URS

February 24, 2003

Mr. Amir Gholami
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Fourth Quarter 2002 Groundwater Monitoring Report
ARCO Service Station #5387
20200 Hesperian Blvd
Hayward, California
URS Project #38486130

Dear Mr. Gholami:

On behalf of Atlantic Richfield Company (ARCO – an affiliated company of the Group Environmental Management Company), URS Corporation (URS) is submitting the *Fourth Quarter 2002 Groundwater Monitoring Report* for ARCO Service Station #5387, located at 20200 Hesperian Boulevard, Hayward, California.

If you have any questions regarding this submission, please call (510) 874-3280.

Sincerely,

URS CORPORATION

Scott Robinson
Project Manager

REGISTERED PROFESSIONAL ENGINEER
AMY BRECKENRIDGE
No. C057141
Exp 12/31/05
CIVIL
STATE OF CALIFORNIA

Amy P. Brekenridge, P.E.
Portfolio Manager

Enclosure: Fourth Quarter 2002 Groundwater Monitoring Report

cc: Mr. Paul Supple, ARCO, PO Box 6549, Moraga, CA 94570

URS Corporation
500 12th Street, Suite 200
Oakland, CA 94607-4014
Tel: 510.893.3600
Fax: 510.874.3268

Atlantic Richfield Company
(a BP affiliated company)

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

February 27, 2003

Re: Fourth Quarter 2002 Groundwater Monitoring Report
ARCO Station #5387
20200 Hesperian Blvd
Hayward, CA

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

REPORT

FOURTH QUARTER 2002 GROUNDWATER MONITORING

ARCO SERVICE STATION #5387
20200 HESPERIAN BOULEVARD
HAYWARD, CALIFORNIA

Prepared for
Atlantic Richfield Company

February 24, 2003

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

38486130

Date: February 24, 2003

Quarter: 4Q 02

ATLANTIC RICHFIELD COMPANY QUARTERLY GROUNDWATER MONITORING REPORT

Former Facility No.:	5387	Address:	20200 Hesperian Boulevard, Hayward, California
ARCO Environmental Engineer:			Paul Supple
Consulting Co./Contact Person:			URS Corporation / Scott Robinson
Consultant Project No.:			38486130
Primary Agency:			ACHCSA

WORK PERFORMED THIS QUARTER (Fourth – 2002):

1. Prepared third quarter 2002 groundwater monitoring report.
2. Performed fourth quarter 2002 groundwater monitoring event.

WORK PROPOSED FOR NEXT QUARTER (First – 2003):

1. Submit third quarter 2002 groundwater monitoring report.
2. Prepare and submit fourth quarter 2002 groundwater monitoring report.
3. Perform first quarter 2003 groundwater monitoring event.

Current Phase of Project:	GW monitoring/sampling
Frequency of Groundwater Sampling:	Wells MW-1 through MW-3, A-4 through A-10, AR-1 and AR-2 quarterly
Frequency of Groundwater Monitoring:	Quarterly
Is Free Product (FP) Present On-Site:	No
Current Remediation Techniques:	Natural Attenuation
Approximate Depth to Groundwater:	10.38 ft (MW-3) to 13.97 ft (A-7)
Groundwater Gradient:	West
	0.003 feet per foot

DISCUSSION:

TPH-g was detected in two of the twelve wells sampled this quarter (MW-1 and MW-2) at concentrations of 998 micrograms per liter (µg/L) and 1,770 µg/L, respectively. Benzene was detected in one well (MW-2) at a concentration of 8.08 µg/L. MTBE was detected in three wells at concentrations ranging from 26.6 µg/L in well AR-1 to 855 µg/L in well MW-1.

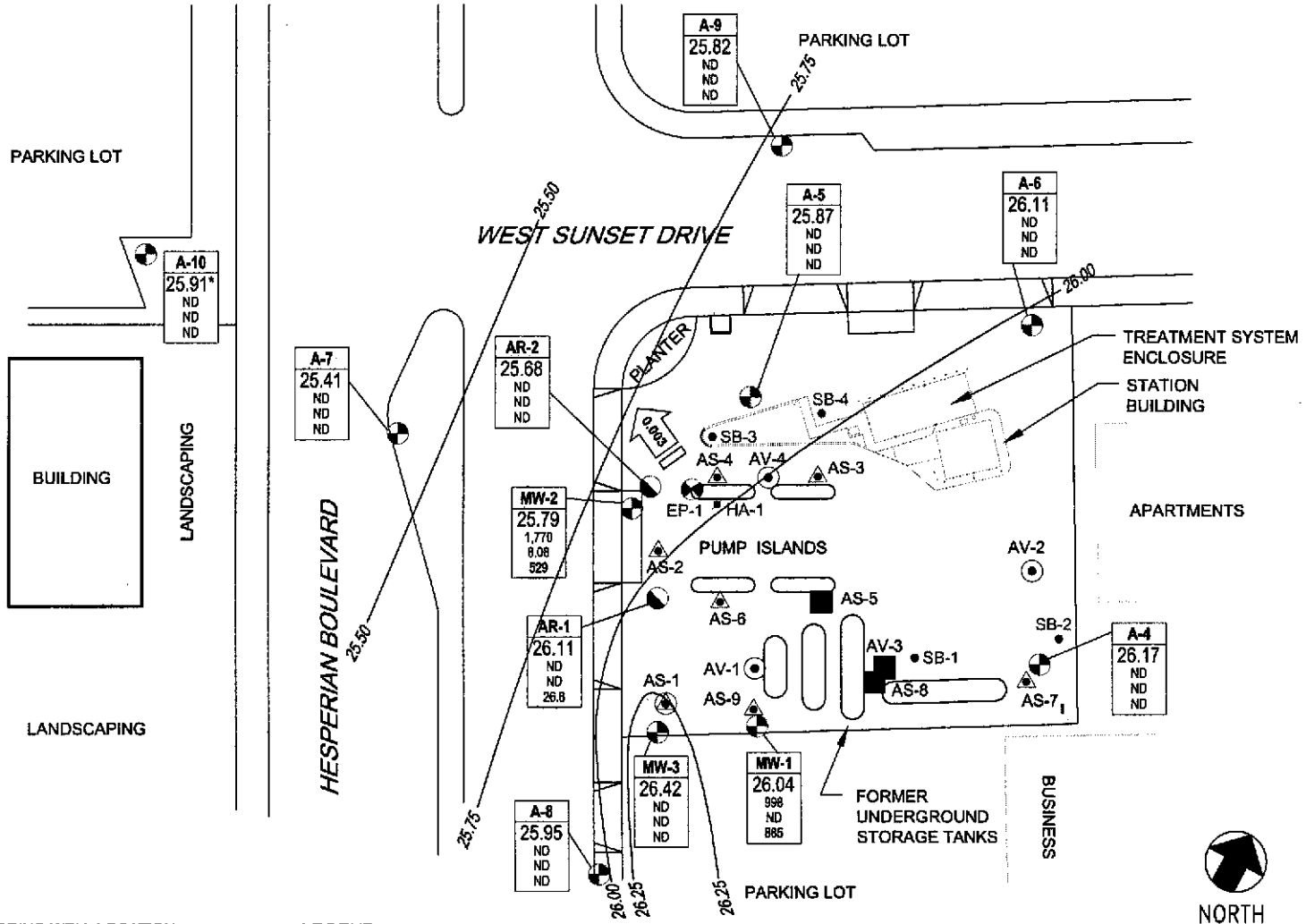
RECOMMENDATIONS:

Based on consistently low or non-detectable hydrocarbon concentrations for over 2 years, URS recommends reducing the sampling frequency in wells A-4, A-5, A-7, A-8, A-9, and AR-1 from quarterly to semi-annually. In addition, URS recommends reducing the sampling frequency from quarterly to annually in wells MW-3, A-6, A-10, and AR-2, based on the above criteria and the well locations with respect to other wells in the monitoring network.

ATTACHMENTS:

- Table 1 – Groundwater Elevation and Analytical Data
- Table 2 – Summary of Groundwater Flow Direction and Gradient
- Figure 1 – Groundwater Elevation Contour and Analytical Summary Map – December 9, 2002
- Attachment A – Field Procedures and Field Data Sheets
- Attachment B – Laboratory Procedures, Certified Analytical Reports and Chain-of-Custody Records
- Attachment C – EDCC Report and EDF/Geowell Submittal Confirmation

X:\x_env\waste\BP GEM\Sites\Scott Robinson\Paul Supple\5387\Reports\Monitoring\Qtr. 4, 2002\Drawings\GWEC-AS_12-9.dwg



LEGEND:

- A-4 — ABANDONED MONITORING WELL LOCATION
- A-4 — MONITORING WELL LOCATION
- AR-1 — GROUNDWATER EXTRACTION WELL LOCATION
- AV-1 — SOIL VAPOR EXTRACTION WELL LOCATION
- AS-2 — AIR SPARGE WELL LOCATION
- AS-1 — DUAL AIR SPARGE/SOIL VAPOR EXTRACTION WELL LOCATION
- HA-1 — AIR SPARGE WELL LOCATION
- SB-3 — DUAL AIR SPARGE/SOIL VAPOR EXTRACTION WELL LOCATION
- EP-1 — EXTRACTION POINT
- 26.00 — APPOXIMATE GROUNDWATER ELEVATION CONTOUR (FEET ABOVE MSL)
- 0.003 — GROUNDWATER FLOW DIRECTION AND GRADIENT (FEET/FOOT)

Well
ELEV
TPH-g
Benzene
MTBE

- WELL DESIGNATION
- GROUNDWATER ELEVATION
- CONCENTRATIONS OF TPH-g, BENZENE AND MTBE IN MICROGRAMS PER LITER (µg/L)
- * NOT USED IN GROUNDWATER ELEVATION CONTOURS (SAMPLED ON 12/19/02)
- ND NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMITS

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

URS

Project No. 38486033

ARCO Service Station 5387
20200 Hesperian Boulevard
Hayward, California

GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP
Fourth Quarter 2002 (December 9, 2002)

FIGURE
1

Table 1
Groundwater Analytical Data

ARCO Service Station #5387
20200 Hesperian Blvd.
Hayward, California

Well Number	Date Sampled		Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
AR-1	09/14/92		38.11	15.21	22.90	820	67	<1.0	8.8	6.7	---
	11/12/92			15.36	22.75	140	66	<0.5	4.3	3.7	---
	02/11/93			12.81	25.30	360	190	<2.5	8.6	<2.5	---
	04/14/93			11.77	26.34	420	240	5.2	30	8.7	---
	08/12/93			13.55	24.56	370	150	<2	11	<2	---
	10/26/93			13.98	24.13	240	98	<2	11	<2	---
	02/17/94		37.46	12.15	25.31	4,700	1,100	<10	140	26	---
	05/03/94			12.03	25.43	620	130	1.3	48	4.3	---
	08/17/94		37.33	12.92	24.41	3,600	630	<5	200	12	---
	11/18/94			12.41	24.92	12,100	720	6.1	337	15	---
	09/26/95		37.46	11.34	26.12	ND	8.3	ND	ND	ND	---
	12/06/95			11.87	25.59	120	20	ND	20	0.6	---
	02/14/96			10.48	26.98	ND	ND	ND	ND	0.52	---
	10/29/96			11.80	25.66	ND	ND	0.99	ND	ND	---
	01/29/97			11.25	26.21	<50	0.41	<0.3	<0.3	<0.3	<20
	04/30/97			12.24	25.22	<20	<0.3	<0.3	<0.3	<0.5	<50
	07/31/97			10.80	26.66	<50	<0.3	<0.3	<0.3	<0.5	<20
	10/22/97			11.90	25.56	<50	<0.3	<0.3	<0.3	<0.5	<20
	01/28/98			11.20	26.26	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98			12.20	25.26	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98			9.10	28.36	<50	<0.3	<0.3	<0.3	<0.5	<5
	10/22/98			9.80	27.66	270	2.1	<0.3	3.6	<0.5	190
	01/13/99			10.10	27.36	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/29/99			11.35	26.11	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/15/02			---	---	<50	<0.5	<0.5	<0.5	1.1	2.9
	04/24/02			---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.6*
	09/23/02	P		11.26	26.20	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.50	20.2
	12/09/02	**P**		**11.35**	**26.11**	**ND<50.0**	**ND<0.500**	**ND<0.500**	**ND<0.500**	**ND<1.00**	**26.6**

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Well Number	Date Sampled		Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
AR-2	03/30/93		38.39	11.53	26.86	390	4.1	1.6	<0.5	47	---
	04/14/93			11.87	26.52	310	18	<0.5	0.67	36	---
	08/12/93			13.59	24.80	130	16	<0.5	1.7	0.57	---
	10/26/93			14.25	24.14	110	15	<0.5	1.8	<0.5	---
	02/17/94			12.76	25.22	130	2.9	<0.5	15	0.8	---
	05/03/94			12.60	25.38	<50	<0.5	<0.5	<0.5	<0.5	---
	08/17/94		38.18	13.86	24.32	3,000	140	140	220	91	---
	11/18/94			13.33	24.85	623	10.5	10.5	27.9	8.0	---
	09/26/95		37.98	11.67	26.31	ND	ND	ND	ND	ND	---
	12/06/95			12.32	25.66	320	12	12	23	2.1	---
	02/14/96			10.74	27.24	ND	ND	ND	ND	0.76	---
	10/29/96			11.95	26.03	ND	ND	ND	ND	ND	---
	01/29/97			11.35	26.63	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/30/97			12.15	25.83	<20	<0.3	<0.3	<0.3	<0.5	<50
	07/31/97			11.20	26.78	<50	<0.3	<0.3	<0.3	<0.5	<20
	10/22/97			12.14	25.84	<50	<0.3	<0.3	<0.3	<0.5	<20
	01/28/98			10.05	27.93	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98			12.10	25.88	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98			9.50	28.48	<50	<0.3	<0.3	<0.3	<0.5	<5
	10/22/98			10.45	27.53	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/13/99			10.50	27.48	<50	<0.3	0.40	<0.3	0.53	<20
	04/29/99			11.48	26.50	<50	<0.3	<0.3	<0.3	0.82	<5
	01/15/02			---	---	<50	<0.5	<0.5	<0.5	<0.5	17
	04/24/02			---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	39*
	09/23/02	P		12.22	25.76	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.50	4.43
	12/09/02	**P**		**12.30**	**25.68**	**ND<50.0**	**ND<0.500**	**ND<0.500**	**ND<0.500**	**ND<1.00**	**ND<5.00**

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MW-1	08/08/86		38.36	11.25	27.11	7,040	132	8.7	439	230	---
	12/24/91			16.12	22.24	2,200	190	8.5	6.9	2.6	---
	03/10/92			13.34	25.02	2,800	270	29	56	39	---
	06/09/92			14.12	24.24	2,900	960	27	99	63	---
	09/14/92			15.34	23.02	2,600	450	<5.0	45	21	---
	11/12/92			15.46	22.90	1,600	310	7.2	22	8.9	---
	02/11/93			11.95	26.41	4,000	510	47	200	91	---
	04/14/93			11.65	26.71	1,700	260	20	100	70	---
	08/12/93			12.93	25.43	830	60	3.8	39	3.6	---
	10/26/93			14.13	24.23	8,800	140	<10	41	<10	---
	02/17/94		37.26	11.86	25.40	1,200	130	12	54	58	---
	05/03/94			11.58	25.68	---	---	---	---	---	---
	08/17/94		37.33	12.78	24.55	3,900	86	5.1	78	9.4	---
	11/18/94			12.31	25.02	6,350	112	8.4	107	35	---
	09/26/95		37.26	11.26	26.00	ND	ND	ND	ND	ND	---
	12/06/95			12.16	25.10	4,100	0.86	0.46	0.38	0.92	---
	02/14/96			8.53	28.73	ND	ND	0.56	ND	0.82	---
	10/29/96			10.23	27.03	130	ND	ND	ND	ND	---
	01/29/97			8.15	29.11	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/30/97			8.05	29.21	<20	<0.3	<0.3	<0.3	<0.5	<50
	07/31/97			10.50	26.76	<50	<0.3	<0.3	<0.3	<0.5	<20
	10/22/97			11.15	26.11	<50	<0.3	<0.3	<0.3	<0.5	<20
	01/28/98			4.95	32.31	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98			8.10	29.16	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98			8.02	29.24	<50	<0.3	<0.3	<0.3	<0.5	40
	10/22/98			9.70	27.56	230	0.43	1.9	0.99	0.99	33
	01/13/99			9.60	27.66	<50	0.43	<0.3	<0.3	<0.5	<20
	04/29/99			8.05	29.21	<50	<0.3	<0.3	<0.3	<0.5	^31/17
	01/15/02			---	---	<50	<0.05	<0.5	<0.5	<0.5	21
	04/24/02			---	---	160	1.5	ND<0.50	ND<0.50	ND<0.50	770*
	09/23/02	(a)		NM	NM	NS	NS	NS	NS	NS	NS
	12/09/02	**P**		**11.22**	**26.04**	**998**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**1.37 (b)**	**855(d)/ 1310***

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20200 Hesperian Blvd.
Hayward, California

Well Number	Date Sampled		Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
MW-2	08/08/86		38.58	11.62	26.96	1,910	20.1	2.8	1.8	—	—
	12/24/91			16.50	22.08	23,000	1,500	1,100	480	1,400	—
	03/10/92			13.50	25.08	210,000	44,000	3,900	1,700	5,800	—
	06/09/92			14.52	24.06	33,000	2,300	370	780	2,600	—
	09/14/92			15.78	22.80	16,000	3,700	10	470	1,000	—
	11/12/92			15.98	22.60	16,000	3,800	86	470	910	—
	02/11/93			12.27	26.31	27,000	3,500	720	1,600	380	—
	04/14/93			12.01	26.57	27,000	3,500	220	2,200	5,100	—
	08/12/93			13.81	24.77	16,000	1,600	27	1,300	1,200	—
	10/26/93			14.53	24.05	12,000	1,200	<25	510	330	—
	02/17/94			12.81	25.77	15,000	1,800	21	850	540	—
	05/03/94			12.63	25.95	—	—	—	—	—	—
	08/17/94		37.99	13.69	24.30	14,000	850	13	640	270	—
	11/18/94		38.06	13.18	24.88	14,900	640	3.4	532	156	—
	09/26/95		37.99	12.23	25.76	5,100	40	25	2.5	18	—
	12/06/95			12.82	25.17	810	34	23	11	11	—
	02/14/96			10.87	27.12	420	0.75	0.54	0.64	0.53	—
	10/29/96			12.95	25.04	670	1.7	1.3	0.6	0.8	—
	01/29/97			11.15	26.84	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/30/97			11.09	26.90	<20	<0.3	<0.3	<0.3	<0.5	<50
	07/31/97			11.70	26.29	330	<0.3	0.58	0.53	<0.5	<20
	10/22/97			11.05	26.94	<50	<0.3	<0.3	<0.3	<0.5	<20
	01/28/98			9.50	28.49	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98			11.15	26.84	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98			10.20	27.79	78	<0.3	<0.3	<0.3	<0.5	97
	10/22/98			11.10	26.89	270	0.37	2.0	0.91	0.73	26
	01/13/99			11.10	26.89	650	5.8	1.0	1.4	1.1	<20
	04/29/99			11.05	26.94	<50	<0.3	<0.3	<0.3	<0.5	^23/16
	01/15/02			---	---	1,200	15	4.5	<0.5	<0.5	190
	04/24/02			---	---	1,300	18	ND<10	ND<10	ND<10	170*
	09/23/02	P		12.15	25.84	1,440	11.2	0.730	ND<0.500	ND<1.50	228
	12/09/02	**P**		**12.20**	**25.79**	**1,770**	**8.08**	**0.694**	**2.47**	**3.79 (b)**	**529(d)/ 902***

Table 1
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ARCO Service Station #5387
20200 Hesperian Blvd.
Hayward, California

Well Number	Date Sampled		Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
MW-3	08/08/86		37.77	10.61	27.16	7,450	510	549	409	1,380	---
	12/24/91			15.60	22.17	6,800	450	10	610	45	---
	03/10/92			12.90	24.87	11,000	2,500	75	400	560	---
	06/09/92			13.60	24.17	16,000	2,000	69	1,300	2,600	---
	09/14/92			14.78	22.99	14,000	630	<50	1,500	2,400	---
	11/12/92			14.92	22.85	7,400	400	<25	860	330	---
	02/11/93			11.65	26.12	8,600	580	<20	710	300	---
	04/14/93			11.16	26.61	6,900	300	8.8	580	99	---
	08/12/93			12.82	24.95	3,400	56	<5	190	<5	---
	10/26/93			13.60	24.17	2,900	42	<10	76	<10	---
	02/17/94		36.80	11.53	25.27	3,100	160	<10	36	8.6	---
	05/03/94			11.36	25.44	2,300	44	<2.5	8.0	<2.5	---
	08/17/94		36.87	12.38	24.49	1,900	7.0	<9.5	4.4	<5	---
	11/18/94			11.93	24.94	909	1.1	<0.5	0.9	4.0	---
	09/26/95		36.80	10.96	25.84	410	1.3	1.9	2.3	3.3	---
	12/06/95			11.56	25.24	---	0.9	4.6	3.0	4.3	---
	02/14/96			7.47	29.33	99	ND	0.49	0.46	ND	---
	10/29/96			9.80	27.00	250	0.7	0.6	ND	ND	---
	01/29/97			7.50	29.30	170	<0.3	<0.3	<0.3	<0.5	<20
	04/30/97			12.10	24.70	<20	<0.3	<0.3	<0.3	<0.5	<50
	07/31/97			9.90	26.90	<50	<0.3	<0.3	<0.3	<0.5	<20
	10/22/97			12.10	24.70	<50	<0.3	<0.3	<0.3	<0.5	<20
	01/28/98			7.50	29.30	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98			12.30	24.50	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98			8.30	28.50	<50	<0.3	<0.3	<0.3	<0.5	<5
	10/22/98			9.10	27.70	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/13/99			9.50	27.30	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/29/99			5.93	30.87	<50	<0.3	0.35	<0.3	<0.5	<5
	01/15/02			---	---	<50	<0.5	<0.5	<0.5	<0.5	7.9
	04/24/02			---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50*
	09/23/02	P		10.30	26.50	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.50	ND<0.500
	12/09/02	**P**		**10.38**	**26.42**	**ND<50.0**	**ND<0.500**	**ND<0.500**	**ND<0.500**	**ND<1.00**	**ND<5.00**

Table 1
Groundwater Analytical Data

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20200 Hesperian Blvd.
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Well Number	Date Sampled		Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
A-4	03/06/91		39.46	13.22	26.24	34,000	11,000	870	2,500	2,100	---
	12/24/91		39.86	17.60	22.26	1,900	29	1.9	25	29	---
	03/10/92			14.76	25.10	7,400	37	<0.60	11	73	---
	06/09/92			15.63	24.23	4,500	3.2	1.5	37	16	---
	09/14/92			16.83	23.03	1,300	<2.5	2.5	61	6.8	---
	11/12/92			16.97	22.89	610	7.2	0.98	34	0.97	---
	02/11/93			13.43	26.43	740	2.4	<0.5	5.0	3.5	---
	04/14/93			13.06	26.80	380	<0.5	<0.5	10	1.6	---
	08/12/93			14.94	24.92	1,200	0.93	<0.5	0.91	<0.5	---
	10/26/93			15.52	24.34	160	<0.5	<0.5	1.0	<0.5	---
	02/17/94		39.46	14.02	25.44	320	0.5	<0.5	28	0.9	---
	05/03/94			13.85	25.61	130	<0.5	<0.5	1.1	<0.5	---
	08/17/94		39.53	14.95	39.53	62	34.58	<0.5	<0.5	<0.5	---
	11/18/94			14.46	25.07	98	1.3	0.6	<0.5	<0.5	---
	12/06/95			13.82	25.71	ND	0.6	ND	ND	ND	---
	02/14/96			11.24	28.29	ND	ND	2.3	ND	0.71	---
	10/29/96			13.50	26.03	140	ND	ND	ND	ND	---
	01/29/97			12.65	26.88	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/30/97			13.97	25.56	<20	<0.3	<0.3	<0.3	<0.5	<50
	07/31/97			12.70	26.83	<50	<0.3	<0.3	<0.3	<0.5	<20
	10/22/97			13.95	25.58	<50	<0.3	<0.3	<0.3	<0.5	<20
	01/28/98			11.90	27.63	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98			13.92	25.61	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98			10.80	28.73	<50	<0.3	<0.3	<0.3	<0.5	<5
	10/22/98			12.60	26.93	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/13/99			12.60	26.93	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/29/99			12.61	26.92	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/15/02			---	---	<50	<0.5	<0.5	<0.5	<0.5	6.2
	04/24/02			---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50*
	09/23/02	(a)		NM	NM	NS	NS	NS	NS	NS	NS
	12/09/02	**P**		**13.36**	**26.17**	**ND<50.0**	**ND<0.500**	**ND<0.500**	**ND<0.500**	**ND<1.00**	**ND<5.00**

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Well Number	Date Sampled		Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
A-5	12/24/91		38.94	16.85	22.09	1,600	21	<0.30	32	52	---
	03/10/92			13.83	25.11	1,000	1.6	<0.30	43	100	---
	06/09/92			14.91	24.03	680	34	<1.5	14	16	---
	09/14/92			16.14	22.80	770	12	<0.30	51	65	---
	11/12/92			16.35	22.59	520	3.0	<2.5	29	36	---
	02/11/93			13.21	25.73	150	1.6	0.96	5.1	1.5	---
	04/14/93			12.97	25.97	190	5.4	<0.5	1.5	0.97	---
	08/12/93			14.12	24.82	230	1.7	<0.5	5.3	0.94	---
	10/26/93			14.72	24.22	190	2.8	<0.5	5.5	2.0	---
	02/17/94		38.47	13.20	25.27	340	<0.5	<0.5	13	2.9	---
	05/03/94			13.08	25.39	170	1.4	<0.5	4.0	1.9	---
	08/17/94		38.54	14.18	24.36	270	0.6	<0.5	7.3	1.1	---
	11/18/94			13.73	24.81	338	---	<0.5	4.6	<0.5	---
	09/26/95		38.47	12.44	26.03	ND	0.63	1.1	ND	1.2	---
	12/06/95			12.92	25.55	ND	ND	ND	ND	ND	---
	02/14/96			10.76	27.71	ND	ND	2.0	ND	1.1	---
	10/29/96			12.35	26.12	ND	ND	ND	ND	ND	---
	01/29/97			10.85	27.62	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/30/97			13.56	24.91	<20	<0.3	<0.3	<0.3	<0.5	<50
	07/31/97			11.80	26.67	<50	<0.3	<0.3	<0.3	<0.5	<20
	10/22/97			12.20	26.27	<50	<0.3	<0.3	<0.3	<0.5	<20
	01/28/98			10.12	28.35	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98			13.50	24.97	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98			10.20	28.27	<50	<0.3	<0.3	<0.3	<0.5	<5
	10/22/98			11.50	26.97	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/13/99			10.15	28.32	<50	0.32	0.38	<0.3	<0.5	<20
	04/29/99			11.50	26.97	<50	<0.3	<0.3	<0.3	0.58	<5
	01/15/02			---	---	<50	<0.5	<0.5	<0.5	<0.5	5.0
	04/24/02			---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.2*
	09/23/02	P		12.55	25.92	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.50	1.30
	12/09/02	**P**		**12.60**	**25.87**	**ND<50.0**	**ND<0.500**	**ND<0.500**	**ND<0.500**	**ND<1.00**	**ND<5.00**

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Well Number	Date Sampled		Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
A-6	12/24/91		39.07	16.88	22.19	<30	<0.3	<0.3	<0.3	<0.3	---
	03/10/92			13.73	25.34	<30	<0.3	<0.3	<0.3	<0.3	---
	06/09/92			14.95	24.12	<30	<0.3	<0.3	<0.3	<0.3	---
	09/14/92			16.20	22.87	<50	<0.5	<0.5	<0.5	<0.5	---
	11/12/92			16.35	22.72	<50	<0.5	<0.5	<0.5	<0.5	---
	02/11/93			13.04	26.03	<50	<0.5	<0.5	<0.5	<0.5	---
	04/14/93			12.23	26.84	<50	<0.5	<0.5	<0.5	<0.5	---
	08/12/93			14.18	24.89	<50	<0.5	<0.5	<0.5	<0.5	---
	10/26/93			14.85	24.22	<50	<0.5	<0.5	<0.5	<0.5	---
	05/03/94			13.66	25.41	<50	<0.5	<0.5	<0.5	<0.5	---
	08/17/94		38.78	14.34	24.44	<50	<0.5	<0.5	<0.5	<0.5	---
	11/18/94			13.76	25.02	<50	<0.5	<0.5	<0.5	<0.5	---
	09/26/95			12.56	26.22	ND	ND	ND	ND	ND	---
	12/06/95			13.18	25.60	ND	ND	ND	ND	ND	---
	02/14/96			12.46	26.32	ND	ND	ND	ND	ND	---
	10/29/96			12.40	26.38	50	ND	ND	ND	ND	---
	01/29/97			13.85	24.93	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/30/97			12.49	26.29	<20	<0.3	<0.3	<0.3	<0.5	<50
	07/31/97			12.10	26.68	<50	<0.3	<0.3	<0.3	<0.5	<20
	10/22/97			15.20	23.58	<50	<0.3	<0.3	<0.3	<0.5	<20
	01/28/98			13.80	24.98	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98			12.45	26.33	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98			10.30	28.48	<50	<0.3	<0.3	<0.3	<0.5	<5
	10/22/98			11.10	27.68	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/13/99			10.40	28.38	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/29/99			13.80	24.98	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/15/02			---	---	<50	<0.5	<0.5	<0.5	<0.5	5.7
	04/24/02			---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50*
	09/23/02	P		12.61	26.17	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.50	ND<0.500
	12/09/02	**P**		**12.67**	**26.11**	**ND<50.0**	**ND<0.500**	**ND<0.500**	**ND<0.500**	**ND<1.00**	**ND<6.00**

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Well Number	Date Sampled		Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
A-7	12/24/91		39.95	18.11	21.84	10,000	88	16	170	610	---
	03/10/92			15.30	24.65	320	9.3	0.54	8.8	34	---
	06/09/92			16.12	23.83	340	11	1.1	8.9	26	---
	09/14/92			17.35	22.60	510	12	<2.0	30	51	---
	11/12/92			17.47	22.48	760	17	0.83	50	73	---
	02/11/93			13.80	26.15	260	20	1.0	11	21	---
	04/14/93			13.60	26.35	1,300	89	2.1	48	87	---
	08/12/93			15.54	24.41	360	9.0	<0.50	13	9.0	---
	10/26/93			16.28	23.67	99	1.7	<0.50	4.0	3.0	---
	02/17/94		39.38	14.44	24.94	1,300	38	<1	35	25	---
	05/03/94			14.34	25.04	330	8.1	<0.5	7.8	3.7	---
	08/17/94		39.45	15.40	24.05	350	2.2	<0.5	9.6	3.6	---
	11/18/94			14.95	24.50	412	1.3	<0.5	6.2	2	---
	09/26/95		39.38	13.92	25.46	ND	ND	ND	ND	ND	---
	12/06/95			14.42	24.96	ND	ND	ND	ND	ND	---
	02/14/96			12.38	27.00	ND	ND	1.1	ND	0.59	---
	10/29/96			12.33	27.05	ND	ND	ND	ND	ND	---
	01/29/97			13.10	26.28	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/30/97			11.70	27.68	<20	<0.3	<0.3	<0.3	<0.5	<50
	07/31/97			13.25	26.13	<50	<0.3	<0.3	<0.3	<0.5	<20
	10/22/97			14.42	24.96	<50	<0.3	<0.3	<0.3	<0.5	<20
	01/28/98			13.00	26.38	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98			11.65	27.73	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98			11.20	28.18	<50	<0.3	<0.3	<0.3	<0.5	<5
	10/22/98			13.75	25.63	51	<0.3	<0.3	<0.3	<0.5	<5
	01/13/99			14.45	24.93	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/29/99			13.74	25.64	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/15/02			---	---	<50	<0.5	<0.5	<0.5	<0.5	4.8
	04/24/02			---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	7.2*
	09/23/02	P		13.78	25.60	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.50	3.48
	12/09/02	**P**		**13.97**	**25.41**	**ND<50.0**	**ND<0.500**	**ND<0.500**	**ND<0.500**	**ND<1.00**	**ND<5.00**

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Well Number	Date Sampled		Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
A-8	09/14/92		37.23	14.19	23.04	<50	<0.5	<0.5	<0.5	<0.5	---
	11/12/92			14.35	22.88	<50	<0.5	<0.5	<0.5	<0.5	---
	02/11/93			11.25	25.98	<50	<0.5	<0.5	<0.5	<0.5	---
	04/14/93			12.33	24.90	<50	<0.5	<0.5	<0.5	<0.5	---
	08/12/93			12.41	24.82	<50	<0.5	<0.5	<0.5	<0.5	---
	10/26/93			13.02	24.21	<50	<0.5	<0.5	<0.5	<0.5	---
	02/17/94		36.76	11.47	25.29	<50	<0.5	<0.5	<0.5	<0.5	---
	05/03/94			11.35	25.41	<50	<0.5	<0.5	<0.5	<0.5	---
	08/17/94		36.84	12.34	24.50	<50	<0.5	1.7	<0.5	1.4	---
	11/18/94			11.90	24.94	<50	1.0	<0.5	<0.5	<0.5	---
	09/26/95		36.76	10.94	25.82	ND	ND	ND	ND	ND	---
	12/06/95			11.42	25.34	ND	ND	ND	ND	ND	---
	02/14/96			8.80	27.96	ND	ND	0.48	ND	ND	---
	10/29/96			11.30	25.46	200	ND	ND	ND	ND	---
	01/29/97			7.60	29.16	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/30/97			10.54	26.22	<20	<0.3	<0.3	<0.3	<0.5	<50
	07/31/97			11.20	25.56	<50	<0.3	<0.3	<0.3	<0.5	<20
	10/22/97			12.14	24.62	<50	<0.3	<0.3	<0.3	<0.5	<20
	01/28/98			4.43	32.33	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98			10.55	26.21	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98			9.07	27.69	<50	<0.3	<0.3	<0.3	<0.5	<5
	10/22/98			12.12	24.64	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/13/99			9.60	27.16	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/29/99			9.08	27.68	<50	<0.3	<0.3	<0.3	1.5	<5
	01/15/02			---	---	<50	<0.5	<0.5	<0.5	<0.5	5.6
	04/24/02			---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50*
	09/23/02	P		10.75	26.01	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.50	ND<0.500
	12/09/02	**P**		**10.81**	**25.95**	**ND<50.0**	**ND<0.500**	**ND<0.500**	**ND<0.500**	**ND<1.00**	**ND<5.00**

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Well Number	Date Sampled		Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
A-9	09/14/92		38.71	16.12	22.59	<50	<0.5	<0.5	<0.5	<0.5	---
	11/12/92			16.29	22.42	<50	<0.5	<0.5	<0.5	<0.5	---
	02/11/93			12.31	26.40	<50	<0.5	<0.5	<0.5	<0.5	---
	04/14/93			12.01	26.70	<50	<0.5	<0.5	<0.5	<0.5	---
	08/12/93			13.90	24.81	<50	<0.5	<0.5	<0.5	<0.5	---
	10/26/93			14.86	23.85	<50	<0.5	<0.5	<0.5	<0.5	---
	02/17/94		38.19	12.99	25.20	<50	<0.5	<0.5	<0.5	<0.5	---
	08/17/94			14.03	24.16	<50	<0.5	<0.5	<0.5	<0.5	---
	11/18/94		37.24	13.44	23.80	<50	<0.5	<0.5	<0.5	<0.5	---
	09/26/95			12.43	25.81	ND	<0.5	ND	ND	ND	---
	12/06/95		38.19	13.14	25.05	ND	<0.5	ND	ND	ND	---
	02/14/96			9.05	29.14	ND	ND	1.8	0.49	0.82	---
	10/29/96			12.85	25.34	ND	ND	ND	ND	ND	---
	01/29/97			9.02	29.17	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/30/97			12.05	26.14	<20	<0.3	<0.3	<0.3	<0.5	<50
	07/31/97			12.18	26.01	<50	<0.3	<0.3	<0.3	<0.5	<20
	10/22/97			7.45	30.74	<50	<0.3	<0.3	<0.3	<0.5	<20
	01/28/98			21.25	16.94	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98			12.10	26.09	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98			10.40	27.79	<50	<0.3	<0.3	<0.3	<0.5	<5
	10/22/98			1.55	24.64	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/13/99			12.05	26.14	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/29/99			7.43	30.76	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/15/02			---	---	<50	<0.5	<0.5	<0.5	<0.5	4.3
	04/24/02			---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50*
	09/23/02	P		12.35	25.84	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.50	ND<0.500
	12/09/02	**P**		**12.37**	**25.82**	**ND<50.0**	**ND<0.500**	**ND<0.500**	**ND<0.500**	**ND<1.00**	**ND<5.00**

Table 1
Groundwater Analytical Data

ARCO Service Station #5387
20200 Hesperian Blvd.
Hayward, California

Well Number	Date Sampled		Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
A-10	12/07/92		38.94	16.81	22.13	660	30	<2.5	<2.5	<2.5	---
	02/11/93			13.15	25.79	210	<0.5	0.97	<0.5	<0.5	---
	04/14/93			12.19	26.75	770	<0.5	3.0	0.76	1.9	---
	08/12/93			14.87	24.07	390	<0.5	<0.5	<0.5	0.84	---
	10/26/93			15.65	23.29	290	<0.5	<0.5	<0.5	<0.5	---
	02/17/94		38.66	14.16	24.50	52	<0.5	<0.5	<0.5	<0.5	---
	05/03/94			14.00	24.66	<50	<0.5	<0.5	<0.5	<0.5	---
	08/17/94		38.72	15.08	23.64	<50	<0.5	<0.5	<0.5	<0.5	---
	11/18/94			14.68	24.04	<50	<0.5	<0.5	<0.5	<0.5	---
	09/26/95		38.66	13.58	25.08	ND	ND	ND	ND	ND	---
	12/06/95			14.24	24.42	ND	ND	ND	ND	ND	---
	02/14/96			6.70	31.96	ND	ND	ND	ND	ND	---
	10/29/96			14.10	24.56	ND	ND	ND	ND	1.1	---
	01/29/97			11.20	24.46	<50	0.41	4.8	0.6	4.4	37
	04/30/97			12.66	26.00	<20	0.40	4.2	0.5	3.8	50
	07/31/97			13.20	25.46	<50	w	<0.3	<0.3	<0.5	<20
	04/22/98			12.60	26.06	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98			8.08	30.58	<50	<0.3	<0.3	<0.3	<0.5	<5
	10/22/98			11.15	27.51	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/13/99			9.60	29.06	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/29/99			11.15	27.51	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/15/02			---	---	<50	<0.5	<0.5	<0.5	<0.5	17
	04/24/02			NM	NM	NS	NS	NS	NS	NS	NS
	09/23/02			DRY	DRY	NS	NS	NS	NS	NS	NS
	12/19/02	**P**		**12.75**	**25.91**	**ND<50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<2.5 (c)**

Table 1
Groundwater Analytical Data

ARCO Service Station #5387
20200 Hesperian Blvd.
Hayward, California

Well Number	Date Sampled	Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)

TPH = Total Petroleum Hydrocarbons analyzed using EPA Method 8015B Modified
MTBE = Methyl tertiary butyl ether analyzed by EPA Method 8021B unless otherwise noted
ND = Not Detected
NM = Not Measured
NS = Not Sampled
P = Purge
NP = No Purge
" --- " = Not analyzed/Not available
µg/L = Micrograms per liter
* = Analyzed by EPA Method 8260B.
^ = Analytical results as measured by EPA Methods 8020 / 8260.
(a) = well inaccessible
(b) = The analyte concentration may be artificially elevated due to coeluting compounds or components.
(c) = The closing calibration was outside acceptance limits by 2%. This should be considered in evaluating the results. The average % difference for all analytes met the 15% requirement and the QC suggests that the calibration linearity is not a factor.
(d) = Estimated value. The reported value exceeds the calibration range of the analysis.

Source The data in this table prior to September 2002 was provided to URS by Group Environmental Management Company and its previous consultants. URS has not verified the accuracy of this data

Table 2

Groundwater Flow Direction and Gradient

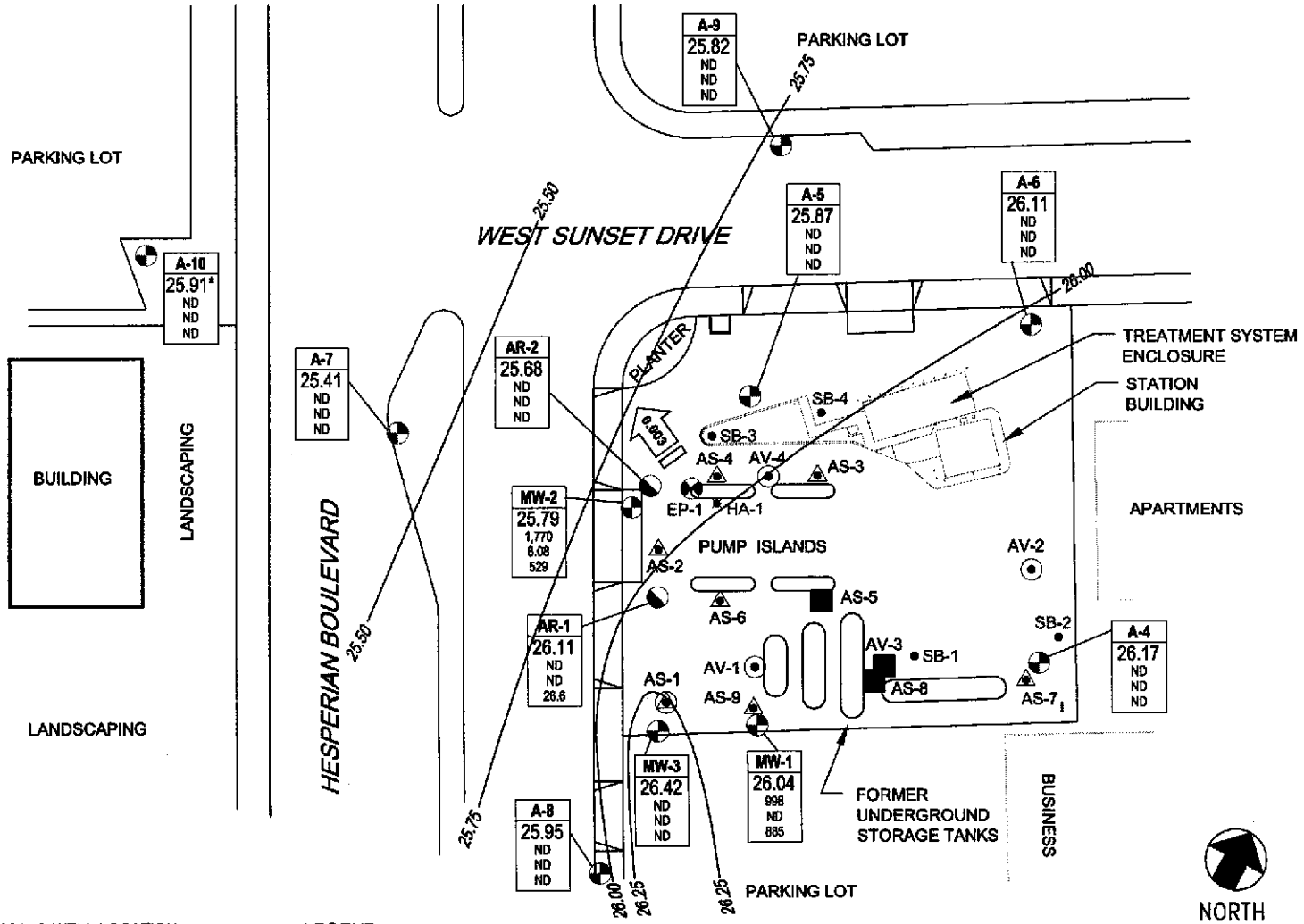
ARCO Service Station #5387

20200 Hesperian Blvd

Hayward, California

Date Measured	Average Flow Direction	Average Hydraulic Gradient
04/24/02	-	-
09/23/02	West	0.004
12/09/02	**West**	**0.003**

X:\x_env\waste\BP GEM\Sites\Scott Robinson\Paul Supple\5387\Reports\Monitoring\Qtr. 4, 2002\Drawings\GWEC-AS_12-9.dwg



LEGEND:

- ■ A-4 — ABANDONED MONITORING WELL LOCATION
- ◓ A-4 — MONITORING WELL LOCATION
- ◔ AR-1 — GROUNDWATER EXTRACTION WELL LOCATION
- ◉ AV-1 — SOIL VAPOR EXTRACTION WELL LOCATION
- ◬ AS-2 — AIR SPARGE WELL LOCATION
- ◍ AS-1 — DUAL AIR SPARGE/SOIL VAPOR EXTRACTION WELL LOCATION
- ✱ HA-1 — AIR SPARGE WELL LOCATION
- • SB-3 — DUAL AIR SPARGE/SOIL VAPOR EXTRACTION WELL LOCATION
- ◓ EP-1 — EXTRACTION POINT
- *26.00* — APPOXIMATE GROUNDWATER ELEVATION CONTOUR (FEET ABOVE MSL)
- 0.003 — GROUNDWATER FLOW DIRECTION AND GRADIENT (FEET/FOOT)

Well	WELL DESIGNATION
ELEV	GROUNDWATER ELEVATION
TPH-g Benzene MTBE	CONCENTRATIONS OF TPH-g, BENZENE AND MTBE IN MICROGRAMS PER LITER (µg/L)
*	NOT USED IN GROUNDWATER ELEVATION CONTOURS (SAMPLED ON 12/19/02)
ND	NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMITS

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

URS

Project No. 38486033

ARCO Service Station 5387
20200 Hesperian Boulevard
Hayward, California

GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP Fourth Quarter 2002 (December 9, 2002)

FIGURE
1

ATTACHMENT A

FIELD PROCEDURES AND FIELD DATA SHEETS

FIELD PROCEDURES

Sampling Procedures

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

WELL GAUGING DATA

Project # 021209-mm1 Date 12/9/07 Client Arco #5387

Site 20200 Hesperian Blvd Hayward

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	
MW-1	2					11.22	28.40		
MW-2	2					12.20	29.50		
MW-3	2					10.38	28.25		
A-4	3					13.36	34.51		
A-5	3					12.60	29.85		
A-6	3					12.67	34.70		
A-7	3					13.97	35.00		
A-8	2					10.81	33.85		
A-9	2					12.37	33.70		
A-10	2					Dry	13.54		
AR-1	6					11.35	33.70		
AR-2	6					12.30	35.20		

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 021209-MM1	Station # ~~927~~ Arco 5387
Sampler: MJM	Date: 12/9/02
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 28.40	Depth to Water: 11.22
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

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.

2.75 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 8.25 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
1337	64.5	6.65	1124	2.75	cloudy
1340	66.2	6.75	1122	5.5	clear
1343	65.5	7.01	1117	8.25	1'

Did well dewater? Yes (No)		Gallons actually evacuated: 8.25	
Sampling Time: 1350		Sampling Date: 12/9/02	
Sample I.D.: MW-1		Laboratory: Pace (Sequoia) Other ___	
Analyzed for: (TPH-G BTEX MTBE) TPH-D Other:			
D.O. (if req'd): Pre-purge:	mg/L	(Inline) Post-purge:	2.2 mg/L
O.R.P. (if req'd): Pre-purge:	mV	Post-purge:	mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 021209-MM1	Station # ~~027~~ Arco 5387
Sampler: MJM	Date: 12/9/02
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 29.50	Depth to Water: 17.20
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

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.

2.75 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 8.25 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
1149	63.5	6.72	1056	2.75	cloudy
1152	65.8	6.77	1044	5.5	clear
1155	66.2	6.73	1047	8.25	"

Did well dewater? Yes (No) Gallons actually evacuated: 8.25

Sampling Time: 1200 Sampling Date: 12/9/02

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

Analyzed for: (TPH-G BTEX MTBE) TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	(ncup) Post-purge:	6.2 ✓✓ mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 021209-MM1	Station # ~~987~~ Arco 5387
Sampler: MJM	Date: 12/9/02
Well I.D.: MW-3	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 28.25	Depth to Water: 10.38
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 / (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 Case Volume (Gals.)) x 3 (Specified Volumes) = 9 Gals. (Calculated Volume)

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
1407	65.5	6.64	1094	3	brown
1410	67.0	6.64	1085	6	cloudy
1413	67.2	6.66	1103	9	"

Did well dewater? Yes (No) Gallons actually evacuated: 9

Sampling Time: 1420 Sampling Date: 12/9/02

Sample I.D.: MW-3 Laboratory: Pace (Sequoia) Other_____

Analyzed for: (TPH-G BTEX MTBE) TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	(In cup) Post-purge:	1.7	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 021209-MM1	Station # ~~GET~~ Arco 5387
Sampler: MJM	Date: 12/9/02
Well I.D.: A-4	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth: 34.51	Depth to Water: 13.36
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

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.

8 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 24 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
1309	64.5	6.58	1045	8	clear
1318	64.6	6.57	1047	16	"
1327	64.7	6.57	1048	24	"

Did well dewater? Yes (No) Gallons actually evacuated: 24

Sampling Time: 1335 Sampling Date: 12/9/02

Sample I.D.: A-4 Laboratory: Pace (Sequoia) Other_____

Analyzed for: (TPH-G BTEX MTBE) TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	(incp) Post-purge:	2.4	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 021209-MM1	Station # ~~927~~ Arco 5387
Sampler: MJM	Date: 12/9/02
Well I.D.: A-5	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth: 29.85	Depth to Water: 12.60
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

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.

6.5 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 19.5 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
1212	64.4	6.67	1037	6.5	cloudy/odor
1217	65.2	6.60	1045	13	clear/"
1222	65.2	6.62	1048	19.5	clear/"

Did well dewater? Yes (No) Gallons actually evacuated: 19.5

Sampling Time: 1230 Sampling Date: 12/9/02

Sample I.D.: A-5 Laboratory: Pace (Sequoia) Other_____

Analyzed for: (TPH-G) BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	(Post-purge: 1 hour)	1.9	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 021209-MM1	Station # ~~GET~~ Arco 5387
Sampler: MJM	Date: 12/9/02
Well I.D.: A-6	Well Diameter: 2 (3) 4 6 8 ____
Total Well Depth: 34.70	Depth to Water: 12.67
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 / (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.

1 Case Volume (Gals.)	X	Specified Volumes	=	Calculated Volume
8	X	3	=	24 Gals.

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
1239	63.6	6.70	688	8	cloudy
1246	63.7	6.68	674	16	clear
1253	63.9	6.69	668	24	LL

Did well dewater? Yes (No) Gallons actually evacuated: 24

Sampling Time: 1300 Sampling Date: 12/9/02

Sample I.D.: A-6 Laboratory: Pace (Sequoia) Other ____

Analyzed for: (TPH-G) (BTEX) (MTBE) TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	(In cup) Post-purge:	2.6	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 021209-MM1	Station # ~~027~~ Arco 5387
Sampler: MJM	Date: 12/9/02
Well I.D.: A-7	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth: 35.00	Depth to Water: 13.97
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

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.

7.5 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 22.5 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
926	64.8	6.77	1131	7.5	cloudy
934	64.8	6.79	1135	15	"
941	65.7	6.76	1131	22.5	"

Did well dewater? Yes (No) Gallons actually evacuated: 22.5

Sampling Time: 945 Sampling Date: 12/9/02

Sample I.D.: A-7 Laboratory: Pace (Sequoia) Other_____

Analyzed for: (TPH-G BTEX MTBE) TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	(In cup Post-purge:)	2.2	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 021209-MM1	Station # ~~927~~ Arco 5387
Sampler: MJM	Date: 12/9/02
Well I.D.: A-8	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 33.85	Depth to Water: 10.81
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

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.

3.5 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 10.5 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
900	63.8	6.63	1660	3.5	turbid / sulfur odor
903	65.8	6.73	1041	7	cloudy / "
906	65.5	6.72	1069	10.5	clear / "

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

Sampling Time: 910 Sampling Date: 12/9/02

Sample I.D.: A-8 Laboratory: Pace (Sequoia) Other ___

Analyzed for: (TPH-G BTEX MTBE) TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge: (in cup)	2.1	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 021209-MM1	Station # ~~027~~ Arco 5387
Sampler: MJM	Date: 12/9/02
Well I.D.: A-9	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 33.70	Depth to Water: 17.37
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

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.

3.5 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 10.5 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or ~~uS~~)	Gals. Removed	Observations
957	63.5	6.81	824	3.5	brown
1000	64.1	6.77	814	7	cloudy
1009	64.5	7.14	821	10.5	"

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

Sampling Time: 1010 Sampling Date: 12/9/02

Sample I.D.: A-9 Laboratory: Pace (Sequoia) Other ___

Analyzed for: (TPH-G BTEX MTBE) TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	(incup) Post-purge:	3.2	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 021209-MM1	Station # ~~027~~ Arco 5387
Sampler: MJM	Date: 12/9/02
Well I.D.: A-10	Well Diameter: 2 3 4 6 8 ___
Total Well Depth: 13.54	Depth to Water: Dry
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) / 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.

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

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
		Insufficient		water	to purge & sample

Did well dewater? Yes No		Gallons actually evacuated:	
Sampling Time:		Sampling Date: 12/9/02	
Sample I.D.:		Laboratory: Pace (Sequoia) Other ___	
Analyzed for: (TPH-G) (BTEX) (MTBE) TPH-D 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 #: 021209-MM1	Station # ~~207~~ Arco 5387
Sampler: MJM	Date: 12/9/02
Well I.D.: AR-1	Well Diameter: 2 3 4 (6) 8 ____
Total Well Depth: 33.70	Depth to Water: 11.35
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

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.

33 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 99 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
1026	65.4	7.08	1004	33	turbid/sweet odor
1034	66.3	6.93	924	66	"
1043	66.6	6.89	1005	99	"

Did well dewater? Yes (No)		Gallons actually evacuated: 99	
Sampling Time: 1045		Sampling Date: 12/9/02	
Sample I.D.: AR-1		Laboratory: Pace (Sequoia) Other____	
Analyzed for: (TPH-G BTEX MTBE) TPH-D Other:			
D.O. (if req'd): Pre-purge:	mg/L	(Incup) Post-purge:	1.8 mg/L
O.R.P. (if req'd): Pre-purge:	mV	Post-purge:	mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 021209-MM1	Station # ~~027~~ Arco 5387
Sampler: MJM	Date: 12/9/02
Well I.D.: AR-2	Well Diameter: 2 3 4 (6) 8 ___
Total Well Depth: 35.20	Depth to Water: 12.30
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	radius² * 0.163

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.

33.5 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 100.5 Gals. (Calculated Volume)

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
1101	65.0	7.20	1136	33.5	clear
1109	66.2	7.00	1134	67	"
1118	66.4	7.03	1174	100.5	"

Did well dewater? Yes (No) Gallons actually evacuated: 100.5

Sampling Time: 1125 Sampling Date: 12/9/02

Sample I.D.: AR-2 Laboratory: Pace (Sequoia) Other_____

Analyzed for: (TPH-G BTEX MTBE) TPH-D Other:

D.O. (if req'd):	Pre-purge:		mg/L	(In cup Post-purge:)	1.1 mg/L
O.R.P. (if req'd):	Pre-purge:		mV	Post-purge:	mV

WELLHEAD INSPECTION CHECKLIST

Client Arco #5387 Date 12/9/02

Site Address 202000 Hesperian Blvd Hayward

Job Number 021209-mm1 Technician MJM

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
MW-1	✓							
MW-2						✓		
MW-3	✓							
A-4						✓		
A-5				✓		✓		✓
A-6				✓		✓		✓
A-7					✓			
A-8				✓	✓			
A-9		✓		✓	✓			
A-10					✓			
AR-1						✓		
AR-2	✓							

NOTES: AR-1 Slip cap No lock 6"
A-5 no lock
MW-2 no lock
A-6 no lock
A-4 no lock.

WELL GAUGING DATA

Project # 021219-JH4 Date 12-19-02 Client Arco 5387

Site 20200 Hesperian Blvd. Hayward Ca.

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
A-10	2					12.75	34.00	TOC	

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 021219-JK4	Station # Arco 5387
Sampler: JK	Date: 12-19-02
Well I.D.: A-10	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 34.00	Depth to Water: 12.75
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

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.

3.4 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 10.2 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
1045	19.3	6.5	1165	3.5	masses of small roots
1050	19.0	6.8	1068	7.0	" "
1055	18.8	6.9	1068	10.5	" "

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

Sampling Time: 1110 Sampling Date: 12-19-02

Sample I.D.: A-10 Laboratory: Pace (Sequoia) Other____

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	None mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELLHEAD INSPECTION CHECKLIST

Client ARCO # 5387 Date 12-19-02

Site Address 20200 Hesperian Blvd. Hayward

Job Number 021219-JK4 Technician JK

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
A-10						✓		

NOTES: Obstruction @ approx. 14' in A-10. Broke through obstruction with augering rods. Tagged bottom @ 34.00 ft.

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

Sequoia Analytical

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10 January, 2003

Scott Robinson
URS Corporation
500 12th Street, Suite 100
Oakland, CA 94607

RE: ARCO #5387, Hayward, Ca
Sequoia Work Order: MLL0350

Enclosed are the results of analyses for samples received by the laboratory on 12/10/02 20:10. 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	Project: ARCO #5387, Hayward, Ca	MLL0350
500 12th Street, Suite 100	Project Number: ARCO #5387, Hayward, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	01/10/03 11:41

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MLL0350-01	Water	12/09/02 13:50	12/10/02 20:10
MW-2	MLL0350-02	Water	12/09/02 12:00	12/10/02 20:10
MW-3	MLL0350-03	Water	12/09/02 14:20	12/10/02 20:10
A-4	MLL0350-04	Water	12/09/02 13:35	12/10/02 20:10
A-5	MLL0350-05	Water	12/09/02 12:30	12/10/02 20:10
A-6	MLL0350-06	Water	12/09/02 13:00	12/10/02 20:10
A-7	MLL0350-07	Water	12/09/02 09:45	12/10/02 20:10
A-8	MLL0350-08	Water	12/09/02 09:10	12/10/02 20:10
A-9	MLL0350-09	Water	12/09/02 10:10	12/10/02 20:10
AR-1	MLL0350-10	Water	12/09/02 10:45	12/10/02 20:10
AR-2	MLL0350-11	Water	12/09/02 11:25	12/10/02 20:10

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

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URS Corporation	Project: ARCO #5387, Hayward, Ca	MLL0350
500 12th Street, Suite 100	Project Number: ARCO #5387, Hayward, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	01/10/03 11:41

Gasoline Hydrocarbons (C6-C12), BTEX and MTBE by EPA 8015M and 8021B

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MLL0350-01) Water Sampled: 12/09/02 13:50 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	**998**	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	**1.37**	1.00	"	"	"	"	"	"	I-06
Methyl tert-butyl ether	**855**	5.00	"	"	"	"	"	"	E
Surrogate: 4-BFB (FID)		*86.7 %*	*57-125*		"	"	"	"	
Surrogate: 4-BFB (PID)		*80.4 %*	*62-120*		"	"	"	"	
MW-2 (MLL0350-02) Water Sampled: 12/09/02 12:00 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	**1770**	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	**8.08**	0.500	"	"	"	"	"	"	
Toluene	**0.694**	0.500	"	"	"	"	"	"	
Ethylbenzene	**2.47**	0.500	"	"	"	"	"	"	
Xylenes (total)	**3.79**	1.00	"	"	"	"	"	"	I-06
Methyl tert-butyl ether	**529**	5.00	"	"	"	"	"	"	E
Surrogate: 4-BFB (FID)		*114 %*	*57-125*		"	"	"	"	
Surrogate: 4-BFB (PID)		*79.0 %*	*62-120*		"	"	"	"	
MW-3 (MLL0350-03) Water Sampled: 12/09/02 14:20 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)		*80.0 %*	*57-125*		"	"	"	"	
Surrogate: 4-BFB (PID)		*85.8 %*	*62-120*		"	"	"	"	

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URS Corporation	Project: ARCO #5387, Hayward, Ca	MLL0350
500 12th Street, Suite 100	Project Number: ARCO #5387, Hayward, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	01/10/03 11:41

Gasoline Hydrocarbons (C6-C12), BTEX and MTBE by EPA 8015M and 8021B

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-4 (MLL0350-04) Water Sampled: 12/09/02 13:35 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)		*86.7 %*	*57-125*		"	"	"	"	
Surrogate: 4-BFB (PID)		*87.5 %*	*62-120*		"	"	"	"	
A-5 (MLL0350-05) Water Sampled: 12/09/02 12:30 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)		*87.9 %*	*57-125*		"	"	"	"	
Surrogate: 4-BFB (PID)		*87.5 %*	*62-120*		"	"	"	"	
A-6 (MLL0350-06) Water Sampled: 12/09/02 13:00 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)		*86.9 %*	*57-125*		"	"	"	"	
Surrogate: 4-BFB (PID)		*85.4 %*	*62-120*		"	"	"	"	

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URS Corporation	Project: ARCO #5387, Hayward, Ca	MLL0350
500 12th Street, Suite 100	Project Number: ARCO #5387, Hayward, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	01/10/03 11:41

Gasoline Hydrocarbons (C6-C12), BTEX and MTBE by EPA 8015M and 8021B

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-7 (MLL0350-07) Water Sampled: 12/09/02 09:45 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)		*85.2 %*		*57-125*	"	"	"	"	
Surrogate: 4-BFB (PID)		*86.2 %*		*62-120*	"	"	"	"	
A-8 (MLL0350-08) Water Sampled: 12/09/02 09:10 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)		*80.8 %*		*57-125*	"	"	"	"	
Surrogate: 4-BFB (PID)		*84.6 %*		*62-120*	"	"	"	"	
A-9 (MLL0350-09) Water Sampled: 12/09/02 10:10 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)		*86.9 %*		*57-125*	"	"	"	"	
Surrogate: 4-BFB (PID)		*85.0 %*		*62-120*	"	"	"	"	

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URS Corporation	Project: ARCO #5387, Hayward, Ca	MLL0350
500 12th Street, Suite 100	Project Number: ARCO #5387, Hayward, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	01/10/03 11:41

Gasoline Hydrocarbons (C6-C12), BTEX and MTBE by EPA 8015M and 8021B

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AR-1 (MLL0350-10) Water Sampled: 12/09/02 10:45 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	**26.6**	5.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)		*85.6 %*	*57-125*		"	"	"	"	
Surrogate: 4-BFB (PID)		*86.5 %*	*62-120*		"	"	"	"	
AR-2 (MLL0350-11) Water Sampled: 12/09/02 11:25 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)		*85.8 %*	*57-125*		"	"	"	"	
Surrogate: 4-BFB (PID)		*86.9 %*	*62-120*		"	"	"	"	

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URS Corporation	Project: ARCO #5387, Hayward, Ca	MLL0350
500 12th Street, Suite 100	Project Number: ARCO #5387, Hayward, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	01/10/03 11:41

Volatile Organic Compounds by EPA Method 8260B

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MLL0350-01) Water	**Sampled: 12/09/02 13:50**	**Received: 12/10/02 20:10**							
Methyl tert-butyl ether	**1310**	500	ug/l	100	2L20048	12/20/02	12/20/02	EPA 8260B	
Surrogate: 1,2-DCA-d4		*120 %*		*77-122*	"	"	"	"	
Surrogate: Toluene-d8		*104 %*		*75-124*	"	"	"	"	
Surrogate: 4-BFB		*98.5 %*		*77-120*	"	"	"	"	
MW-2 (MLL0350-02) Water	**Sampled: 12/09/02 12:00**	**Received: 12/10/02 20:10**							
Methyl tert-butyl ether	**902**	500	ug/l	100	.0048	12/20/02	12/20/02	EPA 8260B	
Surrogate: 1,2-DCA-d4		*125 %*		*77-122*	"	"	"	"	*S-03*
Surrogate: Toluene-d8		*102 %*		*75-124*	"	"	"	"	
Surrogate: 4-BFB		*99.0 %*		*77-120*	"	"	"	"	

Sequoia Analytical

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URS Corporation	Project: ARCO #5387, Hayward, Ca	MLL0350
500 12th Street, Suite 100	Project Number: ARCO #5387, Hayward, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	01/10/03 11:41

Gasoline Hydrocarbons (C6-C12), BTEX and MTBE by EPA 8015M and 8021B - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2L20055 - EPA 5030B (P/T)										
Blank (2L20055-BLK1)				Prepared: 12/20/02 Analyzed: 12/21/02						
Gasoline Range Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Methyl tert-butyl ether	ND	5.00	"							
Surrogate: 4-BFB (FID)	*40.2*		"	*48.0*		*83.8*	*57-125*			
Surrogate: 4-BFB (PID)	*40.9*		"	*48.0*		*85.2*	*62-120*			
Laboratory Control Sample (2L20055-BS1)				Prepared: 12/20/02 Analyzed: 12/21/02						
Gasoline Range Hydrocarbons	563	50.0	ug/l	502		112	80-120			
Benzene	6.47	0.500	"	6.21		104	80-120			
Toluene	34.5	0.500	"	38.1		90.6	80-120			
Ethylbenzene	8.87	0.500	"	8.94		99.2	80-120			
Xylenes (total)	42.0	1.00	"	44.0		95.5	80-120			
Methyl tert-butyl ether	11.9	5.00	"	10.2		117	74-123			
Surrogate: 4-BFB (FID)	*44.8*		"	*48.0*		*93.3*	*57-125*			
Surrogate: 4-BFB (PID)	*38.8*		"	*48.0*		*80.8*	*62-120*			
Laboratory Control Sample Dup (2L20055-BSD1)				Prepared: 12/20/02 Analyzed: 12/21/02						
Gasoline Range Hydrocarbons	553	50.0	ug/l	502		110	80-120	1.79	25	
Benzene	6.19	0.500	"	6.21		99.7	80-120	4.42	40	
Toluene	33.1	0.500	"	38.1		86.9	80-120	4.14	40	
Ethylbenzene	8.43	0.500	"	8.94		94.3	80-120	5.09	40	
Xylenes (total)	40.1	1.00	"	44.0		91.1	80-120	4.63	40	
Methyl tert-butyl ether	11.3	5.00	"	10.2		111	74-123	5.17	40	
Surrogate: 4-BFB (FID)	*46.4*		"	*48.0*		*96.7*	*57-125*			
Surrogate: 4-BFB (PID)	*38.7*		"	*48.0*		*80.6*	*62-120*			

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URS Corporation	Project: ARCO #5387, Hayward, Ca	MLL0350
500 12th Street, Suite 100	Project Number: ARCO #5387, Hayward, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	01/10/03 11:41

Gasoline Hydrocarbons (C6-C12), BTEX and MTBE by EPA 8015M and 8021B - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2L20055 - EPA 5030B (P/T)										
Matrix Spike (2L20055-MS1)		**Source: MLL0350-03**		Prepared: 12/20/02		Analyzed: 12/21/02				
Gasoline Range Hydrocarbons	587	50.0	ug/l	502	14.4	114	70-130			
Benzene	7.45	0.500	"	6.21	ND	120	80-134			
Toluene	39.6	0.500	"	38.1	0.241	103	68-114			
Ethylbenzene	10.0	0.500	"	8.94	0.0522	111	72-128			
Xylenes (total)	48.0	1.00	"	44.0	0.228	109	67-125			
Methyl tert-butyl ether	14.6	5.00	"	10.2	1.24	131	69-130			Q-01
Surrogate: 4-BFB (FID)	*41.6*		"	*48.0*		*86.7*	*57-125*			
Surrogate: 4-BFB (PID)	*38.4*		"	*48.0*		*80.0*	*62-120*			
Matrix Spike Dup (2L20055-MSD1)		**Source: MLL0350-03**		Prepared: 12/20/02		Analyzed: 12/21/02				
Gasoline Range Hydrocarbons	559	50.0	ug/l	502	14.4	108	70-130	4.89	25	
Benzene	6.71	0.500	"	6.21	ND	108	80-134	10.5	40	
Toluene	35.7	0.500	"	38.1	0.241	93.1	68-114	10.4	40	
Ethylbenzene	8.98	0.500	"	8.94	0.0522	99.9	72-128	10.7	40	
Xylenes (total)	42.8	1.00	"	44.0	0.228	96.8	67-125	11.5	40	
Methyl tert-butyl ether	13.2	5.00	"	10.2	1.24	117	69-130	10.1	40	
Surrogate: 4-BFB (FID)	*44.8*		"	*48.0*		*93.3*	*57-125*			
Surrogate: 4-BFB (PID)	*39.0*		"	*48.0*		*81.2*	*62-120*			

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URS Corporation	Project: ARCO #5387, Hayward, Ca	MLL0350
500 12th Street, Suite 100	Project Number: ARCO #5387, Hayward, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	01/10/03 11:41

Volatile Organic Compounds by EPA Method 8260B - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2L20048 - EPA 5030B										
Blank (2L20048-BLK1)				Prepared & Analyzed: 12/20/02						
Methyl tert-butyl ether	ND	1.00	ug/l							
Surrogate: 1,2-DCA-d4	*23.1*		"	*20.0*		*116*	*77-122*			
Surrogate: Toluene-d8	*20.6*		"	*20.0*		*103*	*75-124*			
Surrogate: 4-BFB	*20.7*		"	*20.0*		*104*	*77-120*			
Laboratory Control Sample (2L20048-BS1)				Prepared & Analyzed: 12/20/02						
Methyl tert-butyl ether	11.5	1.00	ug/l	10.0		115	70-130			
Surrogate: 1,2-DCA-d4	*24.1*		"	*20.0*		*120*	*77-122*			
Surrogate: Toluene-d8	*20.6*		"	*20.0*		*103*	*75-124*			
Surrogate: 4-BFB	*21.1*		"	*20.0*		*106*	*77-120*			
Laboratory Control Sample Dup (2L20048-BSD1)				Prepared & Analyzed: 12/20/02						
Methyl tert-butyl ether	11.4	1.00	ug/l	10.0		114	70-130	0.873	20	
Surrogate: 1,2-DCA-d4	*23.8*		"	*20.0*		*119*	*77-122*			
Surrogate: Toluene-d8	*20.3*		"	*20.0*		*102*	*75-124*			
Surrogate: 4-BFB	*19.3*		"	*20.0*		*96.5*	*77-120*			

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URS Corporation	Project: ARCO #5387, Hayward, Ca	MLL0350
500 12th Street, Suite 100	Project Number: ARCO #5387, Hayward, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	01/10/03 11:41

Notes and Definitions

E	Estimated value. The reported value exceeds the calibration range of the analysis.
I-06	The analyte concentration may be artificially elevated due to coeluting compounds or components.
Q-01	The spike recovery for this QC sample is outside of established control limits. Review of associated batch QC indicates the recovery for this analyte does not represent an out-of-control condition for the batch.
S-03	The surrogate recovery for this sample is outside of established control limits. Review of associated QC indicates the recovery for this surrogate does not represent an out-of-control condition.
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

bp

Chain of Custody Record

MLL0350

Page 1 of 2

Project Name 021209-MM1

BP BU/GEM CO Portfolio:

BP Laboratory Contract Number:

Date: 12/9/02

Requested Due Date (mm/dd/yy)

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

Send To:	BP/GEM Facility No.:	Consultant/Contractor: URS
Lab Name: SEQUOIA	BP/GEM Facility Address: 20200 Hesperian Blvd. HAYWARD, CA	Address: 500 12th St., Ste. 200
Lab Address: 885 Jarvis Dr.	Site ID No. ARCO 5387	Oakland, CA 94609-4014
Morgan Hill, CA 95037	Site Lat/Long:	e-mail EDD: syed_rehan@urscorp.com
	California Global ID #:	Consultant/Contractor Project No.: 55-00005387.01 00427
Lab PM: Latonya Pelt	BP/GEM PM Contact: PAUL SUPPLE	Consultant Tele/Fax: 510-874-1735/510-874-3268
Tele/Fax: 408-776-9600 / 408-782-6308	Address:	Consultant/Contractor PM: Scott Robinson
Report Type & QC Level: Send EDF Reports		Invoice to: Consultant/Contractor or BP/GEM (Circle one)
BP/GEM Account No.:	Tele/Fax:	BP/GEM Work Release No: INTRIM -50591

Lab Bottle Order No:

Item No.	Sample Description	Time	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Sediments/Air	Laboratory No.	No. of containers	Preservatives: Unpreserved	Preservatives: H_2SO_4	Preservatives: HNO_3	Preservatives: HCl	Requested Analysis: TPH-G/BTEX (8015 / 8021)	Requested Analysis: TPH-D (8015)	Requested Analysis: MTBE (8021)	Requested Analysis: MTBE, TAME, ETBE, DIPE, TBA (8260)	Requested Analysis: 1,2-DCA & EDB (8260)	Sample Point Lat/Long and Comments
1	MW-1 ✓	1350		X		01	3				X	X		X			
2	MW-2 ✓	1200				02						X		X			
3	MW-3 ✓	1420				03						X		X			
4	A-4 ✓	1335				04						X		X			
5	A-5 ✓	1230				05						X		X			
6	A-6 ✓	1300				06						X		X			
7	A-7 ✓	945				07						X		X			
8	A-8 ✓	910				08						X		X			
9	A-9 ✓	1010				09						X		X			
10	AR-1 ✓	1045		↓		10	↓				↓	X		X			

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Matthew Miller						
Sampler's Company: BlaineTechServices	Matt Miller / BTS	12/10	1220	WK	12/10	1220
Shipment Date:	MM	12/10/2	2010	Matt Miller	12/10	2010
Shipment Method:						
Shipment Tracking No:						

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

Ice Chest in Place Yes ___ No ✓ Temperature Blank Yes ___ No ✓ Cooler Temperature on Receipt 3 °F/C Trip Blank Yes ___ No ✓

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

BP COC Rev. 1 2/5/02

bp

Chain of Custody Record

MLL0350

Project Name: 021209-MM1
BP BU/GEM CO Portfolio:
BP Laboratory Contract Number:
Requested Due Date (mm/dd/yy)
Date: 12/9/02

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

Send To:	BP/GEM Facility No.:	Consultant/Contractor: URS
Lab Name: SEQUOIA	BP/GEM Facility Address: 20200 Hesperian Blvd, HAYWARD, CA	Address: 500 12th St., Ste. 200
Lab Address: 885 Jarvis Dr.	Site ID No. ARCO 5387	Oakland, CA 94609-4014
Morgan Hill, CA 95037	Site Lat/Long:	e-mail EDD: syed_rehan@urscorp.com
	California Global ID #:	Consultant/Contractor Project No.: 35-00005387.01 00427
Lab PM: Latonya Pelt	BP/GEM PM Contact: PAUL SUPPLE	Consultant Tele/Fax: 510-874-1735/510-874-3268
Tele/Fax: 408-776-9600 / 408-782-6308	Address:	Consultant/Contractor PM: Scott Robinson
Report Type & QC Level: Send EDF Reports		Invoice to: Consultant/Contractor or BP/GEM (circle one)
BP/GEM Account No.:	Tele/Fax:	BP/GEM Work Release No: INTRIM-50591

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)	TPH-D (8015)	MTBE (8021)	MTBE, TAME, ETBE DIPE, TBA (8260)	1,2-DCA & EDB (8260)					Sample Point Lat/Long and Comments
1	AR-2	1125		X			11	3				X		X		X							
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Matthew Miller						
Sampler's Company: Blaine Tech Services	[signature] / BTS	12/10/	1220	WXL	12/10/	1200
Shipment Date:	WXL	12/10/	2010	[signature]	12/10	2010
Shipment Method:						
Shipment Tracking No:						

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

Custody Seals In Place Yes ___ No ✓ Temperature Blank Yes ___ No ✓ Cooler Temperature on Receipt 3 °F/C Trip Blank Yes ___ No ✓

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: URS
REC. BY (PRINT): HT
WORKORDER: 112O350

DATE Received at Lab: 12/10/02
TIME Received at Lab: 2016
LOG IN DATE: 12-11-02

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

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	#	CLIENT ID	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s)	Present / (Absent)	01		MW1	3 Voa HCl	W	12/9	
	Intact / Broken*	02		2				
2. Chain-of-Custody	(Present) / Absent*	03		3				
3. Traffic Reports or Packing List:	Present / (Absent)	04		4				
		05		5				
4. Airbill:	Airbill / Sticker	06		6				
	Present / (Absent)	07		7				
5. Airbill #:		08		8				
6. Sample Labels:	(Present) / Absent	09		V 9				
7. Sample IDs:	(Listed) / Not Listed on Chain-of-Custody	10		AR1				
		11		AR2				
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:	3°C							
(Acceptance range for samples requiring thermal pres.:4+/-2°C)	(Yes) / No**							
**Exception (if any):								

HT 12/10/02

*If Circled, contact Project Manager and attach record of resolution.

Sequoia Analytical

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7 January, 2003

Scott Robinson
URS Corporation
500 12th Street, Suite 100
Oakland, CA 94607

RE: ARCO #5387, Hayward, Ca
Sequoia Work Order: MLL0719

Enclosed are the results of analyses for samples received by the laboratory on 12/20/02 15:55. 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	Project: ARCO #5387, Hayward, Ca	MLL0719
500 12th Street, Suite 100	Project Number: ARCO #5387, Hayward, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	01/07/03 13:15

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
A-10	MLL0719-01	Water	12/19/02 11:10	12/20/02 15:55

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

Sequoia Analytical

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URS Corporation	Project: ARCO #5387, Hayward, Ca	MLL0719
500 12th Street, Suite 100	Project Number: ARCO #5387, Hayward, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	01/07/03 13:15

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-10 (MLL0719-01) Water Sampled: 12/19/02 11:10 Received: 12/20/02 15:55									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2L30002	12/30/02	12/30/02	8015Bm/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	Q-23
Surrogate: a,a,a-Trifluorotoluene		*112 %*		*55-142*	"	"	"	"	

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URS Corporation	Project: ARCO #5387, Hayward, Ca	MLL0719
500 12th Street, Suite 100	Project Number: ARCO #5387, Hayward, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	01/07/03 13:15

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2L30002 - EPA 5030B [P/T]										
Blank (2L30002-BLK1)				Prepared & Analyzed: 12/30/02						
Gasoline Range Organics (C6-C10)	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.5	"							
Surrogate: a,a,a-Trifluorotoluene	*11.1*		"	*10.0*		*111*	*55-142*			
Laboratory Control Sample (2L30002-BS1)				Prepared & Analyzed: 12/30/02						
Benzene	9.90	0.50	ug/l	10.0		99.0	68-140			
Toluene	9.96	0.50	"	10.0		99.6	76-127			
Ethylbenzene	10.9	0.50	"	10.0		109	77-130			
Xylenes (total)	30.1	0.50	"	30.0		100	78-128			
Surrogate: a,a,a-Trifluorotoluene	*10.2*		"	*10.0*		*102*	*55-142*			
Laboratory Control Sample (2L30002-BS2)				Prepared & Analyzed: 12/30/02						
Gasoline Range Organics (C6-C10)	255	50	ug/l	250		102	62-134			
Surrogate: a,a,a-Trifluorotoluene	*10.0*		"	*10.0*		*100*	*55-142*			
Matrix Spike (2L30002-MS1)	**Source: MLL0719-01**			Prepared & Analyzed: 12/30/02						
Gasoline Range Organics (C6-C10)	480	50	ug/l	550	ND	87.3	62-134			
Benzene	9.68	0.50	"	6.80	ND	142	68-140			QM-07
Toluene	36.8	0.50	"	41.0	ND	89.8	76-127			
Ethylbenzene	9.31	0.50	"	9.80	ND	95.0	77-130			
Xylenes (total)	42.3	0.50	"	47.9	ND	88.3	78-128			
Surrogate: a,a,a-Trifluorotoluene	*9.24*		"	*10.0*		*92.4*	*55-142*			
Matrix Spike Dup (2L30002-MSD1)	**Source: MLL0719-01**			Prepared & Analyzed: 12/30/02						
Gasoline Range Organics (C6-C10)	509	50	ug/l	550	ND	92.5	62-134	5.86	41	
Benzene	10.1	0.50	"	6.80	ND	149	68-140	4.25	30	QM-07

Sequoia Analytical

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URS Corporation	Project: ARCO #5387, Hayward, Ca	MLL0719
500 12th Street, Suite 100	Project Number: ARCO #5387, Hayward, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	01/07/03 13:15

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2L30002 - EPA 5030B [P/T]										
Matrix Spike Dup (2L30002-MSD1)		**Source: MLL0719-01**		Prepared & Analyzed: 12/30/02						
Toluene	37.2	0.50	ug/l	41.0	ND	90.7	76-127	1.08	30	
Ethylbenzene	9.40	0.50	"	9.80	ND	95.9	77-130	0.962	21	
Xylenes (total)	42.5	0.50	"	47.9	ND	88.7	78-128	0.472	21	
Surrogate: a,a,a-Trifluorotoluene	*9.52*		*"*	*10.0*		*95.2*	*55-142*			

Sequoia Analytical

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

URS Corporation	Project: ARCO #5387, Hayward, Ca	MLL0719
500 12th Street, Suite 100	Project Number: ARCO #5387, Hayward, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	01/07/03 13:15

Notes and Definitions

Q-23	The closing calibration was outside acceptance limits by 2%. This should be considered in evaluating the result. The average % difference for all analytes met the 15% requirement and the QC suggests that calibration linearity is not a factor.
QM-07	The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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: 021219-JK4

BP BU/GEM CO Portfolio:

BP Laboratory Contract Number:

Date: 12-19-02 Requested Due Date (mm/dd/yy): ML0719

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

Send To:	BP/GEM Facility No.:	Consultant/Contractor: URS
Lab Name: SEQUOIA	BP/GEM Facility Address: 20200 Hesperian Blvd, HAYWARD, CA	Address: 500 12th St., Ste. 200
Lab Address: 885 Jarvis Dr.	Site ID No. ARCO 5387	Oakland, CA 94609-4014
Morgan Hill, CA 95037	Site Lat/Long:	e-mail EDD: syed_rehan@urscorp.com
	California Global ID #:	Consultant/Contractor Project No.: 25-00005387.01 00427
Lab PM: Latonya Pelt	BP/GEM PM Contact: PAUL SUPPLE	Consultant Tele/Fax: 510-874-1735/510-874-3268
Tele/Fax: 408-776-9600 / 408-782-6308	Address:	Consultant/Contractor PM: Scott Robinson
Report Type & QC Level: Send EDF Reports		Invoice to: Consultant/Contractor or BP/GEM (circle one)
BP/GEM Account No.:	Tele/Fax:	BP/GEM Work Release No: INTRIM -50591

Lab Bottle Order No:

Item No.	Sample Description	Time	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Sediments	Matrix: Air	Laboratory No.	No. of containers	Preservatives: Unpreserved	Preservatives: H_2SO_4	Preservatives: HNO_3	Preservatives: HCl	Requested Analysis: TPH-G / BTEX (8015 / 8021)	Requested Analysis: TPH-D (8015)	Requested Analysis: MTBE (8021)	Requested Analysis: MTBE, TAME, ETBE, DIPE, TBA (8260)	Requested Analysis: 1,2-DCA & EDB (8260)	Sample Point Lat/Long and Comments
1	A-10	1110		✓			✓ 21	3	—			✓	✓		✓			
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Josh Kerns						
Sampler's Company: Blaine Tech Services	/BTS	12/20/02	1410		12/20/02	1410
Shipment Date:		12/20/02	1555	Hamilton	12/20	1555
Shipment Method:						
Shipment Tracking No:						

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

Custody Seals In Place Yes ___ No ✓ Temperature Blank Yes ___ No ✓ Cooler Temperature on Receipt 3 °F/C Trip Blank Yes ___ No ✓

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: IRS
REC. BY (PRINT): HT
WORKORDER: M1207f9

DATE Received at Lab: 12/20/02
TIME Received at Lab: 1555
LOG IN DATE: 12-21-02

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

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	#	CLIENT ID	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s)	Present / (Absent) Intact / Broken*	01	1-5	A10	3 VOA (HCl)	L	12/19	
2. Chain-of-Custody	(Present) / Absent*							
3. Traffic Reports or Packing List:	Present / (Absent)							
4. Airbill:	Airbill / Sticker Present / (Absent)							
5. Airbill #:								
6. Sample Labels:	(Present) / Absent							
7. Sample IDs:	(Listed) / Not Listed on Chain-of-Custody							
8. Sample Condition:	(Intact) / Broken* / Leaking*							
9. Does information on custody reports, traffic reports and sample labels agree?	(Yes) / No*				HT 12/20/02			
10. Sample received within hold time:	(Yes) / No*							
11. Proper Preservatives used:	(Yes) / No*							
12. Temp Rec. at Lab: 3°C (Acceptance range for samples requiring thermal pres.:4+/-2°C) **Exception (if any):	(Yes) / No**							

*If Circled, contact Project Manager and attach record of resolution.

Sample Receipt Log
Revision 2.2 (04/11/02)
Replaces Revision 2.1 (11/10/00)
Effective 04/15/02

ATTACHMENT C

EDCC AND EDF/GEOWELL SUBMITTAL CONFIRMATION

Error Summary Log

02/10/03

EDF 1.2i All files present in deliverable.

Laboratory:	Sequoia Analytical Laboratories, Inc., Morgan Hill, CA
Project Name:	ARCO #5387, Hayward, Ca
Work Order Number:	MLL0350
Global ID:	NA
Lab Report Number:	MLL0350012820031407

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run	Sub
MLL03500128200 31407	A-4	MLL035004	W	CS	SW8015	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
MLL03500128200 31407	A-4	MLL035004	W	CS	SW8020F	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
MLL03500128200 31407	A-5	MLL035005	W	CS	SW8015	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
MLL03500128200 31407	A-5	MLL035005	W	CS	SW8020F	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
MLL03500128200 31407	A-6	MLL035006	W	CS	SW8015	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
MLL03500128200 31407	A-6	MLL035006	W	CS	SW8020F	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
MLL03500128200 31407	A-7	MLL035007	W	CS	SW8015	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
MLL03500128200 31407	A-7	MLL035007	W	CS	SW8020F	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
MLL03500128200 31407	A-8	MLL035008	W	CS	SW8015	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
MLL03500128200 31407	A-8	MLL035008	W	CS	SW8020F	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
MLL03500128200 31407	A-9	MLL035009	W	CS	SW8015	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
MLL03500128200 31407	A-9	MLL035009	W	CS	SW8020F	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
MLL03500128200 31407	AR-1	MLL035010	W	CS	SW8015	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
MLL03500128200 31407	AR-1	MLL035010	W	CS	SW8020F	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
MLL03500128200 31407	AR-2	MLL035011	W	CS	SW8015	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
MLL03500128200 31407	AR-2	MLL035011	W	CS	SW8020F	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
MLL03500128200 31407	MW-1	MLL035001	W	CS	8260+OX	SW5030B	12/09/02	12/20/02	12/20/02	2L20048	1	NCAB
MLL03500128200 31407	MW-1	MLL035001	W	CS	SW8015	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
MLL03500128200 31407	MW-1	MLL035001	W	CS	SW8020F	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
MLL03500128200 31407	MW-2	MLL035002	W	CS	8260+OX	SW5030B	12/09/02	12/20/02	12/20/02	2L20048	1	NCAB
MLL03500128200	MW-2	MLL035002	W	CS	SW8015	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run	Sub
31407												
MLL03500128200	MW-2	MLL035002	W	CS	SW8020F	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
31407												
MLL03500128200	MW-3	MLL035003	W	CS	SW8015	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
31407												
MLL03500128200	MW-3	MLL035003	W	CS	SW8020F	SW5030	12/09/02	12/20/02	12/21/02	2L20055	1	NCAB
31407												
		2L20048BSD1	WQ	BD1	8260+OX	SW5030B	/ /	12/20/02	12/20/02	2L20048	1	NCAB
		2L20048BS1	WQ	BS1	8260+OX	SW5030B	/ /	12/20/02	12/20/02	2L20048	1	NCAB
		2L20048BLK1	WQ	LB1	8260+OX	SW5030B	/ /	12/20/02	12/20/02	2L20048	1	NCAB
		2L20055BSD1	WQ	BD1	SW8015	SW5030	/ /	12/20/02	12/21/02	2L20055	1	NCAB
		2L20055BSD1	WQ	BD1	SW8020F	SW5030	/ /	12/20/02	12/21/02	2L20055	1	NCAB
		2L20055BS1	WQ	BS1	SW8015	SW5030	/ /	12/20/02	12/21/02	2L20055	1	NCAB
		2L20055BS1	WQ	BS1	SW8020F	SW5030	/ /	12/20/02	12/21/02	2L20055	1	NCAB
		2L20055BLK1	WQ	LB1	SW8015	SW5030	/ /	12/20/02	12/21/02	2L20055	1	NCAB
		2L20055BLK1	WQ	LB1	SW8020F	SW5030	/ /	12/20/02	12/21/02	2L20055	1	NCAB
		2L20055MS1	W	MS1	SW8015	SW5030	/ /	12/20/02	12/21/02	2L20055	1	NCAB
		2L20055MS1	W	MS1	SW8020F	SW5030	/ /	12/20/02	12/21/02	2L20055	1	NCAB
		2L20055MSD1	W	SD1	SW8015	SW5030	/ /	12/20/02	12/21/02	2L20055	1	NCAB
		2L20055MSD1	W	SD1	SW8020F	SW5030	/ /	12/20/02	12/21/02	2L20055	1	NCAB

EDFSAMP: Error Summary Log

02/10/03

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

EDFTEST: Error Summary Log

02/10/03

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

EDFRES: Error Summary Log

02/10/03

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	2L20055MS1	MS1	W	SW8015	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	2L20055MS1	MS1	W	SW8015	PR	12/21/02	1	GROC6C10
Warning: extra parameter	2L20055MS1	MS1	W	SW8020F	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	2L20055MS1	MS1	W	SW8020F	PR	12/21/02	1	MTBE
Warning: extra parameter	2L20055MSD1	SD1	W	SW8015	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	2L20055MSD1	SD1	W	SW8015	PR	12/21/02	1	GROC6C10
Warning: extra parameter	2L20055MSD1	SD1	W	SW8020F	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	2L20055MSD1	SD1	W	SW8020F	PR	12/21/02	1	MTBE
Warning: extra parameter	MLL035001	CS	W	SW8015	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035001	CS	W	SW8015	PR	12/21/02	1	GROC6C10
Warning: extra parameter	MLL035001	CS	W	SW8020F	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035001	CS	W	SW8020F	PR	12/21/02	1	MTBE
Warning: extra parameter	MLL035002	CS	W	SW8015	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035002	CS	W	SW8015	PR	12/21/02	1	GROC6C10
Warning: extra parameter	MLL035002	CS	W	SW8020F	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035002	CS	W	SW8020F	PR	12/21/02	1	MTBE
Warning: extra parameter	MLL035003	CS	W	SW8015	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035003	CS	W	SW8015	PR	12/21/02	1	GROC6C10
Warning: extra parameter	MLL035003	CS	W	SW8020F	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035003	CS	W	SW8020F	PR	12/21/02	1	MTBE
Warning: extra parameter	MLL035004	CS	W	SW8015	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035004	CS	W	SW8015	PR	12/21/02	1	GROC6C10
Warning: extra parameter	MLL035004	CS	W	SW8020F	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035004	CS	W	SW8020F	PR	12/21/02	1	MTBE
Warning: extra parameter	MLL035005	CS	W	SW8015	PR	12/21/02	1	BR4FBZ

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	MLL035005	CS	W	SW8015	PR	12/21/02	1	GROC6C10
Warning: extra parameter	MLL035005	CS	W	SW8020F	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035005	CS	W	SW8020F	PR	12/21/02	1	MTBE
Warning: extra parameter	MLL035006	CS	W	SW8015	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035006	CS	W	SW8015	PR	12/21/02	1	GROC6C10
Warning: extra parameter	MLL035006	CS	W	SW8020F	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035006	CS	W	SW8020F	PR	12/21/02	1	MTBE
Warning: extra parameter	MLL035007	CS	W	SW8015	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035007	CS	W	SW8015	PR	12/21/02	1	GROC6C10
Warning: extra parameter	MLL035007	CS	W	SW8020F	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035007	CS	W	SW8020F	PR	12/21/02	1	MTBE
Warning: extra parameter	MLL035008	CS	W	SW8015	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035008	CS	W	SW8015	PR	12/21/02	1	GROC6C10
Warning: extra parameter	MLL035008	CS	W	SW8020F	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035008	CS	W	SW8020F	PR	12/21/02	1	MTBE
Warning: extra parameter	MLL035009	CS	W	SW8015	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035009	CS	W	SW8015	PR	12/21/02	1	GROC6C10
Warning: extra parameter	MLL035009	CS	W	SW8020F	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035009	CS	W	SW8020F	PR	12/21/02	1	MTBE
Warning: extra parameter	MLL035010	CS	W	SW8015	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035010	CS	W	SW8015	PR	12/21/02	1	GROC6C10
Warning: extra parameter	MLL035010	CS	W	SW8020F	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035010	CS	W	SW8020F	PR	12/21/02	1	MTBE
Warning: extra parameter	MLL035011	CS	W	SW8015	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035011	CS	W	SW8015	PR	12/21/02	1	GROC6C10
Warning: extra parameter	MLL035011	CS	W	SW8020F	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	MLL035011	CS	W	SW8020F	PR	12/21/02	1	MTBE
Warning: extra parameter	2L20055BLK1	LB1	WQ	SW8015	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	2L20055BLK1	LB1	WQ	SW8015	PR	12/21/02	1	GROC6C10

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	2L20055BLK1	LB1	WQ	SW8020F	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	2L20055BLK1	LB1	WQ	SW8020F	PR	12/21/02	1	MTBE
Warning: extra parameter	2L20055BS1	BS1	WQ	SW8015	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	2L20055BS1	BS1	WQ	SW8015	PR	12/21/02	1	GROC6C10
Warning: extra parameter	2L20055BS1	BS1	WQ	SW8020F	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	2L20055BS1	BS1	WQ	SW8020F	PR	12/21/02	1	MTBE
Warning: extra parameter	2L20055BSD1	BD1	WQ	SW8015	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	2L20055BSD1	BD1	WQ	SW8015	PR	12/21/02	1	GROC6C10
Warning: extra parameter	2L20055BSD1	BD1	WQ	SW8020F	PR	12/21/02	1	BR4FBZ
Warning: extra parameter	2L20055BSD1	BD1	WQ	SW8020F	PR	12/21/02	1	MTBE

EDFQC: Error Summary Log

02/10/03

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

EDFCL: Error Summary Log

02/10/03

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

Error Summary Log

02/10/03

EDF 1.2i All files present in deliverable.

Laboratory:	Sequoia Analytical Laboratories, Inc., Morgan Hill, CA
Project Name:	ARCO #5387, Hayward, Ca
Work Order Number:	MLL0719
Global ID:	NA
Lab Report Number:	MLL0719010720031315

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run Sub
MLL07190107200 31315	A-10	MLL071901	W	CS	SW8021F	SW5030B	12/19/02	12/30/02	12/30/02	2L30002	1
		2L30002BS1	WQ	BS1	SW8021F	SW5030B	/ /	12/30/02	12/30/02	2L30002	1
		2L30002BS2	WQ	BS2	SW8021F	SW5030B	/ /	12/30/02	12/30/02	2L30002	1
		2L30002BLK1	WQ	LB1	SW8021F	SW5030B	/ /	12/30/02	12/30/02	2L30002	1
		2L30002MS1	W	MS1	SW8021F	SW5030B	/ /	12/30/02	12/30/02	2L30002	1
		2L30002MSD1	W	SD1	SW8021F	SW5030B	/ /	12/30/02	12/30/02	2L30002	1

EDFSAMP: Error Summary Log

02/10/03

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

EDFTEST: Error Summary Log

02/10/03

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

EDFRES: Error Summary Log

02/10/03

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	2L30002MS1	MS1	W	SW8021F	PR	12/30/02	1	AAATFBZME
Warning: extra parameter	2L30002MS1	MS1	W	SW8021F	PR	12/30/02	1	GROC6C10
Warning: extra parameter	2L30002MSD1	SD1	W	SW8021F	PR	12/30/02	1	AAATFBZME
Warning: extra parameter	2L30002MSD1	SD1	W	SW8021F	PR	12/30/02	1	GROC6C10
Warning: extra parameter	MLL071901	CS	W	SW8021F	PR	12/30/02	1	AAATFBZME
Warning: extra parameter	MLL071901	CS	W	SW8021F	PR	12/30/02	1	GROC6C10
Warning: extra parameter	MLL071901	CS	W	SW8021F	PR	12/30/02	1	MTBE
Warning: extra parameter	2L30002BLK1	LB1	WQ	SW8021F	PR	12/30/02	1	AAATFBZME
Warning: extra parameter	2L30002BLK1	LB1	WQ	SW8021F	PR	12/30/02	1	GROC6C10
Warning: extra parameter	2L30002BLK1	LB1	WQ	SW8021F	PR	12/30/02	1	MTBE
Warning: extra parameter	2L30002BS1	BS1	WQ	SW8021F	PR	12/30/02	1	AAATFBZME
Warning: extra parameter	2L30002BS2	BS2	WQ	SW8021F	PR	12/30/02	1	AAATFBZME
Warning: extra parameter	2L30002BS2	BS2	WQ	SW8021F	PR	12/30/02	1	GROC6C10

EDFQC: Error Summary Log

02/10/03

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

EDFCL: Error Summary Log

02/10/03

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