URS

Alameda County
JAN 30 2003
Environmental Health

January 28, 2003

Barney Chan
Alameda Health Care Services Agency
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Re: Second Quarter 2002 Groundwater Monitoring and Remediation Report
ARCO Service Station #2035
1001 San Pablo Avenue
Albany, California
URS Project #38465900

Dear Mr. Chan:

On behalf of ARCO (an affiliated company of the Group Environmental Management Company), URS Corporation (URS) is submitting the *Second Quarter 2002 Groundwater Monitoring and Remediation Report* for ARCO Service Station #2035, which is located at 1001 San Pablo Avenue, Albany, California.

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

Sincerely,

URS CORPORATION

Scott Robinson
Project Manager

Amy P. Breckenridge, P.E.
Portfolio Manager

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

Enclosure: Second Quarter 2002 Groundwater Monitoring and Remediation Report

cc: Mr. Paul Supple, ARCO, PO Box 6549, Moraga, CA 94570
Barbara and James A. Lestrange, Property Owner, 6 La Canada Court, St. Helena, CA 94574
Muriel & Emile Turpin, Trustees, 957 Arlington Ave., Berkeley, CA 94707

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

REPORT

SECOND QUARTER 2002 GROUNDWATER MONITORING AND REMEDIATION

ARCO SERVICE STATION #2035
1001 SAN PABLO AVENUE
ALBANY, CALIFORNIA

Prepared for
Atlantic Richfield Company

January 28, 2003

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

38465900

Date: January 28, 2003

Quarter: 2Q 02

ATLANTIC RICHFIELD COMPANY QUARTERLY MONITORING AND REMEDIATION REPORT

Facility No.: 2035	Address: 1001 San Pablo Avenue, Albany, California
Atlantic Richfield Co. Environmental Engineer:	Paul Supple
Consulting Co./Contact Person:	URS Corporation / Scott Robinson
Consultant Project No.:	38465900
Primary Agency:	ACHCSA

WORK PERFORMED THIS QUARTER (Second – 2002):

1. Site transferred from Cambria Environmental Technology, Inc. (Cambria) to URS Corporation.
2. Cambria performed second quarter 2002 groundwater monitoring event.
3. Cambria prepared and submitted first quarter 2002 groundwater monitoring report.

WORK PROPOSED FOR NEXT QUARTER (Third – 2002):

1. Prepare and submit second quarter 2002 site status and remediation system performance report.

Current Phase of Project:	Remediation/GW monitoring/sampling
Frequency of Groundwater Sampling:	Well MW-5 annually (2^{nd} quarter) Wells MW-1 through MW-4, MW-6, RW-1, and S-5 semi-annually (2^{nd} /4^{th} quarter)
Frequency of Groundwater Monitoring:	Semi-annual
Is Free Product (FP) Present On-Site:	No
Current Remediation Techniques:	AS/SVE
Approximate Depth to Groundwater:	9.20 (RW-1) to 11.42 (MW-6) feet
Groundwater Gradient (direction):	Southwest
Groundwater Gradient (magnitude):	0.012 feet per foot

DISCUSSION:

Hydrocarbon concentrations detected this quarter were similar to the previous sampling events, except in well RW-1 where concentrations decreased in one order of magnitude to previous results. The maximum TPH-g, benzene, and MTBE concentrations were detected in well RW-1 at 15,000/24,000 µ/L (sample/duplicate), 750/840 µ/L, and 1,500/970 µ/L respectively.

System influent and effluent vapor samples were collected on April 2, 2002 and submitted for analysis.
The SVE system has been inoperable since the site was transitioned from Cambria Environmental Technology, Inc. on May 31, 2002. The repaired blower became inoperable soon after being started up again. Sand and water were found in the blower. The system is currently being evaluated.

ATTACHMENTS:

- Table 1 – Groundwater Monitoring Data
- Table 2 – Groundwater Flow Direction and Gradient
- Figure 1 – Groundwater Elevation Contour and Analytical Summary Map – April 11, 2002
- Attachment A – Field Procedures and Field Data Sheets
- Attachment B – Laboratory Procedures, Certified Analytical Reports, and Chain-of-Custody Records
- Attachment C –Remediation System, Operation and Maintenance Report
- Table C-1 – SVE System Operational Uptime Information
- Table C-2 – SVE System Flow Rates and Analytical Results of Air Samples
- Table C-3 – SVE System Extraction Rates, Emission Rates, Destruction Efficiency and Mass Removed
- Attachment D – EDCC Report and EDF/Geowell Submittal Confirmation

Table 1
Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)
MW-1	03-24-95	41.41	6.21	0.00	35.20	03-24-95	8,800	3,600	<50	62	99	--	--
MW-1	05-24-95	41.41	9.37	0.00	32.04	05-24-95	4,800	2,000	<20	52	<20	--	--
MW-1	08-22-95	41.41	10.30	0.00	31.11	08-22-95	780	310	<2.5	12	<2.5	14	--
MW-1	11-09-95	41.41	12.25	0.00	29.16	11-09-95	58	14	<0.5	<0.5	<0.5	--	--
MW-1	02-27-96	41.41	9.08	0.00	32.33	02-27-96	2,700	930	12	18	32	51	--
MW-1	04-22-96	41.41	9.11	0.00	32.30	04-22-96	2,700	1,000	<10	22	<10	<60	--
MW-1	08-15-96	41.41	10.37	0.00	31.04	08-15-96	300	52	<0.5	0.9	<0.5	22	--
MW-1	12-10-96	41.41	8.79	0.00	32.62	12-10-96	270	63	0.7	<0.5	1	25	--
MW-1	03-27-97	41.41	9.80	0.00	31.61	03-27-97	1,500	610	<5	15	7	56	--
MW-1	05-22-97	41.41	9.65	0.00	31.76	05-22-97	110	6	<0.5	<0.5	0.7	10	--
MW-1	09-04-97	41.41	10.22	0.00	31.19	09-04-97	180	40	<0.5	1.2	0.5	26	--
MW-1	11-03-97	41.41	10.68	0.00	30.73	11-03-97	83	8	<0.5	<0.5	<0.5	13	--
MW-1	02-20-98	41.41	6.92	0.00	34.49	02-20-98	1,800	540	7	27	31	46	--
MW-1	05-18-98	41.41	9.28	0.00	32.13	05-18-98	4,500	1,300	20	57	20	<60	--
MW-1	08-20-98	41.41	10.05	0.00	31.36	08-21-98	530	110	<5	<5	<5	400	--
MW-1	10-20-98	41.41	10.42	0.00	30.99	10-20-98	66	9.1	<0.5	<0.5	<0.5	8	--
MW-1	02-16-99	41.41	8.10	0.00	33.31	02-16-99	1,200	390	<5	<5	6	45	--
MW-1	05-24-99	41.41	9.53	0.00	31.88	05-24-99	1,300	600	3	13	3	26	--
MW-1	08-24-99	41.41	10.03	0.00	31.38	08-24-99	100	21	1.3	<0.5	<0.5	8	--
MW-1	11-16-99	41.41	9.80	0.00	31.61	11-16-99	99	10	0.6	<0.5	<1	7	--
MW-1	02-01-00	41.41	8.82	0.00	32.59	02-02-00	400	93	1.6	3.6	3.7	19	--
DUP 1	06-21-00	--	--	--	--	06-21-00	416	88.4	<2.50	4.61	1.56	<5.00	--
MW-1	06-21-00	41.41	9.60	0.00	31.81	06-21-00	444	100	<2.50	4.15	<2.50	15.9	--
MW-1	11-06-00	41.41	9.50	0.00	31.91	11-06-00	73.2	17.8	<0.500	<0.500	<0.500	7.80	--
MW-1	05-04-01	41.41	9.28	0.00	32.13	05-04-01	714	392	<5.00	<5.00	<5.00	26.1	--
MW-1	10-03-01	41.41	10.50	0.00	30.91	10-03-01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
DUP 1	10-03-01	--	--	--	--	10-03-01	<50	<0.50	<0.50	<0.50	0.52	<2.5	--
MW-1	**04-11-02**	**41.41**	**10.73**	**0.00**	**30.68**	**04-11-02**	**800**	**360**	**<5.0**	**<5.0**	**<5.0**	**<50**	--

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Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)
MW-2	03-24-95	40.38	6.96	0.00	33.42	03-24-95	<50	<0.5	<0.5	<0.5	<0.5	--	--
MW-2	05-24-95	40.38	10.02	0.00	30.36	05-24-95	Not sampled: well sampled semi-annually, during the first and third quarters						
MW-2	08-22-95	40.38	10.87	0.00	29.51	08-22-95	<50	<0.5	<0.5	<0.5	<0.5	<3	--
MW-2	11-09-95	40.38	13.12	0.00	27.26	11-09-95	Not sampled: well sampled semi-annually, during the first and third quarters						
MW-2	02-27-96	40.38	10.25	0.00	30.13	02-27-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--
MW-2	04-22-96	40.38	9.98	0.00	30.40	04-22-96	Not sampled: well sampled semi-annually, during the first and third quarters						
MW-2	08-15-96	40.38	11.10	0.00	29.28	08-15-96	<50	<0.5	<0.5	<0.5	<0.5	4	--
MW-2	12-10-96	40.38	10.00	0.00	30.38	12-10-96	Not sampled: well sampled semi-annually, during the first and third quarters						
MW-2	03-27-97	40.38	10.38	0.00	30.00	03-27-97	<50	<0.5	<0.5	<0.5	<0.5	12	--
MW-2	05-22-97	40.38	10.65	0.00	29.73	05-22-97	Not sampled: well sampled semi-annually, during the first and third quarters						
MW-2	09-04-97	40.38	10.87	0.00	29.51	09-04-97	<50	<0.5	<0.5	<0.5	<0.5	19	--
MW-2	11-03-97	40.38	11.25	0.00	29.13	11-03-97	<50	<0.5	<0.5	<0.5	<0.5	18	--
MW-2	02-20-98	40.38	7.69	0.00	32.69	02-20-98	<50	0.5	<0.5	<0.5	<0.5	12	--
MW-2	05-18-98	40.38	9.88	0.00	30.50	05-18-98	<50	<0.5	<0.5	<0.5	<0.5	10	--
MW-2	08-20-98	40.38	10.62	0.00	29.76	08-21-98	<50	<0.5	<0.5	<0.5	<0.5	3	--
MW-2	10-20-98	40.38	11.00	0.00	29.38	10-20-98	<50	<0.5	<0.5	<0.5	<0.5	31	--
MW-2	02-16-99	40.38	9.04	0.00	31.34	02-16-99	<50	<0.5	<0.5	<0.5	<0.5	13	--
MW-2	05-24-99	40.38	9.90	0.00	30.48	05-24-99	<50	0.6	<0.5	<0.5	<0.5	47	--
MW-2	08-24-99	40.38	10.60	0.00	29.78	08-24-99	<50	<0.5	<0.5	<0.5	<0.5	20	--
MW-2	11-16-99	40.38	10.45	0.00	29.93	11-16-99	<50	<0.5	<0.5	<0.5	<1	<3	--
MW-2	02-01-00	40.38	9.49	0.00	30.89	02-02-00	<50	<0.5	<0.5	<0.5	<1	59	--
MW-2	06-21-00	40.38	10.30	0.00	30.08	06-21-00	<50.0	<0.500	<0.500	<0.500	<0.500	4.17	--
MW-2	11-06-00	40.38	10.19	0.00	30.19	11-06-00	<50.0	<0.500	<0.500	<0.500	<0.500	30.6	--
MW-2	05-04-01	40.38	10.15	0.00	30.23	05-04-01	<50.0	<0.500	<0.500	<0.500	<0.500	32.7	--
DUP	05-04-01	--	--	--	--	05-04-01	<50.0	<0.500	<0.500	<0.500	1.18	31.5	--
MW-2	10-03-01	40.38	10.97	0.00	29.41	10-03-01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
MW-2	**04-11-02**	**40.38**	**11.05**	**0.00**	**29.33**	**04-11-02**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**24**	--

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Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)
MW-3	03-24-95	41.44	7.29	0.00	34.15	03-24-95	51	0.8	<0.5	2.4	<0.5	--	--
MW-3	05-24-95	41.44	9.53	0.00	31.91	05-24-95	<50	<0.5	<0.5	<0.5	<0.5	--	--
MW-3	08-22-95	41.44	11.19	0.00	30.25	08-22-95	<50	<0.5	<0.5	<0.5	<0.5	79	--
MW-3	11-09-95	41.44	12.77	0.00	28.67	11-09-95	<50	<0.5	<0.5	<0.5	<0.5	--	--
MW-3	02-27-96	41.44	9.41	0.00	32.03	02-27-96	120	3.6	<0.5	2.2	3.7	90	--
MW-3	04-22-96	41.44	9.63	0.00	31.81	04-22-96	<50	<0.5	<0.5	<0.5	<0.5	90	--
MW-3	08-15-96	41.44	11.12	0.00	30.32	08-15-96	<50	<0.5	<0.5	<0.5	<0.5	54	--
MW-3	12-10-96	41.44	10.34	0.00	31.10	12-10-96	71	<0.5	<0.5	<0.5	<0.5	130	--
MW-3	03-27-97	41.44	10.28	0.00	31.16	03-27-97	<100	<1	<1	<1	<1	170	--
MW-3	05-22-97	41.44	10.40	0.00	31.04	05-22-97	<100	<1	<1	<1	<1	95	--
MW-3	09-04-97	41.44	10.75	0.00	30.69	09-04-97	<50	<0.5	<0.5	<0.5	<0.5	37	--
MW-3	11-03-97	41.44	11.44	0.00	30.00	11-03-97	<200	<2	<2	<2	<2	130	--
MW-3	02-20-98	41.44	7.48	0.00	33.96	02-20-98	<200	<2	5	<2	8	140	--
MW-3	05-18-98	41.44	9.87	0.00	31.57	05-18-98	<100	<1	<1	<1	<1	150	--
MW-3	08-20-98	41.44	10.72	0.00	30.72	08-21-98	<200	<2	<2	<2	<2	210	--
MW-3	10-20-98	41.44	11.30	0.00	30.14	10-20-98	<200	<2	<2	<2	<2	270	--
MW-3	02-16-99	41.44	8.60	0.00	32.84	02-16-99	<500	<5	<5	<5	<5	700	--
MW-3	05-24-99	41.44	9.87	0.00	31.57	05-24-99	<50	<0.5	<0.5	<0.5	<0.5	150	140
MW-3	08-24-99	41.44	10.83	0.00	30.61	08-24-99	<50	<0.5	<0.5	<0.5	<0.5	54	71
MW-3	11-16-99	41.44	10.54	0.00	30.90	11-16-99	100	<0.5	3.3	<0.5	<1	500	--
MW-3	02-01-00	41.44	5.69	0.00	35.75	02-02-00	18,000	1,000	45	1,500	940	100	--
MW-3	06-21-00	41.44	9.99	0.00	31.45	06-21-00	90.9	1.52	<0.500	<0.500	<0.500	187	--
MW-3	11-06-00	41.44	10.15	0.00	31.29	11-06-00	138	2.37	<0.500	<0.500	<0.500	216	--
MW-3	05-04-01	41.44	10.17	0.00	31.27	05-04-01	316	15.7	1.14	<0.500	<0.500	178	--
MW-3	10-03-01	41.44	10.99	0.00	30.45	10-03-01	120	<0.50	<0.50	<0.50	<0.50	120	--
MW-3	**04-11-02**	**41.44**	**11.05**	**0.00**	**30.39**	**04-11-02**	**250**	**9.4**	**<0.50**	**<0.50**	**<0.50**	**120**	**--**

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MW-4	03-24-95	40.33	5.92	0.00	34.41	03-24-95	<50	<0.5	<0.5	<0.5	<0.5	- -	- -
MW-4	05-24-95	40.33	9.23	0.00	31.10	05-24-95	<50	<0.5	<0.5	<0.5	<0.5	- -	- -
MW-4	08-22-95	40.33	10.61	0.00	29.72	08-22-95	<50	<0.5	<0.5	<0.5	<0.5	99	- -
MW-4	11-09-95	40.33	11.97	0.00	28.36	11-09-95	<50	<0.5	<0.5	<0.5	<0.5	- -	89
MW-4	02-27-96	40.33	8.84	0.00	31.49	02-27-96	<50	0.8	<0.5	<0.5	<0.5	<3	- -
MW-4	04-22-96	40.33	9.15	0.00	31.18	04-22-96	Not sampled: well sampled annually, during the first quarter						
MW-4	08-15-96	40.33	10.35	0.00	29.98	08-15-96	Not sampled: well sampled annually, during the first quarter						
MW-4	12-10-96	40.33	8.70	0.00	31.63	12-10-96	Not sampled: well sampled annually, during the first quarter						
MW-4	03-27-97	40.33	9.75	0.00	30.58	03-27-97	<5,000	<50	<50	<50	<50	4,200	- -
MW-4	05-22-97	40.33	9.91	0.00	30.42	05-22-97	Not sampled: well sampled annually, during the first quarter						
MW-4	09-04-97	40.33	10.25	0.00	30.08	09-04-97	Not sampled: well sampled annually, during the first quarter						
MW-4	11-03-97	40.33	10.79	0.00	29.54	11-03-97	<50	<0.5	<0.5	<0.5	<0.5	<3	- -
MW-4	02-20-98	40.33	6.78	0.00	33.55	02-20-98	<2,000	<20	<20	<20	<20	3,300	- -
MW-4	05-18-98	40.33	9.26	0.00	31.07	05-18-98	<50	<0.5	<0.5	<0.5	<0.5	<3	- -
MW-4	08-20-98	40.33	10.10	0.00	30.23	08-21-98	<50	<0.5	<0.5	<0.5	<0.5	9	- -
MW-4	10-20-98	40.33	10.43	0.00	29.90	10-20-98	<50	<0.5	<0.5	<0.5	<0.5	17	- -
MW-4	02-16-99	40.33	8.56	0.00	31.77	02-16-99	<500	<5	<5	<5	<5	400	- -
MW-4	05-24-99	40.33	9.52	0.00	30.81	05-24-99	<50	<0.5	<0.5	<0.5	<0.5	10	7.6
MW-4	08-24-99	40.33	9.99	0.00	30.34	08-24-99	<2,500	<25	<25	<25	<25	1,200	1,300
MW-4	11-16-99	40.33	9.80	0.00	30.53	11-16-99	<50	<0.5	<0.5	<0.5	<1	<3	- -
MW-4	02-01-00	40.33	9.11	0.00	31.22	02-02-00	<50	<0.5	<0.5	<0.5	<1	1,200	- -
MW-4	06-21-00	40.33	9.60	0.00	30.73	06-21-00	<50.0	<0.500	<0.500	<0.500	<0.500	60.5	- -
MW-4	11-06-00	40.33	9.53	0.00	30.80	11-06-00	<50.0	<0.500	<0.500	<0.500	<0.500	14.0	- -
MW-4	05-04-01	40.33	9.21	0.00	31.12	05-04-01	<50.0	<0.500	<0.500	<0.500	<0.500	83.6	- -
MW-4	10-03-01	40.33	10.74	0.00	29.59	10-03-01	<50	<0.50	<0.50	<0.50	<0.50	260	- -
MW-4	**04-11-02**	**40.33**	**10.81**	**0.00**	**29.52**	**04-11-02**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**11**	**- -**

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Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)
MW-5	03-24-95	41.84	6.23	0.00	35.61	03-24-95	<50	<0.5	<0.5	<0.5	<0.5	--	--
MW-5	05-24-95	41.84	9.61	0.00	32.23	05-24-95	Not sampled: well sampled annually, during the first quarter						
MW-5	08-22-95	41.84	11.12	0.00	30.72	08-22-95	Not sampled: well sampled annually, during the first quarter						
MW-5	11-09-95	41.84	12.52	0.00	29.32	11-09-95	Not sampled: well sampled annually, during the first quarter						
MW-5	02-27-96	41.84	9.52	0.00	32.32	02-27-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--
MW-5	04-22-96	41.84	9.44	0.00	32.40	04-22-96	Not sampled: well sampled annually, during the first quarter						
MW-5	08-15-96	41.84	10.83	0.00	31.01	08-15-96	Not sampled: well sampled annually, during the first quarter						
MW-5	12-10-96	41.84	9.20	0.00	32.64	12-10-96	Not sampled: well sampled annually, during the first quarter						
MW-5	03-27-97	41.84	10.10	0.00	31.74	03-27-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--
MW-5	05-22-97	41.84	10.28	0.00	31.56	05-22-97	Not sampled: well sampled annually, during the first quarter						
MW-5	09-04-97	41.84	10.73	0.00	31.11	09-04-97	Not sampled: well sampled annually, during the first quarter						
MW-5	11-03-97	41.84	11.23	0.00	30.61	11-03-97	Not sampled: well sampled annually, during the first quarter						
MW-5	02-20-98	41.84	6.67	0.00	35.17	02-20-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--
MW-5	05-18-98	41.84	9.61	0.00	32.23	05-18-98	Not sampled: well sampled annually, during the first quarter						
MW-5	08-20-98	41.84	10.58	0.00	31.26	08-21-98	Not sampled: well sampled annually, during the first quarter						
MW-5	10-20-98	41.84	10.66	0.00	31.18	10-20-98	Not sampled: well sampled annually, during the first quarter						
MW-5	02-16-99	41.84	8.35	0.00	33.49	02-16-99	Not sampled						
MW-5	05-24-99	41.84	9.95	0.00	31.89	05-24-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--
MW-5	08-24-99	41.84	10.51	0.00	31.33	08-24-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--
MW-5	11-16-99	41.84	10.37	0.00	31.47	11-16-99	Not sampled: well sampled annually, during the second quarter						
MW-5	02-01-00	41.84	9.35	0.00	32.49	02-02-00	<50	<0.5	<0.5	<0.5	<1	<3	--
MW-5	06-21-00	41.84	10.03	0.00	31.81	06-21-00	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--
MW-5	11-06-00	41.84	9.89	0.00	31.95	11-06-00	Not sampled: well sampled annually, during the second quarter						
MW-5	05-04-01	41.84	9.42	0.00	32.42	05-04-01	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--
MW-5	10-03-01	41.84	10.55	0.00	31.29	10-03-01	Not sampled: well sampled annually, during the second quarter						
MW-5	**04-11-02**	**41.84**	**10.63**	**0.00**	**31.21**	**04-11-02**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5.0**	**--**

Table 1
Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)
MW-6	03-24-95	40.13	9.03	0.00	31.10	03-24-95	<50	<0.5	<0.5	<0.5	<0.5	- -	- -
MW-6	05-24-95	40.13	12.45	0.00	27.68	05-24-95	Not sampled: well sampled annually, during the first quarter						
MW-6	08-22-95	40.13	13.32	0.00	26.81	08-22-95	Not sampled: well sampled annually, during the first quarter						
MW-6	11-09-95	40.13	14.13	0.00	26.00	11-09-95	Not sampled: well sampled annually, during the first quarter						
MW-6	02-27-96	40.13	11.86	0.00	28.27	02-27-96	<50	<0.5	<0.5	<0.5	<0.5	<3	- -
MW-6	04-22-96	40.13	12.35	0.00	27.78	04-22-96	Not sampled: well sampled annually, during the first quarter						
MW-6	08-15-96	40.13	13.18	0.00	26.95	08-15-96	Not sampled: well sampled annually, during the first quarter						
MW-6	12-10-96	40.13	11.94	0.00	28.19	12-10-96	Not sampled: well sampled annually, during the first quarter						
MW-6	03-27-97	40.13	13.10	0.00	27.03	03-27-97	<50	<0.5	<0.5	<0.5	<0.5	<3	- -
MW-6	05-22-97	40.13	13.00	0.00	27.13	05-22-97	Not sampled: well sampled annually, during the first quarter						
MW-6	09-04-97	40.13	13.30	0.00	26.83	09-04-97	Not sampled: well sampled annually, during the first quarter						
MW-6	11-03-97	40.13	13.42	0.00	26.71	11-03-97	<50	<0.5	<0.5	<0.5	<0.5	19	- -
MW-6	02-20-98	40.13	10.57	0.00	29.56	02-20-98	<100	<1	<1	<1	<1	95	- -
MW-6	05-18-98	40.13	12.64	0.00	27.49	05-18-98	<100	<1	<1	<1	<1	180	- -
MW-6	08-20-98	40.13	13.13	0.00	27.00	08-21-98	<100	<1	<1	<1	<1	180	- -
MW-6	10-20-98	40.13	13.48	0.00	26.65	10-20-98	<100	<1	<1	<1	<1	180	- -
MW-6	02-16-99	40.13	11.92	0.00	28.21	02-16-99	<200	<2	<2	<2	<2	200	- -
MW-6	05-24-99	40.13	12.80	0.00	27.33	05-24-99	<50	<0.5	<0.5	<0.5	<0.5	120	- -
MW-6	08-24-99	40.13	13.03	0.00	27.10	08-24-99	<50	<0.5	<0.5	<0.5	<0.5	44	- -
MW-6	11-16-99	40.13	12.70	0.00	27.43	11-16-99	<50	<0.5	<0.5	<0.5	<1	17	17
MW-6	02-01-00	40.13	8.61	0.00	31.52	02-02-00	<50	<0.5	<0.5	<0.5	<1	6	- -
MW-6	06-21-00	40.13	12.88	0.00	27.25	06-21-00	<50.0	<0.500	<0.500	<0.500	<0.500	2.57	- -
MW-6	11-06-00	40.13	12.74	0.00	27.39	11-06-00	<50.0	<0.500	<0.500	<0.500	<0.500	3.77	- -
DUP	11-06-00	- -	- -	- -	- -	11-06-00	<50.0	<0.500	<0.500	<0.500	<0.500	4.03	- -
MW-6	05-04-01	40.13	11.29	0.00	28.84	05-04-01	<50.0	<0.500	<0.500	<0.500	<0.500	10.5	12.3
MW-6	10-03-01	40.13	11.35	0.00	28.78	10-03-01	<50	<0.50	<0.50	<0.50	<0.50	5.8	4.8
MW-6	**04-11-02**	**40.13**	**11.42**	**0.00**	**28.71**	**04-11-02**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<5.0**	- -

Table 1
Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)
RW-1	03-24-95	40.33	9.32	0.01	31.02	03-24-95	11,000	560	660	150	1,700	--	--
RW-1	05-24-95	40.33	9.75	0.03	30.60	05-24-95	Not sampled: well contained floating product						
RW-1	08-22-95	40.33	10.86	0.02	29.48	08-22-95	Not sampled: well contained floating product						
RW-1	11-09-95	40.33	20.61	0.00	19.72	11-09-95	1,600	79	46	13	240	--	--
RW-1	02-27-96	40.33	16.56	0.00	23.77	02-27-96	210	44	7.5	2.5	24	29	--
RW-1	04-22-96	40.33	9.65	0.00	30.68	04-22-96	36,000	7,400	3,700	580	3,400	<300	--
RW-1	08-15-96	40.33	10.60	0.00	29.73	08-15-96	1,800	31	38	15	150	<30	--
RW-1	12-10-96	40.33	8.72	0.00	31.61	12-10-96	25,000	1,900	1,000	330	3,200	<100	--
RW-1	03-27-97	40.33	10.33	0.00	30.00	03-27-97	7,200	1,900	59	95	240	480	--
RW-1	05-22-97	40.33	10.10	0.00	30.23	05-22-97	3,000	630	84	45	340	<60	--
RW-1	09-04-97	40.33	10.42	0.00	29.91	09-04-97	7,100	120	55	14	160	<60	--
RW-1	11-03-97	40.33	9.10	0.00	31.23	11-03-97	<200	14	19	3	19	140	--
RW-1	02-20-98	40.33	7.49	0.00	32.84	02-20-98	3,800	1,000	85	64	220	950	--
RW-1	05-18-98	40.33	8.90	0.00	31.43	05-18-98	<200	45	<2	2	4	220	--
RW-1	08-20-98	40.33	11.06	0.00	29.27	08-21-98	480	200	<2	<2	30	180	--
RW-1	10-20-98	40.33	11.12	0.00	29.21	10-20-98	110	36	2.9	<0.5	4.1	5	--
RW-1	02-16-99	40.33	7.70	0.00	32.63	02-17-99	250	61	2	2	19	94	--
RW-1	05-24-99	40.33	11.12	0.00	29.21	05-24-99	4,500	2,000	7	<2	180	35	--
RW-1	08-24-99	40.33	10.15	0.00	30.18	08-24-99	2,600	1,100	6.3	2.3	17	39	--
RW-1	11-16-99	40.33	9.95	0.00	30.38	11-16-99	1,200	2,600	16	86	41	140	--
RW-1	02-01-00	40.33	11.88	0.00	28.45	02-02-00	11,000	980	230	200	1,400	38	--
RW-1	06-21-00	40.33	9.83	0.00	30.50	06-21-00	899	278	<2.50	8.70	8.46	61.1	--
RW-1	11-06-00	40.33	8.45	0.00	31.88	11-06-00	156,000	3,260	28,800	4,570	25,700	26,200	--
RW-1	05-04-01	40.33	8.57	0.00	31.76	05-04-01	244,000	8,420	56,000	5,660	36,200	23,400	11,000
RW-1	10-03-01	40.33	9.13	0.00	31.20	10-03-01	120,000	2,500	33,000	3,800	21,000	3,300	--
RW-1	**04-11-02**	**40.33**	**9.20**	**0.00**	**31.13**	**04-11-02**	**15,000**	**750**	**2,000**	**380**	**2,000**	**1,500**	**--**
DUP 1	**04-11-02**	--	--	--	--	**04-11-02**	**24,000**	**840**	**2,300**	**500**	**2,800**	**970**	**--**

Table 1
Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)
S-5	05-31-01	- -	- -	- -	- -	05-31-01	310,000	3,000	11,000	4,000	34,000	<2,500	- -
S-5	10-03-01	- -	10.00	- -	- -	10-03-01	70,000	1,800	7,800	1,400	20,000	<120	- -
S-5	**04-11-02**	- -	**10.17**	- -	- -	**04-11-02**	**30,000**	**390**	**1,400**	**410**	**7,400**	**<500**	- -

TOC: top of casing

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

TPH: total petroleum hydrocarbons as gasoline, California DHS LUFT Method

BTEX: benzene, toluene, ethylbenzene, total xylenes by EPA method 8021B. (EPA method 8020 prior to 11/16/99).

MTBE: Methyl tert-butyl ether

µg/L: micrograms per liter

mg/L: milligrams per liter

- -: not analyzed or not applicable

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

[1] = Computed by adding correction factor to groundwater elevation. Correction factor = free product thickness times 0.73 (approximate specific gravity of gasoline).

*: EPA method 8020 prior to 11/16/99

**: For previous historical groundwater elevation and analytical data please refer to *Fourth Quarter 1995 Groundwater Monitoring Program Results and Remediation System Performance Evaluation Report, ARCO Service Station 2035, Albany, California*, (EMCON, March 25, 1996).

DUP: duplicate sample

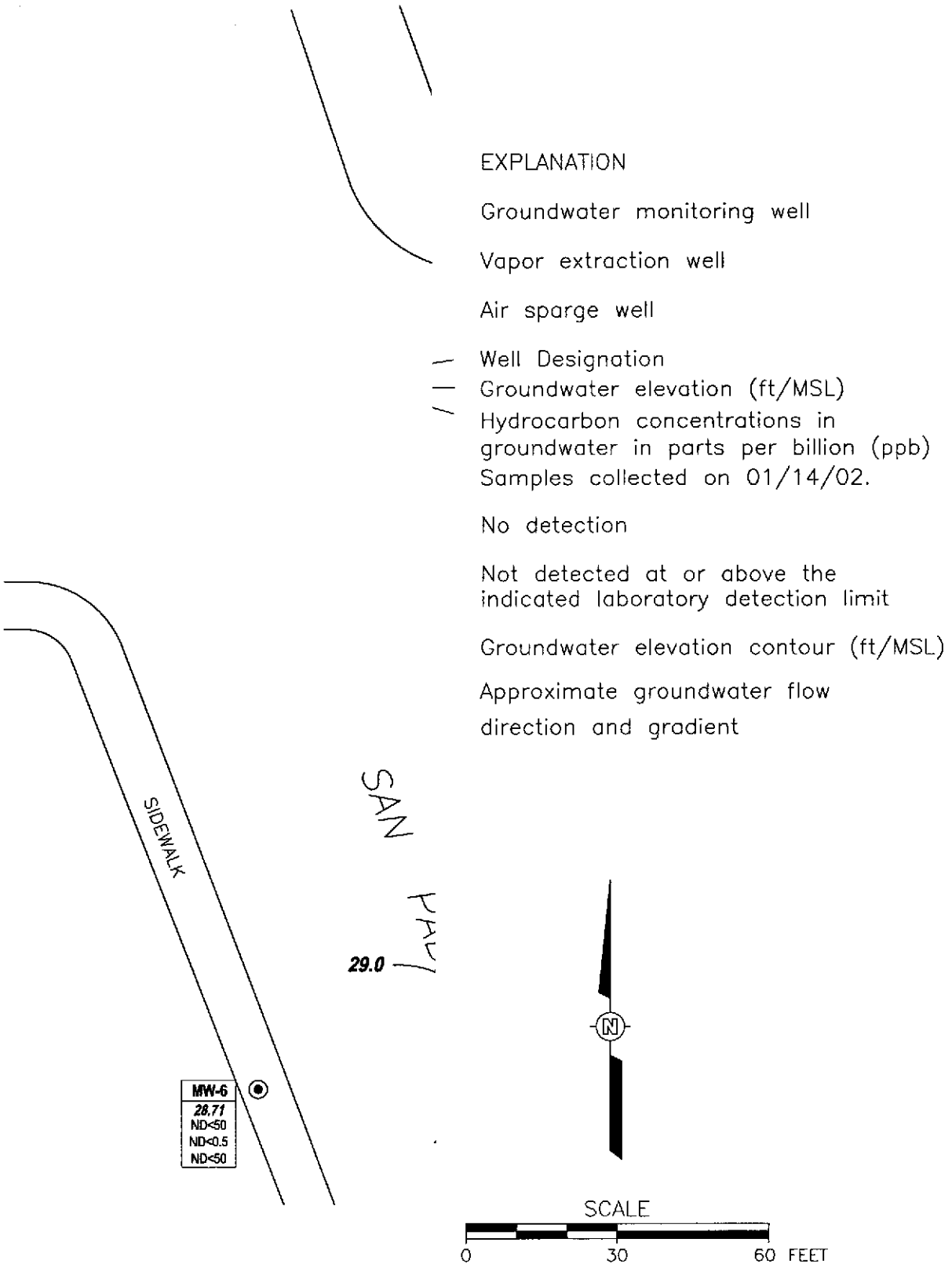
Note: Site transferred from Cambria Environmental Technology Inc. to URS during second quarter 2002. Second quarter data made available by Cambria.

Table 2
Groundwater Flow Direction and Gradient

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Date Measured	Average Flow Direction	Average Hydraulic Gradient
03-24-95	Northwest	0.037
05-24-95	West-Northwest	0.013
08-22-95	Southwest	0.012
11-09-95	West-Southwest	0.01
02-27-96	Southwest	0.009
04-22-96	West-Southwest	0.014
08-15-96	Southwest	0.011
12-10-96	West-Southwest	0.023
03-27-97	West-Southwest	0.026
05-22-97	West-Southwest	0.024
09-04-97	West	0.019
11-03-97	Southwest	0.038
02-20-98	West	0.031
05-18-98	West	0.02
08-20-98	West	0.02
10-20-98	West	0.02
02-16-99	West	0.03
05-24-99	West-Southwest	0.03
08-24-99	West-Southwest	0.01
11-16-99	West-Southwest	0.02
02-01-00	Northwest	0.08
06-21-00	West	0.023
11-06-00	West	0.018
05-04-01	West-Southwest	0.015
10-03-01	Southwest	0.013
04-11-02	**Southwest**	**0.012**

Note: Site transferred from Cambria Environmental Technology Inc. to URS during second quarter 2002. Second quarter data made available by Cambria.



GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP
Second Quarter 2002 (April 11, 2002)

FIGURE
1

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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.

CAMBRIA

WELL DEPTH MEASUREMENTS

Well ID	Time	Product Depth	Water Depth	Product Thickness	Well Depth	Comments
MW-1			10.73			purge
MW-2			11.05			purge
MW-3			11.05			purge
MW-4			10.81			no purge
MW-5			10.63			no purge
MW-6			11.42			no purge
RW-1			9.20			purge
S-5			10.17		15.51	purge

Project Name: Arco 2035

Project Number: 4386008

Measured By: S. Hill

Date: 4-11-02

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CAMBRIA

WELL SAMPLING FORM

Project Name: ARCO 2035	Cambria Mgr: **RAS**	Well ID: MW-1
Project Number: 438-1808	Date:04/11/02	Well Yield:
Site Address: 1001 San Pablo Ave Albany, Ca	Sampling Method: **Disposable bailer**	Well Diameter: 4" pvc
		Technician(s): SG
Initial Depth to Water: 10.73	Total Well Depth: 30.10	Water Column Height: 19.73
Volume/ft: 0.[illegible] 0.65	1 Casing Volume: 12.59	3 Casing Volumes: 37.77
Purging Device: **disposable bailer**	Did Well Dewater?: no	Total Gallons Purged: 37
Start Purge Time: 5:10	Stop Purge Time: 5:24	Total Time: 14mins

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp.	pH	Cond.	Comments
5:15	12	16.1	7.20	524	
5:20	24	15.9	7.18	937	
5:25	37	16.1	7.15	980	DO= 0.51mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-1	**04/11/02**	5:30	**4VOAs**	**HCL**	**TPHg BTEX MTBE**	**8260**

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NSM 5/31/94

CAMBRIA

WELL SAMPLING FORM

Project Name: ARCO 2035	Cambria Mgr: **RAS**	Well ID: MW-2
Project Number: 4938-1608	Date: 04/11/02	Well Yield:
Site Address: 1001 San Pablo Ave. Albany, CA	Sampling Method: **Disposable bailer**	Well Diameter: 4" pvc
		Technician(s): SG
Initial Depth to Water: 11.05	Total Well Depth: 29.01	Water Column Height: 17.96
Volume/ft: ~~gal~~ 0.65	1 Casing Volume: 11.67	3 Casing Volumes: 35.02
Purging Device: **disposable bailer**	Did Well Dewater?: no	Total Gallons Purged: 35
Start Purge Time: 5:40	Stop Purge Time: 5:54	Total Time: 14 mins

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp.	pH	Cond.	Comments
5:45	12	16.1	7.27	3999	
5:50	24	16.3	7.20	3999	
5:55	35	16.3	7.15	3994	DO = 0.60 mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-2	04/11/02	6:00	4VOAs	HCL	TPHg BTEX MTBE	8260

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NSM 5/31/94

CAMBRIA

WELL SAMPLING FORM

Project Name: ARCO 2035	Cambria Mgr: **RAS**	Well ID: MW-3
Project Number: 4938-1608	Date: 04/11/02	Well Yield:
Site Address: 1001 San Pablo Ave Albany, Ca	Sampling Method: **Disposable bailer**	Well Diameter: 4" pvc
		Technician(s): SG
Initial Depth to Water: 11.05	Total Well Depth: 33.50	Water Column Height: 22.45
Volume/ft: ~~0.16~~ 0.65	1 Casing Volume: 14.59	3 Casing Volumes: 43.77
Purging Device: **disposable bailer**	Did Well Dewater?: NO	Total Gallons Purged: 44
Start Purge Time: 4:40	Stop Purge Time: 4:54	Total Time: 14 mins

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp.	pH	Cond.	Comments
4:45	15	16.1	7.42	3999	
4:50	30	16.1	7.25	3999	
4:55	44	16.1	7.20	3999	DO= 0.53 mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-3	04/11/02	5:00	4VOAs	HCL	TPHg BTEX MTBE	8260

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NSM 5/31/94

CAMBRIA

WELL SAMPLING FORM

Project Name: ARCO 2035	Cambria Mgr: **RAS**	Well ID: MW-4
Project Number: 4138-1608	Date: 04/11/02	Well Yield:
Site Address: 1001 San Pablo Ave Albany, CA	Sampling Method: **Disposable bailer**	Well Diameter: 4" **pvc** Technician(s): SG
Initial Depth to Water: 10.31	Total Well Depth:	Water Column Height:
Volume/ft: 0.16	1 Casing Volume:	3 Casing Volumes:
Purging Device: **disposable bailer**	Did Well Dewater?:	Total Gallons Purged:
Start Purge Time:	Stop Purge Time:	Total Time:

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp.	pH	Cond.	Comments
					DO= 0.41 mg/L
		NO purge			

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-4	04/11/02	4:00	4VOAs	HCL	TPHg BTEX MTBE	8260

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CAMBRIA

WELL SAMPLING FORM

Project Name: ARCO 2035	Cambria Mgr: **RAS**	Well ID: MW-5
Project Number: 438-1608	Date:04/11/02	Well Yield:
Site Address: 1001 San Pablo Ave Albany	Sampling Method: **Disposable bailer**	Well Diameter: 4" **pvc** Technician(s): SG
Initial Depth to Water: 10.63	Total Well Depth:	Water Column Height:
Volume/ft: 0.16	1 Casing Volume:	3 Casing Volumes:
Purging Device: **disposable bailer**	Did Well Dewater?:	Total Gallons Purged:
Start Purge Time:	Stop Purge Time:	Total Time:

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp.	pH	Cond.	Comments
					DO = 0.49 mg/L
		no purge			

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-5	04/11/02	4:30	**4VOAs**	**HCL**	**TPHg BTEX MTBE**	**8260**

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CAMBRIA

WELL SAMPLING FORM

Project Name: ARCO 2035	Cambria Mgr: **RAS**	Well ID: MW-6
Project Number: 438-1608	Date: 04/11/02	Well Yield:
Site Address: 1001 San Pablo Ave Albany	Sampling Method: **Disposable bailer**	Well Diameter: " **pvc** Technician(s): SG
Initial Depth to Water: 11.42	Total Well Depth:	Water Column Height:
Volume/ft: 0.16	1 Casing Volume:	3 Casing Volumes:
Purging Device: **disposable bailer**	Did Well Dewater?:	Total Gallons Purged:
Start Purge Time:	Stop Purge Time:	Total Time:

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp.	pH	Cond.	Comments
	10	purge			DO = 0.54 mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-6	04/11/02	3:30	4VOAs	HCL	TPHg BTEX MTBE	8260

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CAMBRIA

WELL SAMPLING FORM

Project Name: ARCO 2035	Cambria Mgr: **RAS**	Well ID: RW-1
Project Number: 4138 1608	Date: 04/11/02	Well Yield:
Site Address: 1001 San Pablo Ave Albany, CC	Sampling Method: **Disposable bailer**	Well Diameter: 4" **pvc** Technician(s): SG
Initial Depth to Water: 9.20	Total Well Depth: 25.40	Water Column Height: 16.20
Volume/ft: 0.65	1 Casing Volume: 10.53	3 Casing Volumes: 31.59
Purging Device: **disposable bailer**	Did Well Dewater?: ND	Total Gallons Purged: 31
Start Purge Time: 6:25	Stop Purge Time: 6:39	Total Time: 14 mins

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp.	pH	Cond.	Comments
6:30	10	16.2	7.21	3999	
6:35	20	16.3	7.25	3999	
6:40	31	16.3	7.29	3999	
					DO = 0.35 ms/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
RW-1	04/11/02	6:45	4VOAs	HCL	TPHg BTEX MTBE	8260
DUP						

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CAMBRIA

WELL SAMPLING FORM

Project Name: ARCO 2035	Cambria Mgr: **RAS**	Well ID: S-5
Project Number: 433-1608	Date:04/11/02	Well Yield:
Site Address: 1001 San Pablo Ave Albany, Ca	Sampling Method: **Disposable bailer**	Well Diameter: 4" pvc
		Technician(s): SG
Initial Depth to Water: 10.17	Total Well Depth:	Water Column Height:
Volume/ft: 0.16	1 Casing Volume:	3 Casing Volumes:
Purging Device: **disposable bailer**	Did Well Dewater?:	Total Gallons Purged:
Start Purge Time:	Stop Purge Time:	Total Time:

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp.	pH	Cond.	Comments
					0.37 ms/L
	no purge				

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
S-5	04/11/02	7:45	4VOAs	HCL	TPHg BTEX MTBE	8260

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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.

Sequoia Analytical

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29 April, 2002

Ron Scheele
Cambria Environmental [1]
6262 Hollis St.
Emeryville, CA 94608

RE: ARCO
Sequoia Report: L204072

Enclosed are the results of analyses for samples received by the laboratory on 04/17/02 15:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Wayne Stevenson
Project Manager

CA ELAP Certificate #2360

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Cambria Environmental [1]	Project: ARCO	
6262 Hollis St.	Project Number: ARCO#2035, Albany	**Reported:**
Emeryville CA, 94608	Project Manager: Ron Scheele	04/29/02 09:47

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	L204072-01	Water	04/11/02 17:30	04/17/02 15:10
MW-2	L204072-02	Water	04/11/02 18:00	04/17/02 15:10
MW-3	L204072-03	Water	04/11/02 17:00	04/17/02 15:10
MW-4	L204072-04	Water	04/11/02 16:00	04/17/02 15:10
MW-5	L204072-05	Water	04/11/02 16:30	04/17/02 15:10
MW-6	L204072-06	Water	04/11/02 15:30	04/17/02 15:10
RW-1	L204072-07	Water	04/11/02 18:45	04/17/02 15:10
S-5	L204072-08	Water	04/11/02 19:45	04/17/02 15:10
DUP	L204072-09	Water	04/11/02 00:00	04/17/02 15:10

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Wayne Stevenson, Project Manager

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Cambria Environmental [1]	Project: ARCO	
6262 Hollis St.	Project Number: ARCO#2035, Albany	**Reported:**
Emeryville CA, 94608	Project Manager: Ron Scheele	04/29/02 09:47

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (L204072-01) Water Sampled: 04/11/02 17:30 Received: 04/17/02 15:10									
Purgeable Hydrocarbons as Gasoline	**800**	500	ug/l	10	2040075	04/23/02	04/23/02	EPA 8021B	P-01
Benzene	**360**	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	50	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*84.3 %*	*70-130*		"	"	"	"	
MW-2 (L204072-02) Water Sampled: 04/11/02 18:00 Received: 04/17/02 15:10									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	2040069	04/22/02	04/23/02	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**24**	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*98.2 %*	*70-130*		"	"	"	"	
MW-3 (L204072-03) Water Sampled: 04/11/02 17:00 Received: 04/17/02 15:10									
Purgeable Hydrocarbons as Gasoline	**250**	50	ug/l	1	2040069	04/22/02	04/23/02	EPA 8021B	P-03
Benzene	**9.4**	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**120**	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*154 %*	*70-130*		"	"	"	"	*S-04*

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Cambria Environmental [1]	Project: ARCO	
6262 Hollis St.	Project Number: ARCO#2035, Albany	**Reported:**
Emeryville CA, 94608	Project Manager: Ron Scheele	04/29/02 09:47

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (L204072-04) Water Sampled: 04/11/02 16:00 Received: 04/17/02 15:10									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	2040069	04/22/02	04/23/02	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**11**	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*105 %*	*70-130*		"	"	"	"	
MW-5 (L204072-05) Water Sampled: 04/11/02 16:30 Received: 04/17/02 15:10									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	2040069	04/22/02	04/23/02	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*96.6 %*	*70-130*		"	"	"	"	
MW-6 (L204072-06) Water Sampled: 04/11/02 15:30 Received: 04/17/02 15:10									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	2040069	04/22/02	04/23/02	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*101 %*	*70-130*		"	"	"	"	

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Cambria Environmental [1]	Project: ARCO	
6262 Hollis St.	Project Number: ARCO#2035, Albany	**Reported:**
Emeryville CA, 94608	Project Manager: Ron Scheele	04/29/02 09:47

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
RW-1 (L204072-07) Water Sampled: 04/11/02 18:45 Received: 04/17/02 15:10									
Purgeable Hydrocarbons as Gasoline	**15000**	2500	ug/l	50	2040068	04/22/02	04/23/02	EPA 8021B	P-01
Benzene	**750**	25	"	"	"	"	"	"	
Toluene	**2000**	25	"	"	"	"	"	"	
Ethylbenzene	**380**	25	"	"	"	"	"	"	
Xylenes (total)	**2000**	25	"	"	"	"	"	"	
Methyl tert-butyl ether	**1500**	250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*103 %*	*70-130*		"	"	"	"	
S-5 (L204072-08) Water Sampled: 04/11/02 19:45 Received: 04/17/02 15:10									
Purgeable Hydrocarbons as Gasoline	**30000**	5000	ug/l	100	2040068	04/22/02	04/23/02	EPA 8021B	P-01
Benzene	**390**	50	"	"	"	"	"	"	
Toluene	**1400**	50	"	"	"	"	"	"	
Ethylbenzene	**410**	50	"	"	"	"	"	"	
Xylenes (total)	**7400**	50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	500	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*97.8 %*	*70-130*		"	"	"	"	
DUP (L204072-09) Water Sampled: 04/11/02 00:00 Received: 04/17/02 15:10									
Purgeable Hydrocarbons as Gasoline	**24000**	2500	ug/l	50	2040076	04/23/02	04/23/02	EPA 8021B	P-01
Benzene	**840**	25	"	"	"	"	"	"	
Toluene	**2300**	25	"	"	"	"	"	"	
Ethylbenzene	**500**	25	"	"	"	"	"	"	
Xylenes (total)	**2800**	25	"	"	"	"	"	"	
Methyl tert-butyl ether	**970**	250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*101 %*	*70-130*		"	"	"	"	

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Cambria Environmental [1]	Project: ARCO	
6262 Hollis St.	Project Number: ARCO#2035, Albany	**Reported:**
Emeryville CA, 94608	Project Manager: Ron Scheele	04/29/02 09:47

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2040068 - EPA 5030B (P/T)										
Blank (2040068-BLK1)				Prepared & Analyzed: 04/22/02						
Purgeable Hydrocarbons as Gasoline	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	5.0	"							
Surrogate: a,a,a-Trifluorotoluene	*9.88*		"	*10.0*		*98.8*	*70-130*			
LCS (2040068-BS1)				Prepared & Analyzed: 04/22/02						
Benzene	11.1	0.50	ug/l	10.0		111	70-130			
Toluene	11.1	0.50	"	10.0		111	70-130			
Ethylbenzene	11.6	0.50	"	10.0		116	70-130			
Xylenes (total)	34.5	0.50	"	30.0		115	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.93*		"	*10.0*		*99.3*	*70-130*			
LCS (2040068-BS2)				Prepared & Analyzed: 04/22/02						
Purgeable Hydrocarbons as Gasoline	267	50	ug/l	250		107	70-130			
Surrogate: a,a,a-Trifluorotoluene	*10.0*		"	*10.0*		*100*	*70-130*			
Matrix Spike (2040068-MS1)		**Source: L204053-24**		Prepared & Analyzed: 04/22/02						
Benzene	9.91	0.50	ug/l	10.0	ND	99.1	60-140			
Toluene	9.84	0.50	"	10.0	ND	98.4	60-140			
Ethylbenzene	9.92	0.50	"	10.0	ND	99.2	60-140			
Xylenes (total)	29.7	0.50	"	30.0	ND	99.0	60-140			
Surrogate: a,a,a-Trifluorotoluene	*8.90*		"	*10.0*		*89.0*	*70-130*			
Matrix Spike Dup (2040068-MSD1)		**Source: L204053-24**		Prepared & Analyzed: 04/22/02						
Benzene	10.0	0.50	ug/l	10.0	ND	100	60-140	0.904	25	
Toluene	10.1	0.50	"	10.0	ND	101	60-140	2.61	25	
Ethylbenzene	10.2	0.50	"	10.0	ND	102	60-140	2.78	25	
Xylenes (total)	30.2	0.50	"	30.0	ND	101	60-140	1.67	25	
Surrogate: a,a,a-Trifluorotoluene	*9.17*		"	*10.0*		*91.7*	*70-130*			

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Cambria Environmental [1]	Project: ARCO	
6262 Hollis St.	Project Number: ARCO#2035, Albany	**Reported:**
Emeryville CA, 94608	Project Manager: Ron Scheele	04/29/02 09:47

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B - Quality Control
Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2040069 - EPA 5030B (P/T)										
Blank (2040069-BLK1)				Prepared & Analyzed: 04/22/02						
Purgeable Hydrocarbons as Gasoline	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	5.0	"							
Surrogate: a,a,a-Trifluorotoluene	*9.93*		"	*10.0*		*99.3*	*70-130*			
LCS (2040069-BS1)				Prepared & Analyzed: 04/22/02						
Benzene	8.94	0.50	ug/l	10.0		89.4	70-130			
Toluene	8.93	0.50	"	10.0		89.3	70-130			
Ethylbenzene	8.84	0.50	"	10.0		88.4	70-130			
Xylenes (total)	25.9	0.50	"	30.0		86.3	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.84*		"	*10.0*		*98.4*	*70-130*			
LCS (2040069-BS2)				Prepared & Analyzed: 04/22/02						
Purgeable Hydrocarbons as Gasoline	259	50	ug/l	250		104	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.19*		"	*10.0*		*91.9*	*70-130*			
Matrix Spike (2040069-MS1)	**Source: L204053-09**			Prepared & Analyzed: 04/22/02						
Benzene	8.64	0.50	ug/l	10.0	ND	86.4	60-140			
Toluene	8.78	0.50	"	10.0	ND	87.8	60-140			
Ethylbenzene	8.96	0.50	"	10.0	ND	89.6	60-140			
Xylenes (total)	26.2	0.50	"	30.0	ND	87.3	60-140			
Surrogate: a,a,a-Trifluorotoluene	*9.12*		"	*10.0*		*91.2*	*70-130*			
Matrix Spike Dup (2040069-MSD1)	**Source: L204053-09**			Prepared & Analyzed: 04/22/02						
Benzene	9.29	0.50	ug/l	10.0	ND	92.9	60-140	7.25	25	
Toluene	9.36	0.50	"	10.0	ND	93.6	60-140	6.39	25	
Ethylbenzene	9.43	0.50	"	10.0	ND	94.3	60-140	5.11	25	
Xylenes (total)	27.5	0.50	"	30.0	ND	91.7	60-140	4.84	25	
Surrogate: a,a,a-Trifluorotoluene	*9.48*		"	*10.0*		*94.8*	*70-130*			

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Cambria Environmental [1]	Project: ARCO	
6262 Hollis St.	Project Number: ARCO#2035, Albany	**Reported:**
Emeryville CA, 94608	Project Manager: Ron Scheele	04/29/02 09:47

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2040075 - EPA 5030B (P/T)										
Blank (2040075-BLK1)				Prepared & Analyzed: 04/23/02						
Purgeable Hydrocarbons as Gasoline	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	5.0	"							
Surrogate: a,a,a-Trifluorotoluene	*8.88*		"	*10.0*		*88.8*	*70-130*			
Blank (2040075-BLK2)				Prepared & Analyzed: 04/24/02						
Purgeable Hydrocarbons as Gasoline	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	5.0	"							
Surrogate: a,a,a-Trifluorotoluene	*8.84*		"	*10.0*		*88.4*	*70-130*			
LCS (2040075-BS1)				Prepared & Analyzed: 04/23/02						
Benzene	9.74	0.50	ug/l	10.0		97.4	70-130			
Toluene	8.64	0.50	"	10.0		86.4	70-130			
Ethylbenzene	8.28	0.50	"	10.0		82.8	70-130			
Xylenes (total)	24.2	0.50	"	30.0		80.7	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.76*		"	*10.0*		*97.6*	*70-130*			
LCS (2040075-BS2)				Prepared & Analyzed: 04/23/02						
Purgeable Hydrocarbons as Gasoline	258	50	ug/l	250		103	70-130			
Surrogate: a,a,a-Trifluorotoluene	*10.2*		"	*10.0*		*102*	*70-130*			

Sequoia Analytical

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Cambria Environmental [1]	Project: ARCO	
6262 Hollis St.	Project Number: ARCO#2035, Albany	**Reported:**
Emeryville CA, 94608	Project Manager: Ron Scheele	04/29/02 09:47

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B - Quality Control
Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2040075 - EPA 5030B (P/T)										
LCS (2040075-BS3)				Prepared & Analyzed: 04/24/02						
Benzene	9.86	0.50	ug/l	10.0		98.6	70-130			
Toluene	8.96	0.50	"	10.0		89.6	70-130			
Ethylbenzene	8.64	0.50	"	10.0		86.4	70-130			
Xylenes (total)	25.3	0.50	"	30.0		84.3	70-130			
Surrogate: a,a,a-Trifluorotoluene	*8.58*		"	*10.0*		*85.8*	*70-130*			
LCS (2040075-BS4)				Prepared & Analyzed: 04/24/02						
Purgeable Hydrocarbons as Gasoline	242	50	ug/l	250		96.8	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.70*		"	*10.0*		*97.0*	*70-130*			
Matrix Spike (2040075-MS1)		**Source: L204073-02**		Prepared & Analyzed: 04/23/02						
Purgeable Hydrocarbons as Gasoline	241	50	ug/l	250	ND	96.4	60-140			
Surrogate: a,a,a-Trifluorotoluene	*9.31*		"	*10.0*		*93.1*	*70-130*			
Matrix Spike Dup (2040075-MSD1)		**Source: L204073-02**		Prepared & Analyzed: 04/23/02						
Purgeable Hydrocarbons as Gasoline	246	50	ug/l	250	ND	98.4	60-140	2.05	25	
Surrogate: a,a,a-Trifluorotoluene	*8.26*		"	*10.0*		*82.6*	*70-130*			
Batch 2040076 - EPA 5030B (P/T)										
Blank (2040076-BLK1)				Prepared & Analyzed: 04/23/02						
Purgeable Hydrocarbons as Gasoline	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	5.0	"							
Surrogate: a,a,a-Trifluorotoluene	*9.62*		"	*10.0*		*96.2*	*70-130*			

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Cambria Environmental [1]	Project: ARCO	
6262 Hollis St.	Project Number: ARCO#2035, Albany	**Reported:**
Emeryville CA, 94608	Project Manager: Ron Scheele	04/29/02 09:47

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B - Quality Control
Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2040076 - EPA 5030B (P/T)										
Blank (2040076-BLK2)				Prepared & Analyzed: 04/24/02						
Purgeable Hydrocarbons as Gasoline	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	5.0	"							
Surrogate: a,a,a-Trifluorotoluene	*9.20*		"	*10.0*		*92.0*	*70-130*			
LCS (2040076-BS1)				Prepared & Analyzed: 04/23/02						
Benzene	11.3	0.50	ug/l	10.0		113	70-130			
Toluene	10.0	0.50	"	10.0		100	70-130			
Ethylbenzene	9.80	0.50	"	10.0		98.0	70-130			
Xylenes (total)	29.0	0.50	"	30.0		96.7	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.78*		"	*10.0*		*97.8*	*70-130*			
LCS (2040076-BS2)				Prepared & Analyzed: 04/23/02						
Purgeable Hydrocarbons as Gasoline	259	50	ug/l	250		104	70-130			
Surrogate: a,a,a-Trifluorotoluene	*10.1*		"	*10.0*		*101*	*70-130*			
LCS (2040076-BS3)				Prepared & Analyzed: 04/24/02						
Benzene	10.9	0.50	ug/l	10.0		109	70-130			
Toluene	9.76	0.50	"	10.0		97.6	70-130			
Ethylbenzene	9.52	0.50	"	10.0		95.2	70-130			
Xylenes (total)	28.2	0.50	"	30.0		94.0	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.81*		"	*10.0*		*98.1*	*70-130*			
LCS (2040076-BS4)				Prepared & Analyzed: 04/24/02						
Purgeable Hydrocarbons as Gasoline	264	50	ug/l	250		106	70-130			
Surrogate: a,a,a-Trifluorotoluene	*10.3*		"	*10.0*		*103*	*70-130*			

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Cambria Environmental [1]	Project: ARCO	
6262 Hollis St.	Project Number: ARCO#2035, Albany	**Reported:**
Emeryville CA, 94608	Project Manager: Ron Scheele	04/29/02 09:47

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B - Quality Control

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2040076 - EPA 5030B (P/T)										
Matrix Spike (2040076-MS1)	**Source: L204059-03**			Prepared & Analyzed: 04/24/02						
Purgeable Hydrocarbons as Gasoline	252	50	ug/l	250	ND	101	60-140			
Surrogate: a,a,a-Trifluorotoluene	*10.1*		"	*10.0*		*101*	*70-130*			
Matrix Spike Dup (2040076-MSD1)	**Source: L204059-03**			Prepared & Analyzed: 04/24/02						
Purgeable Hydrocarbons as Gasoline	247	50	ug/l	250	ND	98.8	60-140	2.00	25	
Surrogate: a,a,a-Trifluorotoluene	*10.1*		"	*10.0*		*101*	*70-130*			

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Cambria Environmental [1]	Project: ARCO	
6262 Hollis St.	Project Number: ARCO#2035, Albany	**Reported:**
Emeryville CA, 94608	Project Manager: Ron Scheele	04/29/02 09:47

Notes and Definitions

P-01	Chromatogram Pattern: Gasoline C6-C12
P-03	Chromatogram Pattern: Unidentified Hydrocarbons C6-C12
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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

ARCO Products Company
Division of Atlantic Richfield Company

RAT#8 — **Task Order No.** WAR# 28819.00 — **Chain of Custody**

ARCO Facility no. 2035 | City (Facility) Albany | Project manager (Consultant) Ron Scheels | Laboratory name Sequoia

ARCO engineer Paul Supple | Telephone no. (ARCO) 925-299-881 | Telephone no. (Consultant) 510-450-1983 | Fax no. (Consultant) 510-460-8195 | Contract number

Consultant name Cambria Env. Tech. | Address (Consultant) 6262 Hollis St. Emeryville, Ca | Method of shipment

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH_g/MTBE EPA M602/8020/8015 EPA 8260	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM5520	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ VOAs ☐ Semi VOAs ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐
MW-1	01	4		X		X	X	4-11-02	5:30		X									
MW-2	02	4		X		X	X	4-11-02	6:00		X									
MW-3	03	4		X		X	X	4-11-02	5:00		X									
MW-4	04	4		X		X	X	4-11-02	4:00		X									
MW-5	05	4		X		X	X	4-11-02	4:30		X									
MW-6	06	4		X		X	X	4-11-02	3:30		X									
RW-1	07	4		X		X	X	4-11-02	6:45		X									
S-5	08	4		X		X	X	4-11-02	7:45		X									
DUP	09	4		X		X	X	4-11-02			X									

Special detection Limit/reporting: Lowest Possible

Special QA/QC

Remarks: Report results in EDF format

Lab number: 204072

Turnaround time

- Priority Rush 1 Business Day ☐
- Rush 2 Business Days ☐
- Expedited 5 Business Days ☐
- Standard 10 Business Days ☒

Condition of sample:

Temperature received:

Relinquished by sampler: [signature] — Date 4/17/02 — Time 3:10

Received by: [signature] — Date 4/17/02 — Time 3:10

Relinquished by: — Date — Time

Received by: — Date — Time

Relinquished by: — Date — Time

Received by: — Date — Time

Sequoia Analytical

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Cambria - Emeryville	Project: ARCO #2035, Albany, CA	
6262 Hollis St.	Project Number: ARCO #2035 Albany, CA	**Reported:**
Emeryville CA, 94608	Project Manager: Ron Scheele	04/17/02 10:49

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
INF	MLD0021-01	Air	04/01/02 12:00	04/02/02 18:15
EFF	MLD0021-02	Air	04/01/02 12:00	04/02/02 18:15

Sequoia Analytical - Morgan Hill

Latonya K. Pelt

Latonya Pelt, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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17 April, 2002

Ron Scheele
Cambria - Emeryville
6262 Hollis St.
Emeryville, CA 94608

RE: ARCO #2035, Albany, CA
Sequoia Report: MLD0021

Enclosed are the results of analyses for samples received by the laboratory on 04/02/02 18:15. 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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Cambria - Emeryville	Project: ARCO #2035, Albany, CA	
6262 Hollis St.	Project Number: ARCO #2035 Albany, CA	**Reported:**
Emeryville CA, 94608	Project Manager: Ron Scheele	04/17/02 10:49

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified and BTEX by EPA 8021B in Air

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
INF (MLD0021-01) Air Sampled: 04/01/02 12:00 Received: 04/02/02 18:15									
Gasoline Range Organics (C6-C10)	**45**	4.9	ppmv	2	2D03005	04/03/02	04/03/02	8015Bm/8021 B	P-01
Benzene	**0.38**	0.063	"	"	"	"	"	"	
Toluene	**1.0**	0.053	"	"	"	"	"	"	
Ethylbenzene	**0.18**	0.046	"	"	"	"	"	"	
Xylenes (total)	**1.5**	0.046	"	"	"	"	"	"	
Methyl tert-butyl ether	**20**	0.28	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*109 %*	*70-130*		"	"	"	"	
EFF (MLD0021-02) Air Sampled: 04/01/02 12:00 Received: 04/02/02 18:15									
Gasoline Range Organics (C6-C10)	ND	2.4	ppmv	1	2D03005	04/03/02	04/03/02	8015Bm/8021 B	
Benzene	ND	0.031	"	"	"	"	"	"	
Toluene	ND	0.027	"	"	"	"	"	"	
Ethylbenzene	ND	0.023	"	"	"	"	"	"	
Xylenes (total)	**0.050**	0.023	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.14	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*99.7 %*	*70-130*		"	"	"	"	

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Cambria - Emeryville	Project: ARCO #2035, Albany, CA	
6262 Hollis St.	Project Number: ARCO #2035 Albany, CA	**Reported:**
Emeryville CA, 94608	Project Manager: Ron Scheele	04/17/02 10:49

otal Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified and BTEX by EPA 8021B in Air - Quality Contr

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2D03005 - EPA 5030B [P/T]										
Blank (2D03005-BLK1)				Prepared & Analyzed: 04/03/02						
Gasoline Range Organics (C6-C10)	ND	12	ppmv							
Benzene	ND	0.16	"							
Toluene	ND	0.13	"							
Ethylbenzene	ND	0.12	"							
Xylenes (total)	ND	0.12	"							
Methyl tert-butyl ether	ND	0.69	"							
Surrogate: a,a,a-Trifluorotoluene	*1.73*		"	*1.68*		*103*	*70-130*			
LCS (2D03005-BS1)				Prepared & Analyzed: 04/03/02						
Benzene	3.36	0.16	ppmv	3.14		107	0-200			
Toluene	2.81	0.13	"	2.66		106	0-200			
Ethylbenzene	2.55	0.12	"	2.31		110	0-200			
Xylenes (total)	7.57	0.12	"	6.92		109	0-200			
Surrogate: a,a,a-Trifluorotoluene	*1.91*		"	*1.68*		*114*	*70-130*			
LCS (2D03005-BS2)				Prepared & Analyzed: 04/03/02						
Gasoline Range Organics (C6-C10)	69.1	12	ppmv	70.9		97.5	0-200			
Surrogate: a,a,a-Trifluorotoluene	*1.82*		"	*1.68*		*108*	*70-130*			

Sequoia Analytical

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Cambria - Emeryville	Project: ARCO #2035, Albany, CA	
6262 Hollis St.	Project Number: ARCO #2035 Albany, CA	**Reported:**
Emeryville CA, 94608	Project Manager: Ron Scheele	04/17/02 10:49

Notes and Definitions

P-01	Chromatogram Pattern: Gasoline C6-C10
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

SEQUOIA ANALYTICAL CHAIN OF CUSTODY

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☐ 404 N. Wiget Lane • Walnut Creek, CA 94598 • (925) 988-9600 FAX (925) 988-9673
☐ 1455 McDowell Blvd. North, Suite D • Petaluma, CA 94954 • (707) 792-1865 FAX (707) 792-0342
☐ 1551 Industrial Road • San Carlos, CA 94070 • (650) 232-9600 FAX (650) 232-9612

Company Name: California Water Service Co
Mailing Address: 1720 N. First St.
City: San Jose State: CA Zip Code: 95112
Telephone: 408 367-8268 FAX #:
Report To: Kelly Suffone-O'Dea Sampler:

Project Name:
Billing Address (if different):
P.O. #:
QC Data: ☑ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

Turnaround Time: ☑ 10 Working Days ☐ 7 Working Days ☐ 5 Working Days ☐ 3 Working Days ☐ 2 Working Days ☐ 24 Hours ☐ 2 - 8 Hours

MLB0021

☐ Drinking Water ☐ Waste Water ☐ Other

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	MBAS									Comments
1. DOM 279-01	2-27-02 / 1500		1		01	1									EDT & State forms
2. DOM 294-01	2-27-02 / 1133		1		02	1									↓
3.															
4.															
5.															
6.															
7.															
8.															
9.															
10.															

SEQUOIA ANALYTICAL

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
[signature]	2/28/02	12:30	[signature]	2/28/02	1230
[signature]	2/28/02	1300	[signature]	2/28/02	311

Were Samples Received in Good Condition? ☑ Yes ☐ No Samples on Ice? ☑ Yes ☐ No Method of Shipment: [signature] Page 1 of 1

ATTACHMENT C

REMEDIATION SYSTEM, OPERATION AND MAINTENANCE REPORT

Date:	January 28, 2003
Quarter:	2Q 02
Site:	2035

ATLANTIC RICHFIELD COMPANY SVE OPERATION AND MAINTENANCE REPORT

Equipment Inventory:	Therm Tech Model VAC-10 Thermal/Catalytic Oxidizer
Operating Mode:	Catalytic Oxidation
BAAQMD Permit #:	8694
TPH Conc. End of Period (lab):	45 ppmv (4/2/02)
Benzene Conc. End of Period (lab):	0.38 ppmv (4/2/02)
SVE Flowrate End of Period:	NA
Total HC Destroyed This Period:	NA
Total HC Destroyed to Date:	3,967 pounds
Utility Usage	
Electric (kWh):	0
Gas (Therms):	0
Operating Hours This Period (SVE):	0
Operating Hours to Date (SVE):	23,063 Hours
Percent Operational (SVE):	0%
Unit Maintenance:	Blower is currently under repair
Number of Auto Shut Downs:	2
Destruction Efficiency Permit Requirement:	98.5% (POC >2,000 ppmv); 97% (POC >200 ppmv); 90% (POC <200 ppmv)
Percent TPH Conversion:	Not calculated/Blower Under Repair
Average Stack Temperature:	Not Measured/Blower Under Repair
Average SVE Source Flow:	Not Measured/Blower Under Repair
Average SVE Process Flow:	Not Measured/Blower Under Repair
Average Source Vacuum:	Not Measured/Blower Under Repair

Table C-1
Soil Vapor Extraction System (1997-Present)
Operational Uptime Information

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Date	Period Operation					Cumulative Operation				
	Meter (hours)	Total (days)	Uptime (days)	Downtime (days)	Uptime (%)	Total (days)	Uptime (days)	Downtime (days)	Uptime (%)	Total Operating Time (hours)
11/01/97						1425	335	1090	24%	6873.20
12/01/97	11484	30	14	16	47%	1455	349	1106	24%	7211.10
01/27/98	11484	57	0	57	0%	1512	349	1163	23%	7211.10
08/12/98	11484	197	0	197	0%	1709	349	1360	20%	7211.10
09/02/98	11485	21	0	21	0%	1730	349	1381	20%	7211.33
10/19/98	12280	47	33	14	70%	1777	382	1395	22%	8006.35
11/10/98	12809	22	22	0	100%	1799	404	1395	22%	8536.00
01/22/99	12809	73	0	73	0%	1872	404	1468	22%	8536.00
02/11/99	12810	20	0	20	0%	1892	404	1488	21%	8536.17
04/01/99	12810	49	0	49	0%	1941	404	1537	21%	8536.28
06/10/99	12810	70	0	70	0%	2011	404	1607	20%	8536.67
06/24/99	13146	14	14	0	100%	2025	418	1607	21%	8872.83
08/17/99	13146	54	0	54	0%	2079	418	1661	20%	8872.83
09/09/99	13147	23	0	23	0%	2102	418	1684	20%	8873.40
09/21/99	13435	12	12	0	100%	2114	430	1684	20%	9162.06
10/06/99	13450	15	1	14	4%	2129	431	1698	20%	9176.92
10/20/99	13475	14	1	13	7%	2143	432	1711	20%	9201.52
11/03/99	13812	14	14	0	100%	2157	446	1711	21%	9538.34
11/17/99	14148	14	14	0	100%	2171	460	1711	21%	9874.70
12/01/99	14391	14	10	4	72%	2185	470	1715	22%	10117.75
12/16/99	14751	15	15	0	100%	2200	485	1715	22%	10478.02
01/05/00	14751	20	0	20	0%	2220	485	1735	22%	10478.05
01/19/00	15087	14	14	0	100%	2234	499	1735	22%	10813.74
02/21/00	15087	33	0	33	0%	2267	499	1768	22%	10813.79
03/01/00	15303	9	9	0	100%	2276	508	1768	22%	11030.07
03/23/00	15831	22	22	0	100%	2298	530	1768	23%	11557.23

Table C-1
Soil Vapor Extraction System (1997-Present)
Operational Uptime Information

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Date	Period Operation					Cumulative Operation				
	Meter (hours)	Total (days)	Uptime (days)	Downtime (days)	Uptime (%)	Total (days)	Uptime (days)	Downtime (days)	Uptime (%)	Total Operating Time (hours)
10/17/00	15832	208	0	208	0%	2506	530	1976	21%	11558.53
10/24/00	15998	7	7	0	99%	2513	537	1976	21%	11724.74
11/13/00	16319	20	13	7	67%	2533	551	1982	22%	12045.33
11/28/00	16319	15	0	15	0%	2548	551	1997	22%	12045.52
12/20/00	16319	22	0	22	0%	2570	551	2019	21%	12045.52
01/17/01	16324	28	0	28	1%	2598	551	2047	21%	12050.49
02/14/01	16346	28	1	27	3%	2626	552	2074	21%	12072.45
02/26/01	16458	12	5	7	39%	2638	556	2082	21%	12184.69
03/13/01	16466	15	0	15	2%	2653	557	2096	21%	12192.59
03/30/01	16872	17	17	0	99%	2670	574	2096	21%	12598.53
04/19/01	17029	20	7	13	33%	2690	580	2110	22%	12755.92
04/30/01	17292	11	11	0	99%	2701	591	2110	22%	13018.45
05/14/01	17601	14	13	1	92%	2715	604	2111	22%	13327.26
05/22/01	17793	8	8	0	100%	2723	612	2111	22%	13519.64
06/05/01	18126	14	14	0	99%	2737	626	2111	23%	13852.16
06/25/01	18305	20	7	13	37%	2757	633	2124	23%	14031.64
07/06/01	18569	11	11	0	100%	2768	644	2124	23%	14295.84
07/18/01	18856	12	12	0	100%	2780	656	2124	24%	14582.70
07/31/01	19166	13	13	0	99%	2793	669	2124	24%	14892.60
08/09/01	19388	9	9	0	103%	2802	643	2159	23%	15114.69
08/23/01	19720	14	14	0	99%	2816	656	2160	23%	15446.56
09/05/01	20029	13	13	0	99%	2829	655	2174	23%	15755.98
09/17/01	20321	12	12	0	101%	2841	668	2173	23%	16047.51
09/24/01	20420	7	4	3	59%	2848	672	2176	24%	16146.19
10/01/01	20425	7	0	7	3%	2855	672	2183	24%	16151.50

Table C-1
Soil Vapor Extraction System (1997-Present)
Operational Uptime Information

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Date	Period Operation					Cumulative Operation				
	Meter (hours)	Total (days)	Uptime (days)	Downtime (days)	Uptime (%)	Total (days)	Uptime (days)	Downtime (days)	Uptime (%)	Total Operating Time (hours)
10/09/01	20621	8	8	0	100%	2863	680	2183	24%	16347.39
10/15/01	20762	6	6	0	100%	2869	686	2183	24%	16488.76
11/07/01	21320	23	23	0	100%	2892	709	2183	25%	17046.89
11/21/01	21650	14	14	0	100%	2906	723	2183	25%	17376.59
12/05/01	21986	14	14	0	100%	2920	737	2183	25%	17712.60
12/27/01	22514	22	22	0	100%	2942	759	2183	26%	18240.53
01/09/02	22516	13	0	13	1%	2955	759	2196	26%	18242.14
01/21/02	22803	12	12	0	100%	2967	771	2196	26%	18529.64
02/05/02	23063	15	11	4	72%	2982	782	2200	26%	18789.39
6/31/02	----System Not Operating-----									

Note: Site transferred from Cambria Environmental Technology Inc. to URS during second quarter 2002. Second quarter data made available by Cambria.

Any data from 2/05 - 6/17?

Table C-2
Soil Vapor Extraction System
Flow Rates and Analytical Results of Air Samples (1997 - present)

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Date	Sample Location	Vacuum (in. H20)	Velocity /Actual Flow (fpm/acfm)	Flowrate[1, 2] (scfm)	Hydrocarbon Concentrations (ppmv) TPHg	Benzene	Toluene	Ethylbenzene	Xylene	MTBE
12/01/97	Influent			221	160	0.6	<0.1	1.6	2.5	
	Effluent				8	<0.1	0.1	<0.1	0.3	
01/27/98	Influent	NA	NA	NA	NA	NA	NA	NA	NA	
	Effluent									
08/12/98	Influent	NA	NA	NA	NA	NA	NA	NA	NA	
	Effluent									
09/02/98	Influent	30.0	600	27	610	<1	<1	2	3	
	Effluent		1050	92	9	<0.1	<0.1	0.1	<0.2	
10/19/98	Influent	20.0	500	23	64	<0.1	0.7	<0.1	<0.2	
	Effluent		1200	106	<5	<0.1	<0.1	<0.1	<0.2	
11/10/98	Influent	20.0	500	23	8	<0.1	0.1	<0.1	<0.2	
	Effluent		1200	106	<5	<0.1	<0.1	<0.1	<0.2	
06/10/99	Influent	35.0	1500	67	100	0.5	3	<0.1	0.9	<1
	Effluent		975	75	<5	<0.1	<0.1	<0.1	<0.2	<1
09/09/99	Influent	15.4	1900	90	<49	0.7	1.1	<0.1	<0.2	33
	Effluent		1200	92	<5	<0.1	<0.1	<0.1	<0.2	<0.8
10/06/99	Influent	16.0	1825	86	240	1	2.9	<0.1	0.7	67
	Effluent		900	69	9	<0.1	0.1	0.1	<0.2	<0.8
12/01/99	Influent	11.0	1900	91	210	0.7	0.8	<0.2	0.2	61
	Effluent		1500	115	<5	<0.1	<0.1	<0.1	<0.2	1.4
01/05/00	Influent	9.8	800	38	90	0.4	0.7	0.1	<0.2	33
	Effluent		1450	111	<5	<0.1	<0.1	<0.1	<0.2	<0.8
03/01/00	Influent	9.8	2000	96	54	1.3	4.8	1.1	7.2	19
	Effluent		1500	115	<5	<0.1	<0.1	<0.1	<0.2	<0.8
10/17/00	Influent	10.0	--	27	77	1.4	1.8	0.33	1.4	20
	Effluent		--	103	6.0	0.044	0.16	0.055	0.38	0.59

Table C-2
Soil Vapor Extraction System
Flow Rates and Analytical Results of Air Samples (1997 - present)

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Date	Sample Location	Vacuum (in. H20)	Velocity /Actual Flow (fpm/acfm)	Flowrate[1, 2] (scfm)	Hydrocarbon Concentrations (ppmv) TPHg	Benzene	Toluene	Ethylbenzene	Xylene	MTBE
02/26/01	Influent	60.0	180	153	50.4	0.850	3.84	0.390	2.02	11.6
	Effluent		180	153	<2.84	<0.0314	0.0769	<0.0230	0.754	0.132
04/19/01	Influent	45.0	124	110	180	2.0	2.6	0.25	2.0	<1.5
	Effluent		124	110	<10.0	<0.15	0.24	<0.15	0.79	<1.5
05/14/01	Influent	40.0	76	69	41.0	0.511	0.299	0.0357	0.293	0.492
	Effluent		76	69	<2.84	<0.0314	<0.0266	<0.0230	<0.0230	<0.111
06/05/01	Influent	45.0	108	96	6.6	<0.31	0.41	0.072	0.32	2.2
	Effluent		108	96	<2.40	<0.31	<0.027	<0.023	0.068	<0.14
08/09/01	Influent	40.0	98.5	89	4.3	0.034	0.19	<0.024	0.15	0.20
	Effluent		98.5	89	<2.8	<0.032	0.026	<0.024	0.13	<0.11
09/05/01	Influent	50.0	113	99	5.2	0.038	0.39	0.025	0.14	0.83
	Effluent		113	99	<2.8	<0.032	<0.026	<0.024	0.027	<0.11
10/01/01	Influent	40.0	218	197	31	0.23	0.56	0.077	0.30	2.1
	Effluent		218	197	<2.8	<0.032	0.071	<0.024	0.036	<0.11
11/07/01	Influent	48.0	221	195	6.4	<0.032	0.33	0.029	0.14	1.4
	Effluent		221	195	<2.8	<0.032	<0.026	<0.024	<0.024	<0.11
12/05/01	Influent	61.0	200	170	7.5	0.16	0.52	<0.024	0.11	
	Effluent		200	170	<2.8	<0.032	<0.026	<0.024	<0.024	
01/09/02	Influent	65.0	203	171	45	0.52	2.4	0.22	1.3	5.6
	Effluent		203	171	<2.8	<0.032	0.049	<0.024	0.052	<0.11
02/05/02	Influent	64.0	200	169	23	0.16	1.4	0.15	0.84	4.8
	Effluent		200	169	<2.8	<0.032	0.076	<0.024	0.059	<0.11
04/02/02	**Influent**	**NA**	**NA**	**NA**	**45**	**0.38**	**1.00**	**0.18**	**1.50**	**20.00**
	Effluent	**NA**	**NA**	**NA**	**<2.4**	**<0.031**	**<0.027**	**<0.023**	**0.05**	**<0.14**

[1] Influent Flow Rate previous to 10/17/00, cfm = (Velocity, fpm)(Influent Pipe Area, sq. ft.)(406.8 in.H20 - Vacuum, in.H20) / (406.8 in.H20)
where Influent Pipe Diameter = 3"
Effluent Flow Rate, cfm = (Velocity, fpm)(Effluent Pipe Area, sq.ft.)[(460° R + 77° F) / (460° R + Vapor Temp F)]
where Effluent (after blower) Pipe Diameter = 4"

[2] Influent Flow Rate 10/17/00 to present, cfm = (Actual flow, acfm)(406.8 in.H20 - Vacuum, in.H20) / (406.8 in.H20)

Effluent Flow Rate 10/17/00 to present, scfm = (Actual flow, acfm)[(460° R + 77° F) / (460° R + Vapor Temp F)]
when dilution valve is open. If dilution valve is closed, influent flow = effluent flow

Note: Site transferred from Cambria Environmental Technology Inc. to URS during second quarter 2002. Second quarter data made available by Cambria.

Table C-3
Soil Vapor Extraction System
Extraction Rates, Emission Rates, Destruction Efficiency, and Mass Removed
(1997 - present)

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Date	Extraction Rate from Wellfield[1]		Emission Rate to Atmosphere[2]		Destruction Efficiency[3]		Period Removal[4]		Cumulative Removal	
	TPHg (lbs/day)	Benzene (lbs/day)	TPHg (lbs/day)	Benzene (lbs/day)	TPHg (%)	Benzene (%)	TPHg (lbs)	Benzene (lbs)	TPHg (lbs)	Benzene (lbs)
12/01/97	13.0	0.0381	0.651	<0.0064	95%	NC	183	0.54	3023	250.5
09/02/98	6.11	0.0000	0.306	<0.0027	95%	NC	0.06	0.00	3023	250.5
10/19/98	0.55	0.0000	<0.196	<0.0031	NC	NC	18.2	0.00	3041	250.5
11/10/98	0.07	0.0000	<0.196	<0.0031	NC	NC	1.51	0.00	3042	250.5
06/10/99	2.47	0.0097	<0.138	<0.0021	NC	NC	0.07	0.00	3042	250.5
09/09/99	1.61	0.0180	<0.169	<0.0026	NC	NC	22.7	0.25	3065	250.8
10/06/99	7.59	0.0247	0.229	<0.0020	97%	NC	95.9	0.31	3161	251.1
12/01/99	7.00	0.0182	<0.212	<0.0033	NC	NC	274	0.71	3435	251.8
01/05/00	1.27	0.0044	<0.205	<0.0032	NC	NC	19.0	0.07	3454	251.9
03/01/00	1.90	0.0357	<0.212	<0.0033	NC	NC	43.7	0.82	3498	252.7
10/17/00	0.77	0.0110	<0.226	<0.0013	71%	88%	17.0	0.24	3515	252.9
02/26/01	2.84	0.0374	<0.160	<0.0014	NC	NC	74.1	0.98	3589	253.9
04/19/01	7.29	0.0633	<0.405	<0.0047	NC	NC	174	1.51	3763	255.4
05/14/01	1.03	0.0100	<0.0715	<0.0006	NC	NC	24.6	0.24	3787	255.7
06/25/01	0.23	<0.0085	<0.0847	<0.0085	NC	NC	6.84	0.25	3794	255.9
08/09/01	0.14	0.0009	<0.0914	<0.0008	NC	NC	6.33	0.04	3801	256.0
09/05/01	0.19	0.0011	<0.1020	<0.0009	NC	NC	5.06	0.03	3806	256.0
10/01/01	2.24	0.0130	<0.2022	<0.0018	NC	NC	36.9	0.21	3843	256.2
11/07/01	0.46	0.0018	<0.2005	<0.0018	NC	NC	17.1	0.07	3860	256.3
12/05/01	0.47	0.0078	<0.1749	<0.0016	NC	NC	13.0	0.22	3873	256.5
01/09/02	2.82	0.0255	<0.1755	<0.0016	NC	NC	62.2	0.56	3935	257.0
02/05/02	1.42	0.0077	<0.1734	<0.0015	NC	NC	32.5	0.18	3967	257.2
6/31/02				**-----System Not Operating-----**						

[1] Extraction Rate, lbs/day = (Influent Flow, cfm)(Influent conc., ppmv)(g/mole)(60 min/hr)(24 hr/day)(28.3 L/cf) / (10^6)(24.45 moles/L)(453.6 g/lb)
where TPHg = 100 g/mole and Benzene = 78.1 g/mole; Influent conc. = 0, if reported as non-detect

[2] Emission Rate, lbs/day = (Effluent Flow, cfm)(Effluent conc., ppmv)(g/mole)(60 min/hr)(24 hr/day)(28.3 L/cf) / (10^6)(24.45 moles/L)(453.6 g/lb)
where TPHg = 100 g/mole and Benzene = 78.1 g/mole; Effluent conc. = Method Reporting Limit, if reported as non-detect

[3] Destruction Efficiency, % = (Extraction Rate - Emission Rate)(100) / (Extraction Rate); NC = Not Calculated due to non-detection.

[4] Period Removal, lbs = (Extraction Rate)(Uptime)

Note: Site transferred from Cambria Environmental Technology Inc. to URS during second quarter 2002. Second quarter data made available by Cambria.

NC = Not Calculated

ATTACHMENT D

EDCC REPORT AND EDF/GEOWELL SUBMITTAL CONFIRMATION