Groundwater Gradient (magnitude):	0.018 to 0.020

DISCUSSION:

All samples collected this quarter were analyzed for TPH-g, BTEX, MTBE and fuel oxygenates by EPA Method 8260B. TPH-g was detected in all three wells sampled this quarter at concentrations ranging from 520 µg/L (ESE-3) to 10,000 µg/L (ESE-2). Benzene was detected in two wells sampled at concentrations of 17 µg/L (ESE-3) and 140 µg/L (ESE-1). MTBE was detected in all three wells sampled at concentrations ranging from 130 µg/L (ESE-3) to 4,400 µg/L (ESE-2). TAME was only detected in ESE-1, at 18 µg/L.

This site became available to URS on the Geotracker system this quarter. Geowell and EDF data were uploaded for the following quarters: second quarter 2002, third quarter 2002, fourth quarter 2002, first quarter 2003 and second quarter 2003.

Future groundwater monitoring, subsurface investigations, and reporting will be performed from the third quarter 2003 onward by another consultant who is representing the current property owner.

ATTACHMENTS:

- Table 1 – Groundwater Elevation and Analytical Data
- Table 2 – Fuel Oxygenate Analytical Data
- Figure 1 – Groundwater Elevation Contour and Analytical Summary Map – June 17, 2003
- Attachment A – Concentration and Water Level Trends (ESE-2)
- Attachment B – Field Procedures and Field Data Sheets
- Attachment C – Laboratory Procedures, Certified Analytical Reports, and Chain-of-Custody Records
- Attachment D – EDCC Report and EDF/Geowell Submittal Confirmation

Table 1
Groundwater Elevation and Analytical Data
Former BP Service Station #11105
3519 Castro Valley Blvd, Castro Valley, CA

WELL ID		DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)		B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)		DO (ppm)	LAB
ESE-1	(c)	10/5/1992	177.69	11.22	166.47	2100		370	150	17	110	---	(l)	---	PACE
ESE-1D	(d)	10/5/1992	---	---	---	2300		370	160	16	110	---	(l)	---	PACE
ESE-1		4/1/1993	177.69	8.79	168.90	5900		1500	410	110	390	---	(l)	---	PACE
ESE-1		6/29/1993	177.69	10.34	167.35	7600		2900	390	130	460	---	(l)	---	PACE
ESE-1		9/23/1993	177.69	10.91	166.78	2000		490	40	20	56	600	(e)(l)	---	PACE
QC-1	(d)	9/23/1993	---	---	---	1500		420	39	19	56	550	(e)(l)	---	PACE
ESE-1		12/10/1993	177.69	9.93	167.76	1800		480	42	19	66	921	(e)(l)	3.2	PACE
QC-1	(d)	12/10/1993	---	---	---	1500		380	38	17	55	770	(e)(l)	---	PACE
ESE-1		2/17/1994	177.69	9.64	168.05	1900		380	48	24	80	585	(e)(l)	---	PACE
QC-1	(d)	2/17/1994	---	---	---	2200		430	42	19	65	491	(e)(l)	---	PACE
ESE-1		8/8/1994	177.69	11.72	165.97	2100		450	46	16	50	760	(c)	5.1	PACE
ESE-1		10/12/1994	177.69	10.48	167.21	760		240	16	51	39	230	(e)	3.5	PACE
ESE-1		1/19/1995	177.69	7.77	169.92	840		600	120	22	58	---		8.0	ATI
ESE-1		5/2/1995	177.69	8.69	169.00	2000		640	67	24	98	---		8.5	ATI
ESE-1		7/28/1995	177.69	10.12	167.57	190		ND<0.50	ND<0.50	ND<0.50	ND<1.0	---		7.9	ATI
ESE-1		11/17/1995	177.69	10.57	167.12	200		3.4	ND<1.0	1	ND<2.0	600		7.7	ATI
ESE-1		2/7/1996	177.69	7.41	170.28	750		370	23	21	64	680		2.5	SPL
ESE-1		4/23/1996	177.69	9.12	168.57	310		100	ND<1	ND<1	ND<1	1500		6.3	SPL
ESE-1		7/9/1996	177.69	10.12	167.57	730		230	74	13	63	750		2.9	SPL
ESE-1		10/10/1996	177.69	10.80	166.89	420		26	1.6	7.3	12	430		7.4	SPL
ESE-1		1/20/1997	177.69	8.52	169.17	660		290	4.2	13	36	450		5.9	SPL
ESE-1		4/25/1997	177.69	9.77	167.92	410		ND<0.5	ND<1.0	ND<1.0	ND<1.0	580		5.3	SPL
ESE-1		7/18/1997	177.69	10.55	167.14	420		ND<0.5	ND<1.0	ND<1.0	ND<1.0	370		5.0	SPL
ESE-1		10/27/1997	177.69	10.36	167.33	300		56	ND<1.0	6.5	ND<1.0	220		4.8	SPL
ESE-1		1/22/1998	177.69	7.52	170.17	4200		440	9	15	17.7	1300		4.2	SPL
ESE-1		4/23/1998	177.69	8.80	168.89	15000		3400	190	910	900	4900		4.2	SPL
QC-1		4/23/1998	---	---	---	15000		2800	140	730	730	4400		---	SPL
ESE-1		7/29/1998	177.69	9.73	167.96	---		---	---	---	---	---		---	---
ESE-1		7/30/1998	---	---	---	15000		ND<2.5	ND<5.0	ND<5.0	ND<5.0	15000		4.0	SPL
ESE-1		12/17/1998	177.69	9.51	168.18	2400		73	1.0	2.8	4.6	2000/2500*		---	SPL
ESE-1		3/19/1999	177.69	8.65	169.04	4700		58	ND<1.0	ND>1.0	ND<1.0	4700		---	SPL
ESE-1		6/23/1999	177.69	10.51	167.18	600		170	ND<1.0	7.2	5.0	3900		---	SPL
ESE-1		9/27/1999	177.69	10.32	167.37	920		200	ND<25	ND<25	ND<25	4900		---	SPL
ESE-1		12/9/1999	177.69	10.24	167.45	460		130	1.2	5.2	1.5	5100		---	PACE
ESE-1		3/9/2000	177.69	7.72	169.97	3000	(j)	1300	120	80	140	7300		---	PACE
ESE-1		6/8/2000	177.69	9.40	168.29	2900		540	9.7	20	17	5200		---	PACE
ESE-1		9/18/2000	177.69	10.05	167.64	890		3.4	ND<0.5	1.4	ND<0.5	2800		---	PACE

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WELL ID	DATE OF SAMPLING/ MONITORING		CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
ESE-1	12/14/2000		177.69	8.20	169.49	1600	11.1	ND<0.5	ND<0.5	ND<0.5	2730	---	PACE
ESE-1	3/21/2001		177.69	9.75	167.94	5700	2.28	ND<0.5	0.51	ND<1.5	6810	---	PACE
ESE-1	6/18/2001		177.69	10.21	167.48	2000	152	0.669	3.62	2.34	1980	---	PACE
ESE-1	9/18/2001		177.69	10.30	167.39	2500	57.1	ND<5.0	6.25	ND<15	2090	---	PACE
ESE-1	12/13/2001		177.69	9.82	167.87	2800	208	6.05	8.54	9.66	2030	---	PACE
ESE-1	3/14/2002		177.69	9.10	168.59	1800	140	6.31	4.5	9.41	1970	---	PACE
ESE-1	6/19/2002		177.69	9.92	167.77	1100	220	2.02	4.23	3.8	1280	---	PACE
ESE-1	9/10/02*		177.69	10.21	167.48	490	39	2.9	ND<2.0	4.9	670	---	SEQ
ESE-1	12/16/2002		177.69	8.56	169.13	730	140	6.0	3.2	9.1	670	---	SEQ
ESE-1	3/11/2003		177.69	9.40	168.29	1700	490	21	22	41	530	---	SEQ
ESE-1	**6/17/2003**	**(n)**	**177.69**	**9.86**	**167.83**	**1300**	**140**	**ND<10**	**ND<10**	**ND<10**	**480**	**---**	**SEQ**

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WELL ID		DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)		DO (ppm)	LAB
ESE-2		10/5/1992	178.23	11.68	166.55	300	5.4	16	3.9	45	---	(l)	---	PACE
ESE-2		4/1/1993	178.23	9.17	169.06	240	27	ND<0.5	17	2.6	123	(e)(l)	---	PACE
ESE-2		6/29/1993	178.23	10.88	167.35	1700	260	24	110	23	---	(l)	---	PACE
QC-1	(d)	6/29/1993		---	---	1300	240	17	110	25	---	(l)	---	PACE
ESE-2		9/23/1993	178.23	11.56	166.67	240	3.1	0.5	0.6	2.5	643	(e)(l)	---	PACE
ESE-2		12/10/1993	178.23	10.48	167.75	250	2.4	2.4	1.5	11	940	(e)(l)	2.6	PACE
ESE-2		2/17/1994	178.23	10.06	168.17	900	ND<0.5	ND<0.5	ND<0.5	ND<0.5	930	(e)(l)	---	PACE
ESE-2		8/8/1994	178.23	11.11	167.12	750	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1400	(e)	5.1	PACE
ESE-2		10/12/1994	178.23	11.31	166.92	1700	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3000	(e)	3.6	PACE
ESE-2		1/19/1995	178.23	8.25	169.98	300	2	0.9	0.7	1	---		8.1	ATI
ESE-2		5/2/1995	178.23	9.21	169.02	1200	4	ND<2.5	ND<2.5	ND<5.0	---		8.4	ATI
ESE-2		7/28/1995	178.23	10.64	167.59	2000	ND<2.5	ND<2.5	ND<2.5	ND<5.0	---		7.7	ATI
ESE-2		11/17/1995	178.23	11.13	167.10	3600	ND<25	ND<25	ND<25	ND<50	12000		7.4	ATI
QC-1	(d)	11/17/1995	---	---	---	3400	ND<25	ND<25	ND<25	ND<50	12000		---	ATI
ESE-2		2/7/1996	178.23	7.94	170.29	450	ND<0.5	ND<1	ND<1	ND<1	2300		1.8	SPL
ESE-2		4/23/1996	178.23	9.73	168.50	260	0.9	ND<1	ND<1	ND<1	8600		7.2	SPL
ESE-2		7/9/1996	178.23	10.70	167.53	780	ND<2.5	ND<5	ND<5	ND<5	13393		3.0	SPL
ESE-2		10/10/1996	178.23	11.39	166.84	2900	ND<0.5	ND<1.0	ND<1.0	ND<1.0	12000		7.0	SPL
ESE-2		1/20/1997	178.23	9.04	169.19	ND<250	ND<2.5	ND<5.0	ND<5.0	ND<5.0	13000		6.2	SPL
ESE-2		4/25/1997	178.23	10.31	167.92	2700	ND<0.5	ND<1.0	ND<1.0	ND<1.0	15000		5.9	SPL
ESE-2		7/18/1997	178.23	11.02	167.21	11000	ND<5	ND<10	ND<10	ND<10	11000		5.0	SPL
ESE-2		10/27/1997	178.23	10.93	167.30	6100	ND<2.5	ND<5.0	ND<5.0	ND<5.0	7100		4.8	SPL
QC-1	(d)	10/27/1997	---	---	---	6600	ND<2.5	ND<5.0	ND<5.0	ND<5.0	7400		---	SPL
ESE-2		1/22/1998	178.23	7.93	170.30	13000	ND<0.5	ND<1.0	ND<1.0	ND<1.0	10000		4.6	SPL
QC-1	(d)	1/22/1998	---	---	---	13000	ND<0.5	ND<1.0	ND<1.0	ND<1.0	10000		---	SPL
ESE-2		4/23/1998	178.23	9.34	168.89	19000	ND<5	ND<10	ND<10	ND<10	36000		4.2	SPL
ESE-2		7/29/1998	178.23	10.29	167.94	---	---	---	---	---	---		---	---
ESE-2		7/30/1998	---	---	---	19000	ND<5	ND<10	ND<10	ND<10	36000		4.2	SPL
ESE-2		12/17/1998	178.23	10.20	168.03	12000	ND<5.0	ND<5.0	ND<5.0	ND<5.0	13000/17000*		---	SPL
ESE-2		3/19/1999	178.23	9.02	169.21	18000	160	ND<1.0	ND<1.0	ND<1.0	18000		---	SPL
ESE-2		6/23/1999	178.23	9.99	168.24	280	ND<1.0	ND<1.0	ND<1.0	ND<1.0	16000		---	SPL
ESE-2		9/27/1999	178.23	10.69	167.54	ND<500	ND<25	ND<25	ND<25	ND<25	12000		---	SPL
ESE-2		12/9/1999	178.23	11.26	166.97	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.6	12000		---	PACE
ESE-2		3/9/2000	178.23	7.95	170.28	ND<50	1.6	ND<0.5	ND<0.5	ND<0.5	7900		---	PACE
ESE-2		6/8/2000	178.23	9.66	168.57	1600	ND<0.5	0.73	ND<0.5	2.2	9400		---	PACE
ESE-2	(k)	9/18/2000	178.23	---	---	---	---	---	---	---	---		---	---
ESE-2		12/14/2000	178.23	11.15	167.08	6000	0.75	ND<0.5	ND<0.5	ND<0.5	11200		---	PACE

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ESE-2	3/21/2001		178.23	10.35	167.88	6900	786	45.7	37.7	71.5	3790	---	PACE
ESE-2	6/18/2001		178.23	11.24	166.99	6400	ND<2.5	ND<2.5	ND<2.5	ND<7.5	9320	---	PACE
ESE-2	9/18/2001		178.23	11.35	166.88	4800	ND<12.5	ND<12.5	ND<12.5	ND<37.5	6960	---	PACE
ESE-2	12/13/2001		178.23	10.97	167.26	59000	0.592	ND<0.5	ND<0.5	ND<1.0	5940	---	PACE
ESE-2	3/14/2002		178.23	10.13	168.10	4500	76	ND<0.5	ND<0.5	ND<1.0	6660	---	PACE
ESE-2	6/19/2002		178.23	10.91	167.32	250	ND<12.5	ND<12.5	ND<12.5	ND<25	4900	---	PACE
ESE-2	9/10/02*		178.23	10.82	167.41	1500	ND<5.0	ND<5.0	ND<5.0	6.3	3100	---	SEQ
ESE-2	12/16/2002		178.23	7.87	170.36	1400	ND<5.0	ND<5.0	ND<5.0	ND<5.0	2400	---	SEQ
ESE-2	3/11/2003		178.23	10.24	167.99	2800	ND<10	ND<10	ND<10	ND<10	4800	---	SEQ
ESE-2	**6/17/2003**	**(n)**	**178.23**	**10.19**	**168.04**	**10000**	**ND<100**	**ND<100**	**ND<100**	**ND<100**	**4400**	**---**	**SEQ**

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3519 Castro Valley Blvd, Castro Valley, CA

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ESE-3	10/5/1992	178.20	10.58	167.62	430	57	31	3.6	34	---	(l)	---	PACE
ESE-3	4/1/1993	178.20	8.14	170.06	2400	460	220	74	210	---	(l)	---	PACE
ESE-3	6/29/1993	178.20	9.72	168.48	280	56	14	15	13	---	(l)	---	PACE
ESE-3	9/23/1993	178.20	10.46	167.74	72	13	3.5	1.7	4.1	---	(l)	---	PACE
ESE-3	12/10/1993	178.20	9.30	168.90	270	71	32	6.1	33	---	(l)	2.7	PACE
ESE-3	2/17/1994	178.20	8.97	169.23	520	140	10	20	33	5.74	(l)	---	PACE
ESE-3	8/8/1994	178.20	10.02	168.18	ND<50	8.8	1.6	1.6	2.3	ND<5.0	(l)	6.2	PACE
ESE-3	10/12/1994	178.20	10.32	167.88	470	190	6.4	15	18	ND<5.0	(l)	3.5	PACE
ESE-3	1/19/1995	178.20	7.40	170.80	330	260	27	21	20	---		6.7	ATI
ESE-3	5/2/1995	178.20	8.26	169.94	530	180	30	23	44	---		8.6	ATI
ESE-3	7/28/1995	178.20	9.54	168.66	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---		8.8	ATI
ESE-3	11/17/1995	178.20	10.04	168.16	ND<50	1.7	ND<0.50	ND<0.50	ND<1.0	ND<5.0		7.3	ATI
ESE-3	2/7/1996	178.20	7.08	171.12	ND<50	8.6	ND<1	ND<1	ND<1	ND<10		3.9	SPL
ESE-3	4/23/1996	178.20	8.79	169.41	ND<50	7.6	ND<1	ND<1	ND<1	65		6.9	SPL
ESE-3	7/9/1996	178.20	10.09	168.11	ND<50	12	2.6	2	3.9	26		3.4	SPL
ESE-3	10/10/1996	178.20	10.48	167.72	---	---	---	---	---	---		---	---
ESE-3	10/11/1996	178.20	---	---	260	140	ND<1.0	ND<1.0	2.6	ND<10		7.2	SPL
ESE-3	1/20/1997	178.20	8.65	169.55	ND<50	1.5	1.7	ND<1.0	ND<1.0	14		5.7	SPL
ESE-3	4/25/1997	178.20	10.02	168.18	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	14		5.4	SPL
ESE-3	7/18/1997	178.20	10.66	167.54	10000	1400	1400	300	1280	ND<250		5.2	SPL
ESE-3	10/27/1997	178.20	9.83	168.37	ND<250	ND<2.5	ND<5.0	ND<5.0	36	ND<50		5.0	SPL
ESE-3	1/22/1998	178.20	7.06	171.14	130	ND<0.5	ND<1.0	ND<1.0	ND<1.0	120		4.3	SPL
ESE-3	4/23/1998	178.20	8.44	169.76	4800	560	ND<10	15	ND<10	4000		3.9	SPL
ESE-3	7/29/1998	178.20	9.27	168.93	---	---	---	---	---	---		---	---
ESE-3	7/30/1998	---	---	---	1800	6.2	ND<5.0	ND<5.0	ND<5.0	1700		4.1	SPL
ESE-3	12/17/1998	178.20	9.15	169.05	600	54	ND<1.0	2.1	4.9	340/480*		---	SPL
ESE-3	3/19/1999	178.20	8.14	170.06	2000	260	4.4	13	28	870		---	SPL
ESE-3	6/23/1999	178.20	9.44	168.76	290	91	ND<1.0	8.3	16	240		---	SPL
ESE-3	9/27/1999	178.20	9.69	168.51	130	35	ND<1.0	2.7	3.8	100		---	SPL
ESE-3	12/9/1999	178.20	10.99	167.21	380	84	1.7	8.7	6.3	160		---	PACE
ESE-3	3/9/2000	178.20	7.12	171.08	950	190	4.6	39	62	350		---	PACE
ESE-3	6/8/2000	178.20	10.92	167.28	300	37	ND<0.5	2.3	1.3	400		---	PACE
ESE-3	9/18/2000	178.20	11.12	167.08	920	140	1.3	15	4.8	170		---	PACE
ESE-3	12/14/2000	178.20	9.70	168.50	320	64	ND<0.5	6.24	1.76	201		---	PACE
ESE-3	3/21/2001	178.20	10.07	168.13	680	80.5	0.546	21.1	18.2	398		---	PACE
ESE-3	6/18/2001	178.20	11.42	166.78	380	47	ND<0.5	3.11	ND<1.5	242		---	PACE
ESE-3	9/18/2001	178.20	11.55	166.65	340	54.8	ND<0.5	4.36	ND<1.5	79.7		---	PACE

Table 1
Groundwater Elevation and Analytical Data
Former BP Service Station #11105
3519 Castro Valley Blvd, Castro Valley, CA

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
ESE-3	12/13/2001	178.20	10.12	168.08	270	31.4	ND<0.5	1.31	2.24	129	---	PACE
ESE-3	3/14/2002	178.20	9.84	168.36	670	89.8	0.769	23.4	30.4	413	---	PACE
ESE-3	6/19/2002	178.20	10.57	167.63	130	18.6	ND<0.5	ND<0.5	ND<1.0	166	---	PACE
ESE-3	9/10/02*	178.20	9.90	168.30	88	12	ND<0.5	ND<0.5	ND<0.5	93	---	SEQ
ESE-3	12/16/2002	178.20	9.23	168.97	290	55	17	3.7	14	78	---	SEQ
ESE-3	3/11/2003	178.20	9.05	169.15	100	3.4	ND<0.50	0.54	ND<0.50	140	---	SEQ
ESE-3	**6/17/2003 (n)**	**178.20**	**9.30**	**168.90**	**520**	**17**	**ND<5.0**	**5.3**	**ND<5.0**	**130**	**---**	**SEQ**

Table 1
Groundwater Elevation and Analytical Data
Former BP Service Station #11105
3519 Castro Valley Blvd, Castro Valley, CA

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)		DO (ppm)	LAB
ESE-4	10/5/1992	177.73	10.33	167.40	98	7.2	1.3	1.1	6.1	---	(l)	---	PACE
ESE-4	4/1/1993	177.73	7.88	169.85	550	93	20	23	33	---	(l)	---	PACE
ESE-4	6/29/1993	177.66 (f)	8.33	169.33	150	23	0.6	5.4	0.5	54	(e)(l)	---	PACE
ESE-4	9/23/1993	177.66	10.05	167.61	110	14	1.7	3.2	4.6	---	(l)	---	PACE
ESE-4	12/10/1993	177.66	8.95	168.71	110	21	7.2	4.2	10	28.75	(l)	2.8	PACE
ESE-4	2/17/1994	177.66	8.65	169.01	210	26	1.2	4.7	11	113	(e)(l)	---	PACE
ESE-4	8/8/1994	177.66	9.76	167.90	76	9.6	ND<0.5	2	ND<0.5	62	(e)	7.0	PACE
ESE-4	10/12/1994	177.66	9.62	168.04	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	44	(e)	3.2	PACE
ESE-4	1/19/1995	177.66	6.97	170.69	140	56	14	24	23	---		6.9	ATI
ESE-4	5/2/1995	177.66	7.85	169.81	130	21	2.8	8.6	8.2	---		9.1	ATI
ESE-4	7/28/1995	177.66	9.20	168.46	ND<50	ND<0.5	ND<0.50	ND<0.50	ND<1.0	---		8.1	ATI
ESE-4	11/17/1995	177.66	9.68	167.98	ND<50	ND<0.5	0.6	ND<0.50	ND<1.0	18		5.7	ATI
ESE-4	2/7/1996	177.66	6.59	171.07	100	2.6	ND<1	1.6	4.1	42		2.0	SPL
ESE-4	4/23/1996	177.66	8.30	169.36	160	37	15	16	31	43		5.4	SPL
ESE-4	7/9/1996	177.66	9.21	168.45	60	17	1.5	6.8	11.6	27		3.9	SPL
ESE-4	10/10/1996	177.66	9.97	167.69	---	---	---	---	---	---		---	---
ESE-4	10/11/1996	177.66	---	---	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	18		5.5	SPL
ESE-4	1/20/1997	177.66	7.68	169.98	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	130		4.9	SPL
ESE-4	4/25/1997	177.66	9.15	168.51	ND<250	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50		4.3	SPL
ESE-4	7/18/1997	177.66	9.71	167.95	ND<50	15	ND<10	ND<10	ND<10	ND<100		4.5	SPL
ESE-4	10/27/1997	177.66	9.38	168.28	ND<250	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50		4.9	SPL
ESE-4	1/22/1997	177.66	6.59	171.07	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10		4.3	SPL
ESE-4	4/23/1998	177.66	7.90	169.76	ND<250	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50		4.0	SPL
ESE-4	7/29/1998	177.66	8.96	168.70	---	---	---	---	---	---		---	---
ESE-4	7/30/1998	---	---	---	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10		4.2	SPL
ESE-4	12/17/1998	177.66	8.32	169.34	---	---	---	---	---	---		---	---
ESE-4	3/19/1999	177.66	7.71	169.95	---	---	---	---	---	---		---	---
ESE-4	6/23/1999	177.66	8.78	168.88	---	---	---	---	---	---		---	---
ESE-4	9/27/1999	177.66	9.27	168.39	---	---	---	---	---	---		---	---
ESE-4	12/9/1999	177.66	9.21	168.45	---	---	---	---	---	---		---	---
ESE-4	3/9/2000	177.66	6.82	170.84	---	---	---	---	---	---		---	---
ESE-4	6/8/2000	177.66	8.72	168.94	---	---	---	---	---	---		---	---
ESE-4	9/18/2000	177.66	9.02	168.64	---	---	---	---	---	---		---	---
ESE-4	12/14/2000	177.66	8.61	169.05	---	---	---	---	---	---		---	---
ESE-4	3/21/2001	177.66	8.61	169.05	---	---	---	---	---	---		---	---
ESE-4	6/18/2001	177.66	9.24	168.42	---	---	---	---	---	---		---	---
ESE-4	9/18/2001	177.66	9.35	168.31	---	---	---	---	---	---		---	---

Table 1
Groundwater Elevation and Analytical Data
Former BP Service Station #11105
3519 Castro Valley Blvd, Castro Valley, CA

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
ESE-4	12/13/2001	177.66	8.53	169.13	---	---	---	---	---	---	---	---
ESE-4	3/14/2002	177.66	8.44	169.22	---	---	---	---	---	---	---	---
ESE-4	6/19/2002	177.66	10.97	166.69	---	---	---	---	---	---	---	---
ESE-4	9/10/02*	177.66	9.27	168.39	---	---	---	---	---	---	---	---
ESE-4	12/16/2002	177.66	6.90	170.76	---	---	---	---	---	---	---	---
ESE-4	3/11/2003	177.66	8.83	168.83	---	---	---	---	---	---	---	---
ESE-4	**6/17/2003**	**177.66**	**8.84**	**168.82**	---	---	---	---	---	---	---	---

Table 1
Groundwater Elevation and Analytical Data
Former BP Service Station #11105
3519 Castro Valley Blvd, Castro Valley, CA

WELL ID		DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)		DO (ppm)	LAB
ESE-5		10/5/1992	176.08	9.22	166.86	1300	200	3.8	1.2	18	---	(l)	---	PACE
ESE-5		4/1/1993	176.08	7.02	169.06	13000	2200	26	730	1000	---	(l)	---	PACE
QC-1	(d)	4/1/1993	---	---	---	13000	2500	25	740	1100	---	(l)	---	PACE
ESE-5		6/29/1993	176.08	10.21	165.87	7600	1500	9.3	170	100	---	(l)	---	PACE
ESE-5		9/23/1993	176.08	10.64	165.44	560	19	1.2	0.9	1.8	---	(l)	---	PACE
ESE-5		12/10/1993	176.08	9.42	166.66	1700	300	3	76	110	14.07	(l)	2.5	PACE
ESE-5		2/7/1994	176.08	9.35	166.73	3500	640	7.8	90	130	45.13	(l)	---	PACE
ESE-5		8/8/1994	176.08	8.76	167.32	2600	210	4.6	9.4	4.4	33	(e)	5.8	PACE
QC-1	(d)	8/8/1994	---	---	---	2500	230	4.6	13	4.8	32	(e)	---	PACE
ESE-5		10/12/1994	176.08	8.95	167.13	5600	560	9.5	75	21	79.2	(l)	3.6	PACE
QC-1	(d)	10/12/1994	---	---	---	6000	550	10	78	22	77	(e)	---	PACE
ESE-5		1/19/1995	176.08	5.40	170.68	1900	620	ND<5	95	15	---		7.6	ATI
QC-1	(d)	1/19/1995	---	---	---	1600	620	ND<5	93	17	---		---	ATI
ESE-5		5/2/1995	176.08	6.48	169.60	5700	1100	ND<10	180	58	---		8.2	ATI
QC-1	(d)	5/2/1995	---	---	---	5300	1100	ND<10	180	58	---		---	ATI
ESE-5		7/28/1995	176.08	7.97	168.11	520	15	ND<0.50	1.7	1.3	---		8.2	ATI
QC-1	(d)	7/28/1995	---	---	---	460	7.2	ND<0.50	1.9	1.5	---		---	ATI
ESE-5		11/17/1995	176.08	8.39	167.69	850	39	1.8	7.6	2.7	24		6.3	ATI
ESE-5		2/7/1996	176.08	4.71	171.37	4100	670	6	190	140	ND<50		1.5	SPL
ESE-5		4/23/1996	176.08	7.35	168.73	3000	570	ND<5	79	100	84		6.5	SPL
ESE-5		7/9/1996	176.08	9.40	166.68	620	150	1.7	9.3	6.4	25		3.7	SPL
ESE-5		10/10/1996	176.08	9.04	167.04	1100	29	ND<5.0	ND<5.0	ND<5.0	ND<50		6.3	SPL
QC-1	(d)	10/10/1996	---	---	---	1100	31	ND<5.0	ND<5.0	ND<5.0	ND<50		---	SPL
ESE-5		1/20/1997	176.08	5.82	170.26	2100	980	ND<25	280	80	ND<250		5.4	SPL
QC-1	(d)	1/20/1997	---	---	---	2700	910	8.8	280	84	180		---	SPL
ESE-5		4/25/1997	176.08	7.24	168.84	---	---	---	---	---	---		---	---
ESE-5		4/28/1997	176.08	---	---	ND<250	7.9	ND<5.0	ND<5.0	ND<5.0	ND<50		4.9	SPL
ESE-5		7/18/1997	176.08	7.86	168.22	1200	ND<5	ND<10	ND<10	ND<10	ND<100		5.0	SPL
QC-1	(d)	7/18/1997	---	---	---	630	31	ND<5.0	ND<5.0	ND<5.0	130		---	SPL
ESE-5		10/27/1997	176.08	7.91	168.17	ND<250	5.4	ND<5.0	ND<5.0	ND<5.0	ND<50		5.2	SPL
ESE-5		1/22/1998	176.08	4.64	171.44	170	7.7	ND<1.0	ND<1.0	ND<1.0	130		4.6	SPL
ESE-5		4/23/1998	176.08	6.31	169.77	720	79	ND<5.0	9.0	ND<5.0	180		4.6	SPL
ESE-5		7/29/1998	176.08	7.43	168.65	---	---	---	---	---	---		---	---
ESE-5		7/30/1998	---	---	---	840	9.8	ND<1.0	4.0	ND<1.0	710		4.3	SPL
ESE-5		12/17/1998	176.08	7.05	169.03	---	---	---	---	---	---		---	---
ESE-5		3/19/1999	176.08	5.00	171.08	ND<250	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0		---	SPL
ESE-5		6/23/1999	176.08	7.77	168.31	---	---	---	---	---	---		---	SPL

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WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
ESE-5	9/27/1999	176.08	8.11	167.97	450	10	ND<5.0	6.3	ND<5.0	220	---	SPL
ESE-5	12/9/1999	176.08	7.66	168.42	---	---	---	---	---	---	---	---
ESE-5	3/9/2000	176.08	5.08	171.00	1700	170	2.5	45	6.4	140	---	PACE
ESE-5	6/8/2000	176.08	7.36	168.72	---	---	---	---	---	---	---	---
ESE-5	9/18/2000	176.08	7.71	168.37	130	0.65	ND<0.5	0.71	ND<0.5	51	---	PACE
ESE-5	12/14/2000	176.08	2.36	173.72	---	---	---	---	---	---	---	---
ESE-5	3/21/2001	176.08	7.42	168.66	1000	10.3	ND<2.5	11	ND<7.5	70.8	---	PACE
ESE-5	6/18/2001	176.08	7.92	168.16	---	---	---	---	---	---	---	---
ESE-5	9/18/2001	176.08	8.05	168.03	200	0.868	ND<0.5	0.55	ND<1.5	57.5	---	PACE
ESE-5	12/13/2001	176.26 (m)	7.80	168.46	---	---	---	---	---	---	---	---
ESE-5	3/14/2002	176.26	6.55	169.71	1300	17.1	1.35	15.4	1.42	37.4	---	PACE
ESE-5	6/19/2002	176.26	7.83	168.43	---	---	---	---	---	---	---	---
ESE-5	9/10/02*	176.26	8.22	168.04	680	9.9	ND<5.0	ND<5.0	ND<5.0	44	---	SEQ
ESE-5	12/16/2002	176.26	6.58	169.68	---	---	---	---	---	---	---	---
ESE-5	3/11/2003	176.26	6.77	169.49	2100	14	ND<2.5	15	3.0	80	---	---
ESE-5	**6/17/2003**	**176.26**	**6.75**	**169.51**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**

Table 1
Groundwater Elevation and Analytical Data
Former BP Service Station #11105
3519 Castro Valley Blvd, Castro Valley, CA

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-6	7/28/1995	179.24	10.00	169.24	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	8.1	ATI
MW-6	11/17/1995	179.24	10.44	168.80	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	6.8	ATI
MW-6	2/7/1996	179.24	7.68	171.56	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	2.4	SPL
MW-6	4/23/1996	179.24	9.33	169.91	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	6.6	SPL
MW-6	7/9/1996	179.24	10.10	169.14	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	2.7	SPL
MW-6	10/10/1996	179.24	11.00	168.24	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.9	SPL
MW-6	1/20/1997	179.24	8.70	170.54	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.5	SPL
MW-6	4/25/1997	179.24	10.16	169.08	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.1	SPL
MW-6	7/18/1997	179.24	10.66	168.58	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.8	SPL
MW-6	10/27/1997	179.24	10.25	168.99	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.8	SPL
MW-6	1/22/1998	179.24	7.76	171.48	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.0	SPL
MW-6	4/23/1998	179.24	9.10	170.14	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.2	SPL
MW-6	7/29/1998	179.24	10.40	168.84	---	---	---	---	---	---	---	---
MW-6	7/30/1998	---	---	---	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	3.8	SPL
MW-6	12/17/1998	179.24	9.40	169.84	---	---	---	---	---	---	---	---
MW-6	3/19/1999	179.24	9.10	170.14	---	---	---	---	---	---	---	---
MW-6	6/23/1999	179.24	9.79	169.45	---	---	---	---	---	---	---	---
MW-6	9/27/1999	179.24	10.10	169.14	---	---	---	---	---	---	---	---
MW-6	12/9/1999	179.24	9.97	169.27	---	---	---	---	---	---	---	---
MW-6	3/9/2000	179.24	8.56	170.68	---	---	---	---	---	---	---	---
MW-6	6/8/2000	179.24	9.11	170.13	---	---	---	---	---	---	---	---
MW-6	9/18/2000	179.24	9.77	169.47	---	---	---	---	---	---	---	---
MW-6	12/14/2000	179.24	9.17	170.07	---	---	---	---	---	---	---	---
MW-6	3/21/2001	179.24	9.82	169.42	---	---	---	---	---	---	---	---
MW-6	6/18/2001	179.24	10.19	169.05	---	---	---	---	---	---	---	---
MW-6	9/18/2001	179.24	10.25	168.99	---	---	---	---	---	---	---	---
MW-6	12/13/2001	179.24	9.75	169.49	---	---	---	---	---	---	---	---
MW-6	3/14/2002	179.24	9.53	169.71	---	---	---	---	---	---	---	---
MW-6	6/19/2002	179.24	9.87	169.37	---	---	---	---	---	---	---	---
MW-6	9/10/02*	179.24	9.49	169.75	---	---	---	---	---	---	---	---
MW-6	12/16/2002	179.24	8.39	170.85	---	---	---	---	---	---	---	---
MW-6	3/11/2003	179.24	9.40	169.84	---	---	---	---	---	---	---	---
MW-6	**6/17/2003**	**179.24**	**9.71**	**169.53**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**

Table 1
Groundwater Elevation and Analytical Data
Former BP Service Station #11105
3519 Castro Valley Blvd, Castro Valley, CA

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-7	7/28/1995	176.55	9.25	167.30	ND<50	0.54 (g)	0.54	ND<0.50	ND<1.0	---	7.1	ATI
MW-7	11/17/1995	176.55	9.73	166.82	1100	ND<10	ND<10	ND<10	ND<20	4000	6.3	ATI
MW-7	2/7/1996	176.55	6.48	170.07	610	ND<0.5	ND<1	ND<1	ND<1	2500	4.1	SPL
QC-1 (d)	2/7/1996	---	---	---	280	ND<0.5	ND<1	ND<1	ND<1	2600	---	SPL
MW-7	4/23/1996	176.55	8.37	168.18	110	ND<0.5	ND<1	ND<1	ND<1	3500	6.4	SPL
QC-1 (d)	4/23/1996	---	---	---	230	ND<0.5	ND<1	ND<1	ND<1	3500	---	SPL
MW-7	7/9/1996	176.55	9.24	167.31	230	ND<0.5	ND<1	ND<1	ND<1	4296	3.1	SPL
QC-1 (d)	7/9/1996	---	---	---	220	ND<0.5	ND<1	ND<1	ND<1	4400	---	SPL
MW-7	10/10/1996	176.55	10.05	166.50	---	---	---	---	---	---	---	---
MW-7	10/11/1996	176.55	---	---	1600	ND<0.5	ND<1.0	ND<1.0	ND<1.0	3000	6.9	SPL
MW-7	1/20/1997	176.55	7.51	169.04	ND<50	0.63	1	ND<1.0	ND<1.0	2600	5.7	SPL
MW-7	4/25/1997	176.55	8.79	167.76	---	---	---	---	---	---	---	---
MW-7	4/28/1997	176.55	---	---	1500	ND<0.5	ND<1.0	ND<1.0	ND<1.0	3600	5.1	SPL
QC-1 (d)	4/28/1997	---	---	---	7700	3500	ND<25	74	37	ND<250	---	SPL
MW-7	7/18/1997	176.55	9.50	167.05	1400	ND<0.5	ND<1.0	ND<1.0	ND<1.0	2600	5.2	SPL
MW-7	10/27/1997	176.55	9.19	167.36	420	ND<0.5	ND<1.0	ND<1.0	ND<1.0	560	4.9	SPL
MW-7	1/22/1998	176.55	6.45	170.10	3100	ND<0.5	ND<1.0	ND<1.0	1.4	2300	4.2	SPL
MW-7	4/23/1998	176.55	8.02	168.53	3800	ND<0.5	ND<1.0	ND<1.0	ND<1.0	3800	3.9	SPL
MW-7	7/29/1998	176.55	8.88	167.67	---	---	---	---	---	---	---	---
MW-7	7/30/1998	---	---	---	500	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	4.1	SPL
QC-1 (d)	7/30/1998	---	---	---	4700	ND<12	ND<25	ND<25	ND<25	4700	---	SPL
MW-7	12/17/1998	176.55	8.62	167.93	---	---	---	---	---	---	---	---
MW-7	3/19/1999	176.55	7.52	169.03	3800	ND<1.0	ND<1.0	ND<1.0	ND<1.0	3800	---	SPL
MW-7	6/23/1999	176.55	9.63	166.92	---	---	---	---	---	---	---	---
MW-7	9/27/1999	176.55	9.39	167.16	140	ND<10	ND<10	ND<10	ND<10	3800	---	SPL
MW-7	12/9/1999	176.55	9.94	166.61	---	---	---	---	---	---	---	---
MW-7	3/9/2000	176.55	6.72	169.83	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1400	---	PACE
MW-7	6/8/2000	176.55	7.38	169.17	---	---	---	---	---	---	---	---
MW-7	9/18/2000	176.55	9.18	167.37	190	ND<0.5	ND<0.5	ND<0.5	ND<0.5	580	---	PACE
MW-7	12/14/2000	176.55	8.13	168.42	---	---	---	---	---	---	---	---
MW-7	3/21/2001	176.55	8.98	167.57	1300	ND<0.5	ND<0.5	ND<0.5	ND<1.5	1460	---	PACE
MW-7	6/18/2001	176.55	9.68	166.87	---	---	---	---	---	---	---	---
MW-7	9/18/2001	176.55	9.80	166.75	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.5	94.9	---	PACE
MW-7	12/13/2001	176.55	9.26	167.29	---	---	---	---	---	---	---	---
MW-7	3/14/2002	176.55	8.69	167.86	800	ND<0.5	ND<0.5	ND<0.5	ND<1.0	952	---	PACE
MW-7	6/19/2002	176.55	9.06	167.49	---	---	---	---	---	---	---	---
MW-7	9/10/02*	176.55	9.23	167.32	260	ND<2.0	ND<2.0	ND<2.0	ND<2.0	580	---	SEQ

Table 1
Groundwater Elevation and Analytical Data
Former BP Service Station #11105
3519 Castro Valley Blvd, Castro Valley, CA

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-7	12/16/2002	176.55	7.77	168.78	---	---	---	---	---	---	---	---
MW-7	3/11/2003	176.55	8.30	168.25	620	ND<2.5	ND<2.5	ND<2.5	ND<2.5	1100	---	---
MW-7	**6/17/2003**	**176.55**	**9.51**	**167.04**	**---**	**—**	**---**	**---**	**---**	**—**	**---**	**---**

Table 1
Groundwater Elevation and Analytical Data
Former BP Service Station #11105
3519 Castro Valley Blvd, Castro Valley, CA

WELL ID		DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)		DO (ppm)	LAB
MW-8		7/28/1995	176.34	7.80	168.54	1100	ND<2.5	ND<2.5	ND<2.5	ND<5.0	---		7.2	ATI
MW-8		11/17/1995	176.34	8.29	168.05	8300	75	5.3	670	240	140		7.0	ATI
MW-8		2/7/1996	176.34	4.99	171.35	2300	33	ND<10	190	216	ND<100		1.7	SPL
MW-8		4/23/1996	176.34	6.09	170.25	2000	390	ND<20	150	26	ND<250		5.1	SPL
MW-8	(h)	7/9/1996	---	---	---	---	---	---	---	---	---		---	---
QC-2	(i)	4/1/1993	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	(l)	---	PACE
QC-2	(i)	6/29/1993	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	(l)	---	PACE
QC-2	(i)	9/23/1993	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	(l)	---	PACE
QC-2	(i)	12/10/1993	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	(l)	---	PACE
QC-2	(i)	2/17/1994	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		---	PACE
QC-2	(i)	8/8/1994	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		---	PACE
QC-2	(i)	10/12/1994	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---		---	PACE
QC-2	(i)	1/19/1995	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	---		---	ATI
QC-2	(i)	5/2/1995	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---		---	ATI
QC-2	(i)	7/28/1995	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---		---	ATI
QC-2	(i)	11/17/1995	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0		---	ATI
QC-2	(i)	2/7/1996	---	---	---	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10		---	SPL
QC-2	(i)	4/23/1996	---	---	---	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10		---	SPL
QC-2	(i)	7/9/1996	---	---	---	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10		---	SPL

Table 1
Groundwater Elevation and Analytical Data
Former BP Service Station #11105
3519 Castro Valley Blvd, Castro Valley, CA

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
MTBE	Methyl tert butyl ether
DO	Dissolved oxygen
ug/L	Micrograms per liter
ppm	Parts per million
ND	Not detected above reported detection limit
---	Not applicable/available/measured/analyzed
PACE	Pace, Inc.
ATI	Analytical Technologies, Inc.
SPL	Southern Petroleum Laboratories
SEQ	Sequoia Analytical

Table 1
Groundwater Elevation and Analytical Data
Former BP Service Station #11105
3519 Castro Valley Blvd, Castro Valley, CA

NOTES:

(a) Top of casing elevations surveyed relative to mean sea level.

(b) Groundwater elevations in feet relative to mean sea level.

(c) Additional analysis of the sample collected from ESE-1 on 10/5/92 detected 96 ug/L total petroleum hydrocarbons as diesel and 1.8 ug/L 1,2-dichloroethane.

(d) Blind duplicate.

(e) A copy of the documentation for this data is included in Appendix C of Alisto report 10-138-09-004.

(f) Top of casing lowered by 0.07 foot after the monitoring event on 4/01/93.

(g) Sample result may be falsely elevated due to matrix interference.

(h) Well destroyed.

(i) Travel blank.

(j) Gasoline does not include MTBE.

(k) Well Inaccessible.

(l) A copy of the documentation for this data can be found in Blaine Tech Services report 010618-J-1. MTBE data for the September 28, 1992, September 29, 1992, October 5, 1992, and April 1, 1993 sampling events have been destroyed.
No chromatograms could be located for MTBE data from wells sampled on June 29, 1993; wells ESE-1, ESE-3, ESE-4, ESE-5, and the Trip Blank, sampled on September 23, 1993; and wells ESE-1, ESE-2, and ESE-3, sampled on December 10, 1993.

(m) Top of casing altered due to wellhead maintenance.

(n) Analyzed for TPH-g, BTEX, MTBE and fuel oxygenates by EPA Method 8260B on 6/17/03 sampling event.

(*) MTBE by EPA 8020/8260.

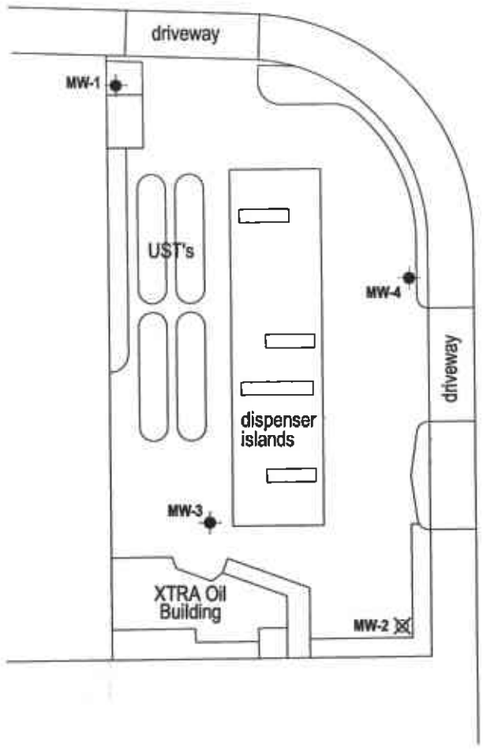
* During the second quarter of 2002, URS Corporation assumed groundwater monitoring activities for BP.

Source: The data within this table collected prior to June 2002 was provided to URS by BP Group Environmental Management company and their previous consultants. URS has not verified the accuracy of this information.

Table 2
Fuel Oxygenates Analytical Data
Former BP Service Station #11105
3519 Castro Valley Blvd, Castro Valley, CA

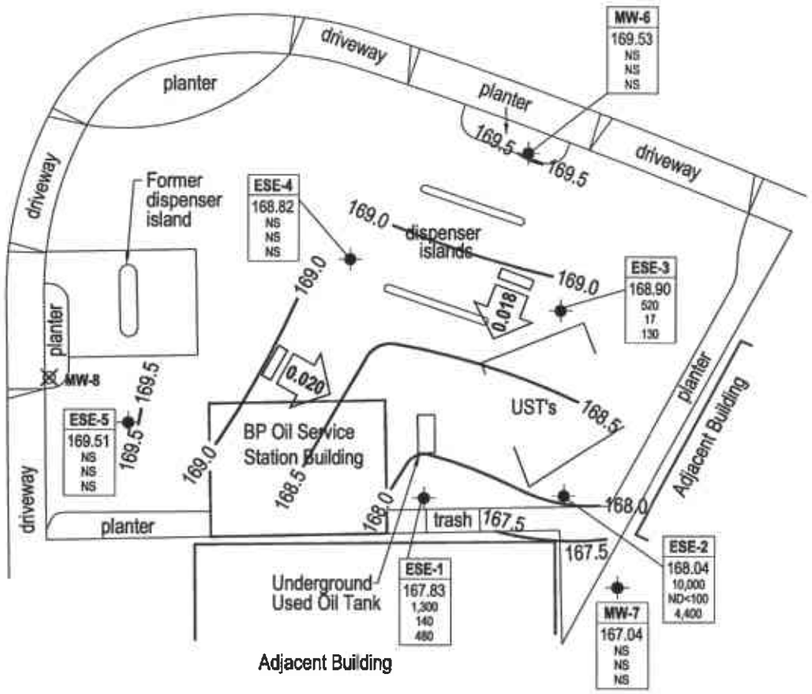
Well Number	Date Sampled	Ethanol (µg/L)	TBA (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
ESE-1	**06/17/03**	**ND<2,000**	**ND<400**	**480**	**ND<10**	**ND<10**	**18**
ESE-2	**06/17/03**	**ND<20,000**	**ND<4,000**	**4,400**	**ND<100**	**ND<100**	**ND<100**
ESE-3	**06/17/03**	**ND<1,000**	**ND<200**	**130**	**ND<5.0**	**ND<5.0**	**ND<5.0**

Note = All fuel oxygenate compounds analyzed using EPA Method 8260B
TBA = tert-Butyl alcohol
MTBE = Methyl tert-Butyl ether
DIPE = Di-isopropyl ether
ETBE = Ethyl tert Butyl ether
TAME = tert-Amyl Methyl ether
µg/L = micrograms per liter
ND< = Not detected at or above specified laboratory method detection limit



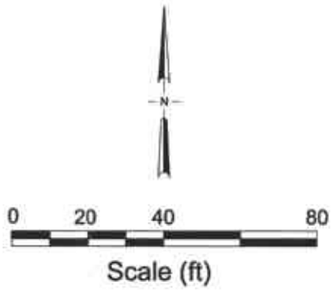
REDWOOD ROAD

CASTRO VALLEY BOULEVARD



EXPLANATION

- ⊠ Abandoned monitoring well
- ⊕ Monitoring well
- Well ID / ELEV / TPHg / Benzene / MTBE — Well Designation; Groundwater elevation (ft above MSL); Concentration of TPH-g, Benzene and MTBE in groundwater in micrograms per liter (µg/L)
- ND< Not detected at or above laboratory reporting limits
- NS Not Sampled
- 169.0 Groundwater elevation contour (Feet above MSL)
- 0.020 Approximate groundwater flow direction and gradient (ft/ft)



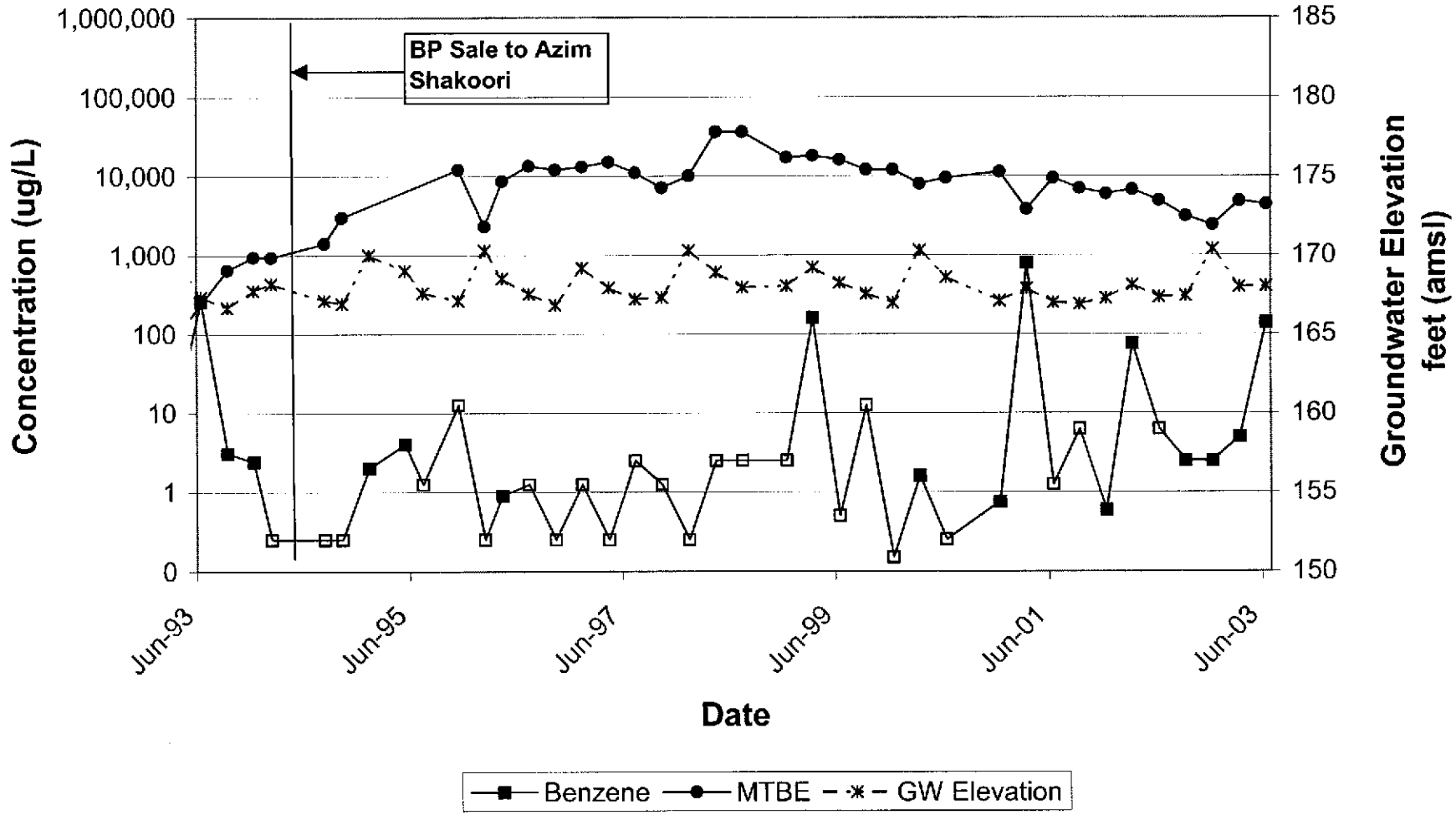
URS	Project No. 38486236 Former BP Service Station #11105 3519 Castro Valley Boulevard Castro Valley, California	GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP Second Quarter 2003 (June 17, 2003)	FIGURE 1

X:\x_env_wastell\BP GEM\Sites\L Nilas Sites\11105\Reports\Monitoring\Qtr. 2, 2003\Drawings\GWEC-AS_6-17.dwg, 07/18/2003 02:58:09 PM, JKMT, URS

ATTACHMENT A

CONCENTRATION AND WATER LEVEL TRENDS
(ESE-2)

Concentration and Water Level Trends
ESE-2



Former BP Service Station #11105
3519 Castro Valley Boulevard
Castro Valley, California

URS Corporation

Graph 1

ATTACHMENT B

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 # 030617-MM1 Date 6/17/03 Client BP 11105

Site 3519 CASTRO VALLEY BLVD., CASTRO VALLEY

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	
ESE-1	2					9.86	29.22	TOC	S
ESE-2	2					10.19	27.00		S
ESE-3	2					9.30	29.80		S
ESE-4	2					8.84	22.54		GO
ESE-5	2					6.75	23.83		GO
MW-6	2					9.71	28.95		GO
MW-7	2					9.51	29.00	V	GO

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 030617-MM1	Station # BP 11105
Sampler: MM	Date: 6/17/03
Well I.D.: ESE-1	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 29.22	Depth to Water: 9.86
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	radius² * 0.163

19.36
13.73 = 80%

Purge Method: Bailer / Disposable Bailer / (Middleburg) / 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.

3.1 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 9.3 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
805	64.3	6.8	943	3.1	clear
812	65.2	6.9	942	6.2	cloudy (light brown)
818	65.2	6.9	930	9.3	DTW = 10.50

Did well dewater? Yes (No) Gallons actually evacuated: 9.3

Sampling Time: 825 DTW = 10.50 Sampling Date: 6/17/03

Sample I.D.: ESE-1 Laboratory: Pace (Sequoia) Other ___

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: Oxy's + Ethanol (8260)

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 #: 030617-MM1	Station # BP 11105
Sampler: MM	Date: 6/17/03
Well I.D.: ESE - 2	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 27.00	Depth to Water: 10.19
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	radius² * 0.163

16.81

13.55 = 80%

Purge Method: Bailer / Disposable Bailer / (Middleburg) / 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.

2.7 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 8.1 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
844	64.3	6.8	990	2.7	clear
847	64.3	6.8	965	5.4	
850	64.5	6.8	962	8.1	DTW = 12.22

Did well dewater? Yes (No) Gallons actually evacuated: 8.1

Sampling Time: 855 DTW = 12.22 Sampling Date: 6/17/03

Sample I.D.: ESE-2 Laboratory: Pace (Sequoia) Other _____

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: Oxys + Ethanol (8260)

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 #: 030617-MM1	Station # BP 11105
Sampler: MM	Date: 6/17/03
Well I.D.: ESE-3	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 29.80	Depth to Water: 9.30
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

20.5

13.40 = 80%

Purge Method: Bailer / Disposable Bailer / (Middleburg) / 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.

3.3 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 9.9 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
725	68.1	6.8	1032	3.5	clear, slight gas odor
730	67.3	6.7	988	7.0	
734	66.7	6.7	979	10.5	DTW = 13.24

Did well dewater? Yes (No) Gallons actually evacuated: 10.5

Sampling Time: 740 DTW = 13.24 Sampling Date: 6/17/03

Sample I.D.: ESE-3 Laboratory: Pace (Sequoia) Other _____

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: Oxy's + Ethanol (8260)

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

WELLHEAD INSPECTION CHECKLIST

Client BP 11165 Date 6/17/03

Site Address 3519 CASTRO VALLEY BLVD., CASTRO VALLEY

Job Number 030617-MM1 Technician MM

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
ESE-1	X							
ESE-2								
ESE-3		X				X(2)		X(2)
ESE-4	X							
ESE-5	X							
MW-6		X			X	X(1)		X(1)
MW-7						X(1)		X(1)

NOTES: X(1) = bolts missing, stripped

X(2) = apron cracked.

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:

BP 11105

Station #

3519 CASTRO VALLEY BLVD., CASTRO VALLEY

Station Address

Total Gallons Collected From Groundwater Monitoring Wells:

27.9

added equip. rinse water 7.0

any other adjustments —

TOTAL GALS. RECOVERED 34.9

loaded onto BTS vehicle # 12

BTS event #

time 920

date 6/17/03

030617-MM1

signature

* *

REC'D AT

BTS

time 1320

date 6/17/03

unloaded by signature

ATTACHMENT C

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 Group Environmental Management Company have been reviewed and verified by that laboratory.

Sequoia Analytical

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

1 July, 2003

Leonard Niles
URS Corporation [Arco]
500 12th Street, Suite 100
Oakland, CA 94607

RE: BP Heritage #11105, Castro Valley, CA
Sequoia Work Order: MMF0436

Enclosed are the results of analyses for samples received by the laboratory on 06/17/03 15:06. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Latonya K. Pelt

Latonya Pelt
Project Manager

CA ELAP Certificate #1210

Sequoia Analytical

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URS Corporation [Arco]	Project: BP Heritage #11105, Castro Valley, CA	MMF0436
500 12th Street, Suite 100	Project Number: N/P	**Reported:**
Oakland CA, 94607	Project Manager: Leonard Niles	07/01/03 06:48

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ESE-1	MMF0436-01	Water	06/17/03 08:25	06/17/03 15:06
ESE-2	MMF0436-02	Water	06/17/03 08:55	06/17/03 15:06
ESE-3	MMF0436-03	Water	06/17/03 07:40	06/17/03 15:06

There were no custody seals that were received with this project.

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URS Corporation [Arco]	Project: BP Heritage #11105, Castro Valley, CA	MMF0436
500 12th Street, Suite 100	Project Number: N/P	**Reported:**
Oakland CA, 94607	Project Manager: Leonard Niles	07/01/03 06:48

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
ESE-1 (MMF0436-01) Water Sampled: 06/17/03 08:25 Received: 06/17/03 15:06									
Ethanol	ND	2000	ug/l	20	3F24003	06/24/03	06/25/03	EPA 8260B	
tert-Butyl alcohol	ND	400	"	"	"	"	"	"	
Methyl tert-butyl ether	**480**	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	10	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	10	"	"	"	"	"	"	
tert-Amyl methyl ether	**18**	10	"	"	"	"	"	"	
Benzene	**140**	10	"	"	"	"	"	"	
Toluene	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Gasoline Range Organics (C6-C10)	**1300**	1000	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*115 %*	*78-129*		"	"	"	"	
ESE-2 (MMF0436-02) Water Sampled: 06/17/03 08:55 Received: 06/17/03 15:06									
Ethanol	ND	20000	ug/l	200	3F24003	06/24/03	06/25/03	EPA 8260B	
tert-Butyl alcohol	ND	4000	"	"	"	"	"	"	
Methyl tert-butyl ether	**4400**	100	"	"	"	"	"	"	
Di-isopropyl ether	ND	100	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	100	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	100	"	"	"	"	"	"	
Benzene	ND	100	"	"	"	"	"	"	
Toluene	ND	100	"	"	"	"	"	"	
Ethylbenzene	ND	100	"	"	"	"	"	"	
Xylenes (total)	ND	100	"	"	"	"	"	"	
Gasoline Range Organics (C6-C10)	**10000**	10000	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*110 %*	*78-129*		"	"	"	"	

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URS Corporation [Arco]	Project: BP Heritage #11105, Castro Valley, CA	MMF0436
500 12th Street, Suite 100	Project Number: N/P	**Reported:**
Oakland CA, 94607	Project Manager: Leonard Niles	07/01/03 06:48

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
ESE-3 (MMF0436-03) Water Sampled: 06/17/03 07:40 Received: 06/17/03 15:06									
Ethanol	ND	1000	ug/l	10	3F24003	06/24/03	06/24/03	EPA 8260B	
tert-Butyl alcohol	ND	200	"	"	"	"	"	"	
Methyl tert-butyl ether	**130**	5.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	5.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Benzene	**17**	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	**5.3**	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	5.0	"	"	"	"	"	"	
Gasoline Range Organics (C6-C10)	**520**	500	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*110 %*	*78-129*		"	"	"	"	

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URS Corporation [Arco]	Project: BP Heritage #11105, Castro Valley, CA	MMF0436
500 12th Street, Suite 100	Project Number: N/P	**Reported:**
Oakland CA, 94607	Project Manager: Leonard Niles	07/01/03 06:48

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 3F24003 - EPA 5035										
Blank (3F24003-BLK1)				Prepared & Analyzed: 06/24/03						
Ethanol	ND	100	ug/l							
tert-Butyl alcohol	ND	20	"							
Methyl tert-butyl ether	ND	0.50	"							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
tert-Amyl methyl ether	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Gasoline Range Organics (C6-C10)	ND	50	"							
Surrogate: 1,2-Dichloroethane-d4	*5.30*		"	*5.00*		*106*	*78-129*			
Laboratory Control Sample (3F24003-BS1)				Prepared & Analyzed: 06/24/03						
Methyl tert-butyl ether	11.7	0.50	ug/l	10.0		117	63-137			
Benzene	10.5	0.50	"	10.0		105	78-124			
Toluene	10.7	0.50	"	10.0		107	78-129			
Surrogate: 1,2-Dichloroethane-d4	*5.36*		"	*5.00*		*107*	*78-129*			
Laboratory Control Sample (3F24003-BS2)				Prepared & Analyzed: 06/24/03						
Methyl tert-butyl ether	7.76	0.50	ug/l	9.92		78.2	63-137			
Benzene	4.76	0.50	"	6.40		74.4	78-124			Q-LIM
Toluene	30.0	0.50	"	29.7		101	78-129			
Gasoline Range Organics (C6-C10)	356	50	"	440		80.9	70-113			
Surrogate: 1,2-Dichloroethane-d4	*5.09*		"	*5.00*		*102*	*78-129*			

Sequoia Analytical

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URS Corporation [Arco]	Project: BP Heritage #11105, Castro Valley, CA	MMF0436
500 12th Street, Suite 100	Project Number: N/P	**Reported:**
Oakland CA, 94607	Project Manager: Leonard Niles	07/01/03 06:48

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 3F24003 - EPA 5035										
Laboratory Control Sample Dup (3F24003-BSD1)				Prepared: 06/24/03 Analyzed: 06/25/03						
Methyl tert-butyl ether	10.4	0.50	ug/l	10.0		104	63-137	11.8	13	
Benzene	9.13	0.50	"	10.0		91.3	78-124	14.0	12	QR-02
Toluene	9.22	0.50	"	10.0		92.2	78-129	14.9	10	QR-02
Surrogate: 1,2-Dichloroethane-d4	*5.22*		"	*5.00*		*104*	*78-129*			
Laboratory Control Sample Dup (3F24003-BSD2)				Prepared: 06/24/03 Analyzed: 06/25/03						
Methyl tert-butyl ether	8.90	0.50	ug/l	9.92		89.7	63-137	13.7	13	QR-02
Benzene	4.69	0.50	"	6.40		73.3	78-124	1.48	12	Q-LIM
Toluene	29.8	0.50	"	29.7		100	78-129	0.669	10	
Gasoline Range Organics (C6-C10)	401	50	"	440		91.1	70-113	11.9	9	QR-02
Surrogate: 1,2-Dichloroethane-d4	*5.35*		"	*5.00*		*107*	*78-129*			
Matrix Spike (3F24003-MS1)		**Source: MMF0436-03**		Prepared & Analyzed: 06/24/03						
Methyl tert-butyl ether	188	5.0	ug/l	99.2	130	58.5	63-137			QM-07
Benzene	61.9	5.0	"	64.0	17	70.2	78-124			QM-07
Toluene	297	5.0	"	297	ND	100	78-129			
Gasoline Range Organics (C6-C10)	4510	500	"	4400	520	90.7	70-113			
Surrogate: 1,2-Dichloroethane-d4	*4.76*		"	*5.00*		*95.2*	*78-129*			
Matrix Spike Dup (3F24003-MSD1)		**Source: MMF0436-03**		Prepared & Analyzed: 06/24/03						
Methyl tert-butyl ether	227	5.0	ug/l	99.2	130	97.8	63-137	18.8	13	QR-07
Benzene	64.4	5.0	"	64.0	17	74.1	78-124	3.96	12	QM-07
Toluene	295	5.0	"	297	ND	99.3	78-129	0.676	10	
Gasoline Range Organics (C6-C10)	4410	500	"	4400	520	88.4	70-113	2.24	9	
Surrogate: 1,2-Dichloroethane-d4	*5.45*		"	*5.00*		*109*	*78-129*			

Sequoia Analytical

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URS Corporation [Arco]	Project: BP Heritage #11105, Castro Valley, CA	MMF0436
500 12th Street, Suite 100	Project Number: N/P	**Reported:**
Oakland CA, 94607	Project Manager: Leonard Niles	07/01/03 06:48

Notes and Definitions

Q-LIM	The percent recovery was outside of the control limits. The samples results may still be useful for their intended purpose.
QM-07	The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QR-02	The RPD result exceeded the control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QR-07	The RPD was outside control limits. The results may still be useful for their intended purpose.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Chain of Custody Record

bp

Project Name 030617-MM1
BP BU/GEM CO Portfolio:
BP Laboratory Contract Number:
Date: 6/17/03
Requested Due Date (mm/dd/yy) MMF 0936

On-site Time: 615 Temp: 60
Off-site Time: 920 Temp: 66
Sky Conditions: cloudy
Meteorological Events:
Wind Speed: Direction:

Send To:	
Lab Name:	SEQUOIA
Lab Address:	885 Jarvis Dr.
	Morgan Hill, CA 95037
Lab PM:	Latonya Pelt
Tele/Fax:	408-776-9600 / 408-782-6308
Report Type & QC Level:	Send EDF Reports
BP/GEM Account No.:	400-6-21124

BP/GEM Facility No.:	
BP/GEM Facility Address:	3519 Castro Valley Blvd, Castro Valley, CA
Site ID No.	11105
Site Lat/Long:	
California Global ID #:	T0600100920
BP/GEM PM Contact:	Scott Hooton
Address:	295 SW 41st St., Bldg. 13 Ste N
	Renton, WA 98055
Tele/Fax:	425-251-0689/425-251-0736

Consultant/Contractor:	URS
Address:	500 12th St., Ste. 200
	Oakland, CA 94609-4014
e-mail EDD:	syed_rehan@urscorp.com
Consultant/Contractor Project No.:	
Consultant Tele/Fax:	510-874-1720 / 510-874-3268
Consultant/Contractor PM:	Leonard Niles
Invoice to:	Consultant/Contractor or BP/GEM (Circle one)
BP/GEM Work Release No:	

Lab Bottle Order No:

Item No.	Sample Description	Time	Matrix: Soil/Solid	Water/Liquid	Sediments	Air	Laboratory No.	No. of containers	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	TPH-G / BTEX (8015 / 8021) (8260)	TPH-D (8015)	MTBE (8021)	MTBE (8260)	MTBE, TAME, ETBE, DIPE, TBA (8260)	1,2-DCA & EDB (8260)	Ethanol (8260)	Sample Point Lat/Long and Comments
1	ESE-1	825		X			01	3				X	X				X		X	
2	ESE-2	855		X			02	3				X	X				X		X	
3	ESE-3	740		X			03	3				X	X				X		X	
4																				
5																				
6																				
7																				
8																				
9																				
10																				

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Michael McNamara						
Sampler's Company: Blaine Tech Services	BTS	6/18/03	1359		6/18/03	1359
Shipment Date:		6/17/03	1506		6/17/03	15:06
Shipment Method:						
Shipment Tracking No:						

Special Instructions: Address Invoice to BP/GEM but send to URS for approval

Custody Seals In Place Yes ___ No X Temperature Blank Yes ___ No X Cooler Temperature on Receipt 6 °F/C Trip Blank Yes ___ No X

Distribution: White Copy - Laboratory / Yellow Copy - BP/GEM / Pink Copy - Consultant/Contractor

BP COC Rev. 1 2/5/02

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: BP
REC. BY (PRINT): [signature]
WORKORDER: MMF0434

DATE REC'D AT LAB: 6/17/03
TIME REC'D AT LAB: 1515.06
DATE LOGGED IN: 6-18-03

Drinking water for regulatory purposes: YES / (NO)
Wastewater for regulatory purposes: YES / (NO)

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present / (Absent) Intact / Broken*	01	A-C	ESE-1	(3) voas	HCl	L	6/17/03	
	↓	↓	↓ 2	↓	↓	↓	↓	
2. Chain-of-Custody (Present) / Absent*	↓	↓	↓ 3	↓	↓	↓	↓	
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 custody reports, traffic reports and sample labels agree? (Yes) / No*								
10. Sample received within hold time: (Yes) / No*								
11. Proper Preservatives used: (Yes) / No*								
12. Temp Rec. at Lab: 6 °C Is temp 4 +/-2°C? (Yes) / No**								

(Acceptance range for samples requiring thermal pres.)

**Exception (if any): Metals / DFF (Direct From Field) or Problem COC

6/17/03

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

ATTACHMENT D

EDCC REPORT AND EDF/GEOWELL SUBMITTAL CONFIRMATION

Error Summary Log

07/14/03

EDF 1.2i All files present in deliverable.

Laboratory:	Sequoia Analytical Laboratories, Inc., Morgan Hill, CA
Project Name:	BP Heritage #11105, Castr
Work Order Number:	MMF0436
Global ID:	T0600100920
Lab Report Number:	MMF0436070120030648

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run Sub
MMF0436070120 030648	ESE-1	MMF043601	W	CS	8260+OX	SW5035	06/17/03	06/24/03	06/25/03	3F24003	1
MMF0436070120 030648	ESE-2	MMF043602	W	CS	8260+OX	SW5035	06/17/03	06/24/03	06/25/03	3F24003	1
MMF0436070120 030648	ESE-3	MMF043603	W	CS	8260+OX	SW5035	06/17/03	06/24/03	06/24/03	3F24003	1
		3F24003BSD1	WQ	BD1	8260+OX	SW5035	/ /	06/24/03	06/25/03	3F24003	1
		3F24003BSD2	WQ	BD2	8260+OX	SW5035	/ /	06/24/03	06/25/03	3F24003	1
		3F24003BS1	WQ	BS1	8260+OX	SW5035	/ /	06/24/03	06/24/03	3F24003	1
		3F24003BS2	WQ	BS2	8260+OX	SW5035	/ /	06/24/03	06/24/03	3F24003	1
		3F24003BLK1	WQ	LB1	8260+OX	SW5035	/ /	06/24/03	06/24/03	3F24003	1
		3F24003MS1	W	MS1	8260+OX	SW5035	/ /	06/24/03	06/24/03	3F24003	1
		3F24003MSD1	W	SD1	8260+OX	SW5035	/ /	06/24/03	06/24/03	3F24003	1

EDFSAMP: Error Summary Log

07/14/03

Error type	Logcode	Projname	Npdlwo	Sampid	Matrix
There are no errors in this data file					

EDFTEST: Error Summary Log

07/14/03

Error type	Labsampid	Qccode	Anmcode	Exmcode	Anadate	Run number
There are no errors in this data file					/ /	0

EDFRES: Error Summary Log

07/14/03

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	3F24003MS1	MS1	W	8260+OX	PR	06/24/03	1	GROC6C10
Warning: extra parameter	3F24003MSD1	SD1	W	8260+OX	PR	06/24/03	1	GROC6C10
Warning: extra parameter	MMF043601	CS	W	8260+OX	PR	06/25/03	1	GROC6C10
Warning: extra parameter	MMF043601	CS	W	8260+OX	PR	06/25/03	1	XYLENES
Warning: extra parameter	MMF043602	CS	W	8260+OX	PR	06/25/03	1	GROC6C10
Warning: extra parameter	MMF043602	CS	W	8260+OX	PR	06/25/03	1	XYLENES
Warning: extra parameter	MMF043603	CS	W	8260+OX	PR	06/24/03	1	GROC6C10
Warning: extra parameter	MMF043603	CS	W	8260+OX	PR	06/24/03	1	XYLENES
Warning: extra parameter	3F24003BLK1	LB1	WQ	8260+OX	PR	06/24/03	1	GROC6C10
Warning: extra parameter	3F24003BLK1	LB1	WQ	8260+OX	PR	06/24/03	1	XYLENES
Warning: extra parameter	3F24003BS2	BS2	WQ	8260+OX	PR	06/24/03	1	GROC6C10
Warning: extra parameter	3F24003BSD2	BD2	WQ	8260+OX	PR	06/25/03	1	GROC6C10

EDFQC: Error Summary Log

07/14/03

Error type	Lablotctl	Anmcode	Parlabel	Qccode	Labqcid
There are no errors in this data files					

EDFCL: Error Summary Log

07/14/03

Error type	Clrevdate	Anmcode	Exmcode	Parlabel	Clcode
There are no errors in this data file	/ /				

AB2886 Electronic Delivery

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

Your EDF file has been succcessfully uploaded!

Confirmation Number: 2530300021
Date/Time of Submittal: 7/14/2003 9:51:25 AM
Facility Global ID: T0600100920
Facility Name: BP
Submittal Title: Second Quarter 2003 Groundwater Monitoring Report Site #11105
Submittal Type: GW Monitoring Report

Logged in as URSCORP-OAKLAND (CONTRACTOR) CONTACT SITE ADMINISTRATOR.

AB2886 Electronic Delivery

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Submittal Title:	**Second Quarter 2003 Geo Well Site #11105**
Submittal Date/Time:	**7/14/2003 9:52:29 AM**
Confirmation Number:	**8810246109**

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Confirmation Number: 8468998312
Date/Time of Submittal: 6/18/2003 8:02:54 PM
Facility Global ID: T0600100920
Facility Name: BP
Submittal Title: First Quarter 2003 Groundwater Monitoring Report
Submittal Type: GW Monitoring Report

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Submittal Title:	**First Quarter 2003 Groundwater Monitoring Report. Site #11105**
Submittal Date/Time:	**6/18/2003 8:04:23 PM**
Confirmation Number:	**2166813492**

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Confirmation Number: 6606598436
Date/Time of Submittal: 6/18/2003 8:06:24 PM
Facility Global ID: T0600100920
Facility Name: BP
Submittal Title: Fourth Quarter 2002 Groundwater Monitoring Report
Submittal Type: GW Monitoring Report

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Submittal Title:	**Fourth Quarter 2002 Groundwater Monitoring Report. Site #11105**
Submittal Date/Time:	**6/18/2003 8:07:35 PM**
Confirmation Number:	**8092014908**

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Confirmation Number: 3803958237
Date/Time of Submittal: 6/19/2003 11:04:47 AM
Facility Global ID: T0600100920
Facility Name: BP
Submittal Title: Third Quarter 2002 Groundwater Monitoring Report. Site # 11105
Submittal Type: GW Monitoring Report

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Submittal Title:	**Third Quarter 2002 Groundwater Monitoring Report. Site # 11105**
Submittal Date/Time:	**6/19/2003 11:07:16 AM**
Confirmation Number:	**1023548722**

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Submittal Title:	**Second Quarter 2002 Groundwater Monitoring Report. Site #11105**
Submittal Date/Time:	**6/30/2003 10:26:58 AM**
Confirmation Number:	**6957656681**

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