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Quarterly Groundwater Monitoring Report
Fourth Quarter 2001

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

MAR 06 2002

Prepared for

Mr. Paul Supple
ARCO Products Company

March 1, 2002

Prepared by

IT Corporation
1921 Ringwood Avenue
San Jose, California 95131-1721

Project 821803 (330-006)

Shaw Garakani
Project Manager

Andrew Lehane
Senior Engineer
RCE 55798

REGISTERED PROFESSIONAL ENGINEER
ANDREW D. LEHANE
55798
EXP. 12/31/04
CIVIL
STATE OF CALIFORNIA

Date: March 1, 2002
Quarter: 4Q01

ARCO QUARTERLY GROUNDWATER MONITORING REPORT

Facility No.: 0608	Address: 17601 Hesperian Boulevard at Hacienda Avenue
	San Lorenzo, California
ARCO Environmental Engineer:	Paul Supple
Consulting Co./Contact Person:	IT Corporation (IT) – Shaw Garakani
Consultant Project No.:	821803 (330-006)
Primary Agency/Regulatory ID No.:	Alameda County Health Care Services Agency
Monitoring Events Performed to Date:	51

WORK PERFORMED THIS QUARTER (Fourth – 2001):

1. Submitted third quarter 2001 groundwater monitoring report.
2. IT performed fourth quarter 2001 groundwater monitoring event on December 29, 2001.
3. Prepared third quarter 2001 groundwater monitoring and remedial system performance evaluation report.
4. Continued monthly payments to homeowners for not using domestic irrigation wells.
5. Continued homeowner quarterly monitoring results notification program.
6. Continued operation and maintenance of the groundwater extraction and treatment (GWET) system.

WORK PROPOSED FOR NEXT QUARTER (First– 2002):

1. Prepare and submit fourth quarter 2001 groundwater monitoring and remedial system performance evaluation report.
2. IT will perform first quarter 2002 groundwater monitoring event.
3. Continue operation, maintenance and performance monitoring of GWET system.
4. Continue monthly payments to homeowners for not using domestic irrigation wells.
5. Continue homeowner quarterly monitoring results notification program.

Current Phase of Project:	Remediation/Monitoring	(Assmnt, Remed., etc.)
Frequency of Groundwater Sampling:	Quarterly-Annually	(Quarterly, etc.)
Frequency of Groundwater Monitoring:	Quarterly	(Monthly, etc.)
Is Free Product (FP) Present On-Site:	No	(Yes/No)
FP Recovered this Quarter:	None	(gallons)
Cumulative FP Recovered to Date:	None	(gallons)
Bulk Soil Removed This Quarter:	None	(cubic yards)
Bulk Soil Removed to Date:	200	(cubic yards)
Current Remediation Techniques:	GWET	(SVE/Sparge/FP Removal, etc.)
Approximate Depth to Groundwater:	7.62 to 10.97	(Measure Feet)
Groundwater Gradient:	NA/NA	(Direction/Magnitude)
Period TPPH-g/Benzene/MtBE Removed:	0.00/ 0.000/ 0.04	(gallons)
Cumulative TPPH-g/Benzene/MtBE Removed:	1.05/ 0.04/ 0.23	(gallons)

DISCUSSION:

- Please refer to Pacific Environmental Group, Inc.'s *Quarterly Groundwater Monitoring Report – Fourth Quarter 1996* for additional historical groundwater elevation and analytical data.
- Based on elevated concentrations of methyl tert-butyl ether (MtBE), the GWET system was reactivated on June 5, 2000. Performance evaluation of the GWET system is presented as Attachment C.
- MtBE concentrations at offsite wells MW-8 and MW-10 have risen this quarter and will be closely monitored during future quarters.

ATTACHMENTS:

- Table 1 - Groundwater Sampling Schedule
- Table 2 - Groundwater Elevation and Analytical Data – Groundwater Monitoring Wells
- Table 3 - Groundwater Analytical Data – Domestic Irrigation Wells
- Figure 1 – Site Map
- Figure 2 – Groundwater Elevation Contour Map – Fourth Quarter 2001
- Figure 3 – TPPH-g/Benzene/MtBE Concentration Map – Fourth Quarter 2001
- Attachment A – Field and Laboratory Procedures
- Attachment B – Certified Analytical Reports, Chain-of-Custody Documentation, and Field Data Sheets
- Attachment C – Remedial System Performance Evaluation
- Attachment D – Certified Analytical Reports, Chain-of-Custody Documentation, and Field Data Sheets for the Groundwater Extraction and Treatment System

cc: Mr. Amir K. Gholami, REHS, Alameda County Health Care Services Agency, 1131 Harbor Bay Parkway, Alameda, CA 94502
Mr. Ron Sykora/Mr. Robert L. Webster, David D. Bohannon Organization, 60 Hillsdale Mall, San Mateo, CA 94403
Mr. Chuck Headlee, Regional Water Quality Control Board - San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, CA 94612

Current Phase of Project:	Remediation/Monitoring	(Assmnt, Remed., etc.)
Frequency of Groundwater Sampling:	Quarterly-Annually	(Quarterly, etc.)
Frequency of Groundwater Monitoring:	Quarterly	(Monthly, etc.)
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FP Recovered this Quarter:	None	(gallons)
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Bulk Soil Removed to Date:	200	(cubic yards)
Current Remediation Techniques:	GWET	(SVE/Sparge/FP Removal, etc.)
Approximate Depth to Groundwater:	7.62 to 10.97	(Measure Feet)
Groundwater Gradient:	NA/NA	(Direction/Magnitude)
Period TPPH-g/Benzene/MtBE Removed:	0.00 / 0.000/ 0.04	(gallons)
Cumulative TPPH-g/Benzene/MtBE Removed:	1.05/ 0.04/ 0.23	(gallons)

DISCUSSION:

- Please refer to Pacific Environmental Group, Inc.'s *Quarterly Groundwater Monitoring Report – Fourth Quarter 1996* for additional historical groundwater elevation and analytical data.
- Based on elevated concentrations of methyl tert-butyl ether (MtBE), the GWET system was reactivated on June 5, 2000. Performance evaluation of the GWET system is presented as Attachment C.

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Table 1
Groundwater Sampling Schedule

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Sampling Frequency
MW-5	a	a	a	a	Quarterly
MW-7	----------Removed from Program----------				
MW-8	a	a	a	a	Quarterly
MW-9	a	a	a	a	Quarterly
MW-10	a	a	a	a	Quarterly
MW-11	a	a	a	a	Quarterly
E-1A	a	a	a	a	Quarterly
MW-13	----------Removed from Program----------				
MW-14	a				Annually
MW-15	a	a	a	a	Quarterly
MW-16	a	a	a	a	Quarterly
MW-17	----------Destroyed----------				
MW-18	a				Annually
MW-19	----------Removed from Program----------				
MW-20	----------Destroyed----------				
MW-21	a				Annually
MW-22	a	a	a	a	Quarterly
MW-23	a				Annually
MW-24	----------Removed from Program----------				
MW-25	a	a	a	a	Quarterly
MW-26	a				Annually
Domestic Irrigation Wells					
590H	----------Destroyed----------				
633H	----------Destroyed----------				
634H	a	a	a	a	Quarterly
642H	a	a	a	a	Quarterly
675H	a	a	a	a	Quarterly
17197 VM	a	a	a	a	Quarterly

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Groundwater Sampling Schedule

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Sampling Frequency
Domestic Irrigation Wells (cont.)					
17200 VM	----------Destroyed----------				
17203 VM	a	a	a	a	Quarterly
17302 VM	a	a	a	a	Quarterly
17348 VE	a	a	a	a	Quarterly
17349 VM	a	a	a	a	Quarterly
17371 VM	a	a	a	a	Quarterly
17372 VM	a	a	a	a	Quarterly
17393 VM	----------Destroyed----------				

a. Samples analyzed for TPPH-g, BTEX compounds, and MtBE according to EPA Methods 8015 (modified) and 8020.

Table 2
Groundwater Elevation and Analytical Data
Groundwater Monitoring Wells

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number		Date Sampled		Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)	Dissolved Oxygen (ppm)
MW-5	††	03/13,14/96		33.99	9.75	24.24	1,600	30	<10	13	<10	NA	NM
		05/28,29/96			11.48	22.51	240	2.4	<0.50	<0.50	<0.50	NA	NM
		08/28/96			12.58	21.41	250	210	8.0	<1.0	<1.0	210	NM
		11/25,26/96			12.07	21.92	<500	<5.0	<5.0	<5.0	<5.0	280	NM
		03/31/97	†		12.42	21.57	<50	<0.50	<0.50	<0.50	<0.50	41	NM
		06/25/97			12.64	21.35	NS	NS	NS	NS	NS	NS	NM
		09/09,10/97			12.75	21.24	<50	<0.50	<0.50	<0.50	<0.50	19	NM
		11/24,25/97			12.60	21.39	<50	0.9	<0.50	<0.50	<0.50	23	1.4
		03/19,20/98			10.43	23.56	61	1.0	0.56	0.55	<0.50	75	1.2
		06/04/98			11.24	22.75	150	<0.30	<0.30	0.32	0.74	20	1.4
		09/21,22/98			12.45	21.54	110	0.59	<0.50	<0.50	<0.50	25	1.8
		12/14,15/98			11.85	22.14	<200	<2.0	<2.0	<2.0	<2.0	600	1.2
		03/15,16/99			11.05	22.94	50.9	<0.50	<0.50	<0.50	<0.50	211	1.0
		06/14,15/99			12.25	21.74	211	<0.50	<0.50	<0.50	<0.50	212	1.2
		09/15,16/99			12.70	21.29	139	<0.50	<0.50	<0.50	<0.50	184	2.4
		12/08,09/99			12.56	21.43	87.4	<0.50	<0.50	<0.50	<0.50	197	1.2
		03/15/00			10.10	23.89	82.4	<0.50	0.710	<0.50	0.579	906	1.2
		03/15/00	a		--	--	--	--	--	--	--	1,230	--
		06/13/00	b		12.44	21.55	96.7	<0.50	<0.50	<0.50	<0.50	551	2.0
		9/19,20/00			12.45	21.54	<50.0	<0.50	<0.50	<0.50	<0.50	51	2.2
		12/14,15/00			12.03	21.96	152.0	1.33	0.56	<0.50	<0.50	<2.50	1.0
		3/8,9/01			10.81	23.18	<50.0	<0.50	<0.50	<0.50	<0.50	73.8	1.6
		06/14/01			12.25	21.74	<50.0	<0.50	<0.50	<0.50	<0.50	47.0	1.8
		09/26/01			12.83	21.16	<50.0	<0.50	<0.50	<0.50	<0.50	270.0	2.0
		12/29/01			10.97	23.02	<50.0	<0.50	<0.50	<0.50	0.95	370.0	2.4
MW-7		03/13,15/96		34.40	9.73	24.67	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
		05/28,29/96			11.60	22.80	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
		08/28,29/96			12.63	21.77	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		11/25,26/96			12.10	22.30	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		03/31-04/01/97			11.72	22.68	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		06/25/97			12.98	21.42	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		09/09,10/97			12.25	22.15	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.0
		11/24,25/97			12.57	21.83	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.0
		03/19,20/98			10.35	24.05	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.0
		06/04/98			11.30	23.10	<50	<0.30	<0.30	<0.30	<0.60	<10	0.7
		09/21,22/98			12.48	21.92	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.4
		12/14,15/98			11.90	22.50	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.2
		03/15,16/99			11.10	23.30	<50	<0.50	<0.50	<0.50	<0.50	<	0.0
		06/14,15/99			Removed From Gauging and Sampling Program								
MW-8		03/13,14/96		32.79	8.90	23.89	670	5.1	<2.0	<2.0	<2.0	NA	NM
		05/28,29/96			10.58	22.21	490	<1.0	<1.0	0.91	0.91	NA	NM
		08/28/96			11.30	21.49	680	29	2.1	3.0	2.4	80	NM
		11/25/96			10.80	21.99	620	1.2	2.6	2.9	2.0	46	NM
		03/31-04/01/97			10.76	22.03	530	<1.0	1.7	2.0	3.8	380	NM
		06/25/97			11.65	21.14	480	6.7	0.69	0.8	0.71	88	NM
		09/09,10/97			11.67	21.12	570	57	<1.0	2.1	1.7	57	2.0
		09/09,10/97	a		--	--	--	--	--	--	--	48	--
		11/24,25/97			11.50	21.29	530	3.0	1.7	1.9	1.5	26	2.0
		03/19,20/98			9.40	23.39	440	1.4	<0.50	<0.50	3.7	140	2.2
		06/03/98			10.25	22.54	360	2.2	1.2	1.8	1.0	47	0.3
		09/21,22/98			11.37	21.42	380	<2.5	<2.5	<2.5	<2.5	620	0.0
		12/14,15/98			10.80	21.99	<50	<0.50	<0.50	<0.50	<0.50	1,600	0.0
		03/15,16/99			10.00	22.79	<500	<5.0	<5.0	<5.0	<5.0	625	0.0
		06/14,15/99			11.17	21.62	166	<0.50	<0.50	<0.50	<0.50	141	NM
		09/15,16/99			11.65	21.14	<500	<5.0	<5.0	<5.0	<5.0	2,380	2.4
		12/08,09/99			11.48	21.31	213	<0.50	<0.50	<0.50	<0.50	4,160	2.8
		03/15/00			9.38	23.41	133	<0.50	3.44	<0.50	0.548	1,350	2.2
		03/15/00	a		--	--	--	--	--	--	--	1,980	--
		06/13/00	b		11.93	20.86	227	<0.50	<0.50	<0.50	<0.50	657	1.0
		9/19,20/2000			11.46	21.33	191	1.7	3.2	<0.50	1.2	160	1.0
		12/14,15/00			10.97	21.82	243	<0.50	<0.50	<0.50	<0.50	243	2.0
		3/8,9/01			9.80	22.99	144	<0.50	<0.50	<0.50	<0.50	188	3.0
		06/14/01			11.22	21.57	150	3.2	0.75	<0.50	1.0	230	3.4
		09/26/01			10.80	21.99	140	<0.50	0.58	<0.50	1.9	170	0.6
		12/29/01			9.85	22.94	<50.0	<0.50	<0.50	<0.50	<0.50	560	4.2

Table 2
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Groundwater Monitoring Wells

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Well Number	Date Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)	Dissolved Oxygen (ppm)
MW-9	03/13,15/96	32.11	7.65	24.46	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28/96		9.67	22.44	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28,29/96		10.78	21.33	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	11/25/96		10.24	21.87	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/31-04/01/97		9.95	22.16	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/25/97		10.85	21.26	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09,10/97		10.87	21.24	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.0
	11/24,25/97		10.70	21.41	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.6
	03/19,20/98		8.63	23.48	<50	<0.50	<0.50	<0.50	<0.50	58	4.8
	06/04/98		9.35	22.76	<50	<0.30	<0.30	<0.30	<0.60	<10	2.0
	09/21,22/98		10.55	21.56	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.8
	12/14,15/98		9.98	22.13	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.2
	03/15,16/99		9.10	23.01	<50	<0.50	<0.50	<0.50	<0.50	<5.0	2.0
	06/14,15/99		10.32	21.79	<50	<0.50	<0.50	<0.50	<0.50	3.27	2.2
	09/15,16/99		10.83	21.28	<50	<0.50	<0.50	<0.50	<0.50	<5.0	3.2
	12/08,09/99		10.70	21.41	<50	<0.50	<0.50	<0.50	<0.50	<5.0	2.6
	03/15/00		8.58	23.53	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.4
	06/13/00 b		10.48	21.63	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
	9/19,20/00		10.53	21.58	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
	12/14,15/00		10.35	21.76	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.0
	3/8,9/01		9.05	23.06	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.6
	06/14/01		10.33	21.78	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.6
	09/26/01		10.82	21.29	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.8
	12/29/01		8.82	23.29	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
MW-10	†† 03/13,14/96	31.67	7.78	23.89	870	35	<5.0	5.2	7.0	NA	NM
	05/29/96		10.00	21.67	800	<1.0	<1.0	<1.0	<1.0	NA	NM
	08/28/96		10.93	20.74	NS	NS	NS	NS	NS	NS	NM
	11/25,26/96		10.45	21.22	1,100	6.0	4.9	3.8	9.5	200	NM
	03/31/97 †		10.15	21.52	160	<0.50	<0.50	<0.50	<0.50	140	NM
	06/25/97		10.99	20.68	800	4.2	1.4	1.5	1.4	170	NM
	09/09,10/97		11.08	20.59	950	<1.2	3.3	2.5	3.7	240	2.0
	09/09,10/97 a		–	–	–	–	–	–	–	210	–
	11/24,25/97		10.85	20.82	920	5.7	6.7	<5.0	<5.0	160	2.4
	11/24,25/97		–	–	–	–	–	–	–	160	–
	03/19/98		8.78	22.89	330	1.7	<0.50	<0.50	<0.50	130	1.0
	06/04/98		9.59	22.08	680	<0.30	4.8	2.3	8.6	79	0.0
	09/21,22/98		10.77	20.90	650	<0.50	<0.50	3.5	1.3	99	0.0
	12/14/98		10.18	21.49	828	<1.0	<1.0	3.39	<1.0	152	0.4
	03/15,16/99		9.30	22.37	910	17.6	1.3	5.24	<1.0	268	0.0
	06/14,15/99		10.57	21.10	643	<0.50	0.761	1.13	1.35	232	NM
	09/15,16/99		11.03	20.64	655	<1.25	1.26	<1.25	<1.25	315	5.8
	12/08,09/99		10.88	20.79	898	5.7	1.29	<1.0	<1.0	236	5.6
	03/15/00		8.68	22.99	459	<1.0	<1.0	<1.0	<1.0	266	2.2
	03/15/00 a		–	–	–	–	–	–	–	342	–
	06/13/00 b		10.85	20.82	617	5.82	2.77	3.07	1.92	437	1.0
	9/19,20/00		10.70	20.97	527	<0.50	0.86	0.99	1.19	413	2.2
	12/14,15/00		10.35	21.32	456	10.50	1.01	0.60	<0.50	145	4.0
	3/8,9/01		9.12	22.55	509	<0.50	21.90	3.16	3.55	161	3.2
	06/14/01		10.55	21.12	710	9.20	2.60	<0.50	1.50	290	3.0
	09/26/01		10.98	20.69	580	<0.50	1.60	1.50	1.60	250	2.6
	12/29/01		9.06	22.61	410	<0.50	6.70	2.50	2.90	950	3.2
MW-11	03/13,14/96	32.54	8.60	23.94	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28/96		10.55	21.99	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28/96		11.52	21.02	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	11/25/96		11.00	21.54	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/31-04/01/97		10.88	21.66	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/25/97		11.65	20.89	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09,10/97		11.75	20.79	80	<0.50	<0.50	<0.50	0.65	<2.5	2.0
	11/24,25/97		11.50	21.04	<50	<0.50	<0.50	<0.50	<0.50	3.8	2.4
	03/19/98		9.43	23.11	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.4
	06/03/98		10.27	22.27	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.8
	09/21,22/98		11.43	21.11	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.0
	12/14/98		10.85	21.69	<50	<0.50	<0.50	<0.50	<0.50	<2.0	1.4
	03/15,16/99		10.05	22.49	<50	<0.50	<0.50	<0.50	<0.50	<5.0	1.2

Table 2
Groundwater Elevation and Analytical Data
Groundwater Monitoring Wells

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)	Dissolved Oxygen (ppm)
MW-11	06/14,15/99		11.25	21.29	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.4
(cont.)	09/15/99		11.68	20.86	<50	<0.50	<0.50	<0.50	<0.50	<5.0	3.4
	12/08,09/99		11.53	21.01	<50	<0.50	<0.50	<0.50	<0.50	<5.0	1.0
	03/15/00		9.32	23.22	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.7
	06/13/00 b		11.05	21.49	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.0
	9/19,20/00		11.37	21.17	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
	3/8,9/01		11.00	21.54	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.0
	3/8,9/01		9.78	22.76	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.0
	06/14/01		11.23	21.31	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.4
	09/26/01		11.70	20.84	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.6
	12/29/01		9.91	22.63	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.2
E-1A	†† 03/13,14/96	33.06	10.35	22.71	2,700	38	<5.0	130	6.2	NA	NM
(MW-12)	05/28,29/96		11.50	21.56	1,400	410	18	55	5.5	NA	NM
	08/28/96		11.70	21.36	NS	NS	NS	NS	NS	NS	NM
	11/25,26/96		11.18	21.88	4,300	13	<5.0	100	20	220	NM
	03/31/97 †		12.65	20.41	1,900	7.9	<2.0	62	3.5	140	NM
	06/25/97		11.82	21.24	4,900	21	<5.0	53	6.8	160	NM
	09/09,10/97		11.85	21.21	3,200	9.0	<5.0	45	<5.0	85	2.0
	09/09,10/97 a		–	–	–	–	–	–	–	70	–
	11/24,25/97		11.75	21.31	2,000	10	<2.5	42	2.8	65	1.0
	03/19,20/98		9.65	23.41	11,000	1,300	<0.50	550	380	220	6.2
	06/04/98 b		10.47	22.59	4,500	3.3	0.92	41	4.0	51	1.5
	09/21,22/98		11.60	21.46	3,300	1.7	<0.50	29	3.6	52	1.8
	12/14,15/98		11.10	21.96	3,100	21	6.7	28	<5.0	140	1.0
	03/15,16/99		10.25	22.81	3,900	24.5	<20	41.2	<20	296	1.0
	06/14,15/99		11.47	21.59	5,090	<5.0	<5.0	6.01	<5.0	234	1.4
	09/15,16/99		11.90	21.16	2,200	7.93	<5.0	10.50	<5.0	142	3.2
	12/08,09/99		11.75	21.31	1,490	6.57	1.36	9.21	<1.25	364	NM
	03/15/00		9.52	23.54	4,430	26.1	<10.0	15.3	<10.0	786	1.8
	03/15/00 a		–	–	–	–	–	–	–	908	–
	06/13/00 b		22.31	10.75	262	9.52	0.584	0.535	<0.5	534	3.4
	9/19,20/00		23.15	9.91	143	1.01	<0.50	<0.50	<0.50	76	2.8
	12/14,15/00		NA	NA	181	<0.50	<0.50	0.789	<0.50	100	1.4
	3/8,9/01		23.80	9.26	370	1.78	<0.50	0.765	<0.50	76	1.6
	06/14/01		21.10	11.96	180	<0.50	<0.50	0.54	<0.50	100	2.6
	09/26/01		19.95	13.11	<50.0	<0.50	<0.50	<0.50	<0.50	210	1.8
	12/29/01		22.40	10.66	<50.0	<0.50	<0.50	<0.50	<0.50	190	2.0
MW-13	03/13,15/96	35.42	10.90	24.52	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28,29/96		12.90	22.52	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28/96		13.89	21.53	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	11/25/96		13.41	22.01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/31-04/01/97		13.11	22.31	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/25/97		13.98	21.44	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09,10/97		14.09	21.33	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
	11/24,25/97		13.90	21.52	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
	03/19,20/98		11.80	23.62	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.8
	06/04/98		12.63	22.79	<50	<0.30	<0.30	<0.30	<0.60	<10	1.3
	09/21,22/98		13.77	21.65	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.8
	12/14,15/98		13.28	22.14	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.4
	03/15,16/99 b		12.48	22.94	<50	<0.50	<0.50	<0.50	<0.50	<5.0	2.2
	06/14,15/99	---------- Removed From Gauging and Sampling Program ----------									
MW-14	03/13,15/96	30.46	6.63	23.83	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28/96		8.83	21.63	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28/96		9.83	20.63	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	11/25/96		9.33	21.13	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/31-04/01/97		9.04	21.42	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/25/97		9.94	20.52	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09,10/97		10.08	20.38	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
	11/24,25/97		9.78	20.68	<50	<0.50	<0.50	<0.50	<0.50	2.9	2.6
	03/19/98		7.92	22.54	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.8
	06/03/98		8.52	21.94	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.1
	09/21,22/98		9.72	20.74	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.8
	12/14/98		9.15	21.31	<50	<0.50	<0.50	<0.50	<0.50	<2.0	2.8
	03/15,16/99		8.20	22.26	<50	<0.50	<0.50	<0.50	<0.50	<5.0	2.6

Table 2
Groundwater Elevation and Analytical Data
Groundwater Monitoring Wells

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)	Dissolved Oxygen (ppm)
MW-14	06/14,15/99		9.54	20.92	Well Sampled Annually						
(cont.)	09/15/99		9.98	20.48	Well Sampled Annually						
	12/08,09/99		9.84	20.62	Well Sampled Annually						
	03/15/00		7.78	22.68	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.6
	06/13/00 b		9.45	21.01	Well Sampled Annually						
	9/19,20/00		9.68	20.78	Well Sampled Annually						
	12/14,15/00		9.14	21.32	Well Sampled Annually						
	3/8,9/01		8.10	22.36	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.0
	06/14/01		9.51	20.95	Well Sampled Annually						
	09/26/01		9.96	20.50	Well Sampled Annually						
	12/29/01		7.62	22.84	Well Sampled Annually						
MW-15	03/13,15/96	31.41	8.13	23.28	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28,29/96		10.30	21.11	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28/96		11.30	20.11	<50	<0.50	<0.50	<0.50	<0.50	5.3	NM
	11/25/96		10.83	20.58	<50	<0.50	<0.50	<0.50	<0.50	12	NM
	03/31-04/01/97		10.45	20.96	<50	<0.50	<0.50	<0.50	<0.50	7.2	NM
	06/25/97		11.39	20.02	<50	<0.50	<0.50	<0.50	<0.50	7.0	NM
	09/09,10/97		11.50	19.91	Well Inaccessible						
	11/24,25/97				Well Inaccessible						
	03/19/98		9.15	22.26	<50	<0.50	<0.50	<0.50	<0.50	5.3	2.2
	06/04/98		NM		Well Inaccessible						
	09/21,22/98		NM		Well Inaccessible						
	12/14/98		10.63	20.78	<50	<0.50	<0.50	<0.50	<0.50	48.2	1.8
	03/15,16/99		NM		Well Inaccessible						
	06/14,15/99		NM		Well Inaccessible						
	09/15, 16/99		NM		Well Inaccessible						
	12/08,09/99		11.28	20.13	<50	<0.5	<0.5	<0.5	<0.5	167.0	NM
	03/15/00		9.03	22.38	<50	<0.5	<0.5	<0.5	<0.5	82.1	1.5
	03/15/00 a		--	--	--	--	--	--	--	105	--
	06/13/00 b		10.96	20.45	<50	<0.5	0.703	<0.5	0.870	69.8	2.0
	9/19,20/00		11.10	20.31	<50	<0.5	<0.5	<0.5	<0.5	156.0	2.2
	12/14,15/00		NM	NA	Well Inaccessible						
	3/8,9/01		9.48	21.93	<50	<0.5	<0.5	<0.5	<0.5	63.8	2.6
	06/14/01		10.95	20.46	<50	<0.5	<0.5	<0.5	<0.5	26.0	3.0
	09/26/01		11.38	20.03	<50	<0.5	<0.5	<0.5	<0.5	17.0	1.2
	12/29/01		9.41	22.00	<50	<0.5	<0.5	<0.5	<0.5	30.0	2.2
MW-16	03/13/96	31.39	8.62	22.77	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28/96		10.90	20.49	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28/96		11.84	19.55	<50	<0.50	<0.50	<0.50	<0.50	89	NM
	11/25/96		11.32	20.07	<50	<0.50	<0.50	<0.50	<0.50	66	NM
	03/31-04/01/97		11.06	20.33	<50	<0.50	<0.50	<0.50	<0.50	49	NM
	06/25/97		11.92	19.47	<50	<0.50	<0.50	<0.50	<0.50	59	NM
	09/09,10/97		12.03	19.36	<50	<0.50	<0.50	<0.50	<0.50	63	3.0
	09/09,10/97 a		--	--	--	--	--	--	--	86	--
	11/24,25/97		11.76	19.63	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.0
	03/19/98		9.80	21.59	<50	<0.50	<0.50	<0.50	<0.50	8.4	3.0
	06/03/98		10.55	20.84	<50	<0.50	<0.50	<0.50	<0.50	22	1.6
	09/21,22/98		11.77	19.62	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.2
	12/14/98		11.20	20.19	<50	<0.50	<0.50	<0.50	<0.50	25	1.0
	03/15,16/99		10.30	21.09	<50	<0.50	<0.50	<0.50	<0.50	<5.0	3.6
	06/14,15/99		11.55	19.84	<50	<0.50	<0.50	<0.50	<0.50	3.13	3.4
	09/15/99		11.99	19.40	<50	<0.50	<0.50	<0.50	<0.50	8.70	3.8
	12/08,09/99		11.80	19.59	<50	<0.50	<0.50	<0.50	<0.50	10.1	2.4
	03/15/00		9.55	21.84	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.4
	06/13/00 b		11.64	19.75	<50	<0.50	0.517	<0.50	0.603	6.29	1.0
	9/19,20/00		11.64	19.75	<50	<0.50	<0.50	<0.50	<0.50	5.01	2.0
	12/14,15/00		11.25	20.14	<50	<0.50	<0.50	<0.50	<0.50	6.14	2.0
	3/8,9/01		10.01	21.38	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.4
	06/14/01		11.47	19.92	<50	<0.50	<0.50	<0.50	<0.50	2.5	2.6
	09/26/01		11.93	19.46	<50	<0.50	<0.50	<0.50	<0.50	3.8	1.8
	12/29/01		9.71	21.68	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
MW-17					Well Destroyed						
MW-18	03/13/96	29.70	7.53	22.17	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28/96		9.88	19.82	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28/96		10.82	18.88	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	11/25/96		10.18	19.52	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM

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Well Number	Date Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)	Dissolved Oxygen (ppm)
MW-18	03/31-04/01/97		10.14	19.56	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
(cont.)	06/25/97		10.94	18.76	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09,10/97		11.00	18.70	<50	<0.50	<0.50	<0.50	<0.50	<2.5	4.0
	11/24,25/97		10.65	19.05	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.4
	03/19/98		8.95	20.75	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
	06/03/98		9.57	20.13	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.8
	09/21,22/98		10.80	18.90	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.2
	12/14/98		10.18	19.52	<50	<0.50	<0.50	<0.50	<0.50	<2.0	2.6
	03/15,16/99		9.20	20.50	<50	<0.50	<0.50	<0.50	<0.50	<5.0	1.0
	06/14,15/99		10.60	19.10	Well Sampled Annually						
	09/15/99		10.96	18.74	Well Sampled Annually						
	12/08,09/99		10.79	18.91	Well Sampled Annually						
	03/15/00		8.80	20.90	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/13/00 b		10.60	19.10	Well Sampled Annually						
	9/19,20/00		10.63	19.07	Well Sampled Annually						
	12/14,15/00		10.39	19.31	Well Sampled Annually						
	3/8,9/01		9.03	20.67	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.4
	06/14/01		10.40	19.30	Well Sampled Annually						
	09/26/01		10.91	18.79	Well Sampled Annually						
	12/29/01		8.24	21.46	Well Sampled Annually						
MW-19	03/13/96	29.02	7.06	21.96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28/96		9.42	19.60	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28/96		10.33	18.69	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	11/25/96		9.67	19.35	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/31-04/01/97		9.65	19.37	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/25/97		10.41	18.61	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09,10/97		10.47	18.55	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.0
	11/24,25/97		10.35	18.67	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.6
	03/19/98		8.67	20.35	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/03/98		9.15	19.87	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.2
	09/21,22/98		10.28	18.74	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.6
	12/14/98		9.70	19.32	<50	<0.50	<0.50	0.588	0.647	<2.0	2.4
	03/15,16/99	Well Inaccessible									
	06/14,15/99	Removed From Gauging and Sampling Program									
MW-20		Well Destroyed									
MW-21	03/13/96	28.72	7.58	21.14	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28,29/96		9.85	18.87	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28/96		10.75	17.97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	11/25/96		10.00	18.72	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/31-04/01/97		10.03	18.69	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/25/97		10.83	17.89	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09,10/97		10.90	17.82	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
	11/24,25/97		10.50	18.22	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.4
	03/19/98		9.08	19.64	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.08
	06/03/98		9.57	19.15	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.6
	09/21,22/98		10.75	17.97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.4
	12/14/98		10.11	18.61	<50	<0.50	<0.50	<0.50	<0.50	<2.0	0.6
	03/15,16/99		9.10	19.62	<50	<0.50	<0.50	<0.50	<0.50	<5.0	1.0
	06/14,15/99		10.58	18.14	Well Sampled Annually						
	09/15/99		10.93	17.79	Well Sampled Annually						
	12/08,09/99		10.70	18.02	Well Sampled Annually						
	03/15/00		8.95	19.77	<50	<0.50	<0.50	<0.50	<0.50	<5.0	1.3
	06/13/00 b		10.97	17.75	Well Sampled Annually						
	9/19,20/00		10.66	18.06	Well Sampled Annually						
	12/14,15/00		10.30	18.42	Well Sampled Annually						
	3/8,9/01		9.00	19.72	<50	<0.50	<0.50	<0.50	<0.50	<5.0	2.4
	06/14/01		10.40	18.32	Well Sampled Annually						
	09/26/01		10.75	17.97	Well Sampled Annually						
	12/29/01		7.86	20.86	Well Sampled Annually						
MW-22	03/13/96	29.29	7.83	21.46	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28/96		10.33	18.96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28/96		11.28	18.01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	11/25/96		10.61	18.68	<50	<0.50	<0.50	<0.50	<0.50	3.0	NM
	12/30/96		10.61	18.68	NA	NA	NA	NA	NA	3.3	NM
	03/31-04/01/97		10.56	18.73	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/25/97		11.51	17.78	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09,10/97		11.45	17.84	<50	<0.50	<0.50	<0.50	<0.50	3.4	1.0
	11/24,25/97		11.08	18.21	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.6
	03/19/98		9.40	19.89	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
	06/03/98		10.00	19.29	<50	<0.50	<0.50	<0.50	<0.50	0.87	3.2
	09/21,22/98		11.27	18.02	<50	<0.50	<0.50	<0.50	<0.50	2.1	2.8
	12/14/98		10.65	18.64	<50	<0.50	<0.50	<0.50	<0.50	<2.0	2.4
	03/15,16/99		9.67	19.62	<50	<0.50	<0.50	<0.50	<0.50	<5.0	2.4
	06/14,15/99		11.06	18.23	<50	<0.50	<0.50	<0.50	<0.50	5.05	1.0
	09/15/99 a		11.46	17.83	<50	<0.50	<0.50	<0.50	<0.50	49.2	1.2
	12/08,09/99		11.25	18.04	<50	<0.50	<0.50	<0.50	<0.50	17.9	1.4

Table 2
Groundwater Elevation and Analytical Data
Groundwater Monitoring Wells

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)	Dissolved Oxygen (ppm)
MW-22	03/15/00		9.20	20.09	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.1
(cont.)	06/13/00 b		11.06	18.23	<50	<0.50	<0.50	<0.50	<0.50	6.85	1.0
	9/19,20/00		11.12	18.17	<50	<0.50	<0.50	<0.50	<0.50	3.18	1.8
	12/14,15/00		10.85	18.44	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
	3/8,9/01		9.43	19.86	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.8
	06/14/01		10.98	18.31	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.2
	09/26/01		11.41	17.88	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.0
	12/29/01		8.78	20.51	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
MW-23	03/13/96	30.99	9.13	21.86	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28/96		11.37	19.62	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28/96		12.31	18.68	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	11/25/96		11.76	19.23	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/31-04/01/97		11.56	19.43	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/25/97		12.39	18.60	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09,10/97		12.53	18.46	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
	11/24,25/97		12.13	18.86	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.4
	03/19/98		10.22	20.77	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.4
	06/03/98		11.03	19.96	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.3
	09/21,22/98		12.31	18.68	<50	<0.50	0.54	1.9	<0.50	<2.5	2.2
	12/14/98		11.67	19.32	<50	<0.50	<0.50	<0.50	<0.50	<2.0	2.0
	03/15,16/99		10.82	20.17	<50	<0.50	<0.50	<0.50	<0.50	<5.0	2.6
	06/14,15/99		12.08	18.91	Well Sampled Annually						
	09/15/99		12.48	18.51	Well Sampled Annually						
	12/08,09/99		12.29	18.70	Well Sampled Annually						
	03/15/00		10.04	20.95	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.2
	06/13/00 b		11.95	19.04	Well Sampled Annually						
	9/19,20/00		12.15	18.84	Well Sampled Annually						
	12/14,15/00		12.25	18.74	Well Sampled Annually						
	3/8,9/01		10.49	20.50	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.6
	06/14/01		11.97	19.02	Well Sampled Annually						
	09/26/01		12.40	18.59	Well Sampled Annually						
	12/29/01		10.42	20.57	Well Sampled Annually						
MW-24	03/13,15/96	34.38	10.10	24.28	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28/96		12.25	22.13	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28/96		13.28	21.10	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	11/25/96		12.71	21.67	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/31-04/01/97		12.50	21.88	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/25/97		13.38	21.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09,10/97		13.46	20.92	<50	<0.50	<0.50	<0.50	<0.50	<2.5	5.0
	11/24,25/97		13.25	21.13	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/19,20/98		11.32	23.06	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.8
	06/04/98		12.00	22.38	<50	<0.30	<0.30	<0.30	<0.60	<10	0.8
	09/21,22/98		13.13	21.25	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.4
	12/14,15/98		12.53	21.85	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.2
	03/15,16/99		11.58	22.80	<50	<0.50	<0.50	<0.50	<0.50	<5.0	0.0
	06/14,15/99	Removed From Gauging and Sampling Program									
MW-25	03/13,14/96	34.12	9.61	24.51	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28,29/96		11.30	22.82	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28,29/96		12.32	21.80	<50	<0.50	<0.50	<0.50	<0.50	51	NM
	11/25/96		11.83	22.29	<50	<0.50	<0.50	<0.50	<0.50	110	NM
	03/31-04/01/97		11.55	22.57	<50	<0.50	<0.50	<0.50	<0.50	39	NM
	06/25/97		14.57	19.55	<50	<0.50	<0.50	<0.50	<0.50	49	NM
	09/09,10/97		12.45	21.67	<50	<0.50	<0.50	<0.50	<0.50	78	1.0
	09/09,10/97 a		--	--	--	--	--	--	--	79	--
	11/24,25/97		12.30	21.82	<50	<0.50	<0.50	<0.50	<0.50	130	0.0
	03/19,20/98		10.18	23.94	<50	<0.50	<0.50	<0.50	<0.50	96	1.8
	06/04/98		11.00	23.12	<50	<0.30	<0.30	<0.30	<0.60	44	0.8
	09/21,22/98		12.13	21.99	<50	<0.50	<0.50	<0.50	<0.50	150	0.4
	12/14,15/98		11.60	22.52	<50	<0.50	<0.50	<0.50	<0.50	44	1.0
	03/15,16/99		10.78	23.34	<50	<0.50	<0.50	<0.50	<0.50	26.6	2.0
	06/14,15/99		11.97	22.15	<50	<0.50	<0.50	<0.50	<0.50	98.9	2.2
	09/15,16/1999		12.34	21.78	<50	<0.50	<0.50	<0.50	<0.50	66.4	NM
	12/08,09/99		12.25	21.87	<50	<0.50	<0.50	<0.50	<0.50	55.5	0.0
	03/15/00		10.16	23.96	<50	<0.50	<0.50	<0.50	<0.50	154	1.0
	03/15/00 a		--	--	--	--	--	--	--	206	--
	06/13/00 b		11.72	22.40	<50	<0.50	<0.50	<0.50	<0.50	77.7	1.0
	9/19,20/00		12.08	22.04	<50	1	<0.50	<0.50	<0.50	192	1.2
	12/14,15/00		11.74	22.38	<50	<0.50	<0.50	<0.50	<0.50	134	4.0
	3/8,9/01		10.53	23.59	<50	<0.50	<0.50	<0.50	<0.50	140	2.6
	06/14/01		11.95	22.17	<50	<0.50	<0.50	<0.50	<0.50	150	2.6
	09/26/01		12.22	21.90	<50	<0.50	<0.50	<0.50	<0.50	84	1.0
	12/29/01 c	33.81	10.32	23.49	73	<0.50	<0.50	1	7	94	2.2
MW-26	03/13,15/96	33.71	9.38	24.33	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28/96		11.57	22.14	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28,29/96		12.55	21.16	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	11/25/96		12.03	21.68	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/31-04/01/97		11.84	21.87	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/25/97		12.94	20.77	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM

Table 2
Groundwater Elevation and Analytical Data
Groundwater Monitoring Wells

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)	Dissolved Oxygen (ppm)
MW-26	09/09,10/97		12.77	20.94	<50	<0.50	<0.50	<0.50	<0.50	<2.5	5.0
(cont.)	11/24,25/97		12.55	21.16	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.6
	03/19,20/98		10.55	23.16	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.6
	06/04/98		11.22	22.49	<50	<0.30	<0.30	<0.30	<0.60	<10	2.1
	09/21,22/98		12.45	21.26	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.8
	12/14,15/98		11.83	21.88	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.0
	03/15,16/99		10.86	22.85	<50	<0.50	<0.50	<0.50	<0.50	<5.0	1.0
	06/14,15/99		12.17	21.54	---------- Well Sampled Annually ----------						
	09/15/99		12.70	21.01	---------- Well Sampled Annually ----------						
	12/08,09/99		12.57	21.14	---------- Well Sampled Annually ----------						
	03/15/00		10.50	23.21	<50	<0.50	<0.50	<0.50	<0.50	6.55	1.4
	06/13/00	b	12.20	21.51	---------- Well Sampled Annually ----------						
	9/19,20/00		12.38	21.33	---------- Well Sampled Annually ----------						
	12/14,15/00		11.88	21.83	---------- Well Sampled Annually ----------						
	3/8,9/01		10.78	22.93	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.6
	06/14/01		12.17	21.54	---------- Well Sampled Annually ----------						
	09/26/01		12.70	21.01	---------- Well Sampled Annually ----------						
	12/29/01		10.41	23.30	---------- Well Sampled Annually ----------						

MtBE = Methyl tert-butyl ether
MSL = Mean sea level
TOB = Top of box
ppb = Parts per billion
ppm = Parts per million
< = Less than laboratory detection limit
† = Well sampled without purging.
†† = ORC program initiated September 21, 1995 and discontinued on May 15, 1997.

NA = Not analyzed
NM = Not measured
NS = Not sampled
a. = MtBE result confirmed by EPA Method 8260.
b. = Depths to water originally measured from TOC. Depth to water adjusted to reflect a TOB measurement by adding the average difference between TOB and TOC measurements over the last four gauging events.
c. = well elevation changed during station reconstruction. well resurveyed 11/6/2001

Please see certified analytical reports for laboratory notes and definitions.

Table 3
Groundwater Analytical Data
Domestic Irrigation Wells

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Address	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)		Dissolved Oxygen (ppm)
590 H	03/14/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	05/29/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	08/29/96 a	NS	NS	NS	NS	NS	NA		NM
	11/26/96	NS	NS	NS	NS	NS	NS		NM
	03/31/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5		NM
	06/25/97 a	NS	NS	NS	NS	NS	NS		NM
	09/09/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5		2.0
	11/24/97 a	NS	NS	NS	NS	NS	NS		NM
	03/19/98	<50	<0.50	<0.50	<0.50	<0.50	<2.5		1.0
	06/03/98	<50	<0.50	<0.50	<0.50	<0.50	<0.50		3.8
	09/21/98	<50	<0.50	<0.50	<0.50	<0.50	<2.5		3.2
	12/14/98	<50	<0.50	<0.50	<0.50	<0.50	<2.0		2.2
	03/15/99 a	NS	NS	NS	NS	NS	NS		NM
	06/14/99	<50	<0.50	<0.50	<0.50	<0.50	<2.5		NM
	09/15/99 a	NS	NS	NS	NS	NS	NS		NM
	12/08/99 a	NS	NS	NS	NS	NS	NS		NM
	03/15/00 a	NS	NS	NS	NS	NS	NS		NM
	06/13/00 a	NS	NS	NS	NS	NS	NS		NM
	Well Destroyed								
633 H	03/14/96	480	10	11	1.8	140	NA		NM
	05/13/96 b	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	05/27/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	08/29/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	11/26/96	<50	<0.50	<0.50	<0.50	<0.50	3.70		NM
	12/30/96	--	--	--	--	--	4.9	c	NM
	03/31/97	NS	NS	NS	NS	NS	NS		NM
	06/25/97 a	NS	NS	NS	NS	NS	NS		NM
	09/10/97	<50	<0.50	<0.50	<0.50	0.66	<2.5		1.0
	11/24/97	110	2.0	2.1	1.0	4.2	<2.5	c	NM
	03/19/98	150	1.8	0.62	<0.50	28	77		NM
	03/19/98	--	--	--	--	--	<2.0	c	NM
	06/03/98	480	6.2	4.3	2.9	120	28		1.3
	09/21/98	<50	<0.50	<0.50	<0.50	0.66	<2.5		1.2
	12/14/98	<50	<0.50	<0.50	<0.50	2.21	11.7		NM
	03/15/99	<50	0.513	<0.50	<0.50	0.542	31		NM
	06/14/99	<50	<0.50	<0.50	<0.50	<0.50	7.93		NM
	09/15/99	<50	<0.50	<0.50	<0.50	<0.50	5.65		0.0
	12/08/99	<50	<0.50	<0.50	<0.50	<0.50	<5.0		1.4
	03/15/00	<50	<0.50	<0.50	<0.50	<0.50	17.5		1.2
	06/13/00	240	5.03	1.01	2.39	63.8	10.5		NM
	Well Destroyed								
634 H	03/13/96 a	NS	NS	NS	NS	NS	NA		NM
	05/27/96 a	NS	NS	NS	NS	NS	NA		NM
	08/29/96 a	NS	NS	NS	NS	NS	NA		NM
	11/26/96	NS	NS	NS	NS	NS	NS		NM
	03/31/97	NS	NS	NS	NS	NS	NS		NM
	06/25/97 a	NS	NS	NS	NS	NS	NS		NM
	09/09/97 g	NS	NS	NS	NS	NS	NS		NM
	11/24/97 g	NS	NS	NS	NS	NS	NS		NM
	03/19/98 e	NS	NS	NS	NS	NS	NS		NM

Table 3
Groundwater Analytical Data
Domestic Irrigation Wells

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Address	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)	Dissolved Oxygen (ppm)
634 H	06/03/98 e	NS	NS	NS	NS	NS	NS	NM
(cont.)	09/21/98 e	NS	NS	NS	NS	NS	NS	NM
	12/14/98 e	NS	NS	NS	NS	NS	NS	NM
	03/15/99 e	NS	NS	NS	NS	NS	NS	NM
	06/14/99 e	NS	NS	NS	NS	NS	NS	NM
	09/15/99 e	NS	NS	NS	NS	NS	NS	NM
	12/08/99 e	NS	NS	NS	NS	NS	NS	NM
	03/15/00 e	NS	NS	NS	NS	NS	NS	NM
	06/13/00 e	NS	NS	NS	NS	NS	NS	NM
	09/19/00 e	NS	NS	NS	NS	NS	NS	NM
	12/14/00 e	NS	NS	NS	NS	NS	NS	NM
	03/08/01 e	NS	NS	NS	NS	NS	NS	NM
	06/14/01 e	NS	NS	NS	NS	NS	NS	NM
	09/26/01 e	NS	NS	NS	NS	NS	NS	NM
	12/29/01 e	NS	NS	NS	NS	NS	NS	NM
642 H	03/15/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/27/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/29/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	11/26/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/31/97	NS	NS	NS	NS	NS	NS	NM
	06/25/97	NS	NS	NS	NS	NS	NS	NM
	09/09/97 a	NS	NS	NS	NS	NS	NS	NM
	11/24/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/19/98 a	NS	NS	NS	NS	NS	NS	NM
	06/03/98	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NM
	09/21/98 a	NS	NS	NS	NS	NS	NS	NM
	12/14/98 a	NS	NS	NS	NS	NS	NS	NM
	03/15/99 a	NS	NS	NS	NS	NS	NS	NM
	06/14/99	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.0
	09/15/99	<50	<0.50	<0.50	<0.50	<0.50	<5.0	2.2
	12/08/99	<50	<0.50	<0.50	<0.50	<0.50	<5.0	2.4
	03/15/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.8
	06/13/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/19/00 a	NS	NS	NS	NS	NS	NS	NM
	12/14/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.2
	03/08/01 a	NS	NS	NS	NS	NS	NS	NM
	06/14/01 a	NS	NS	NS	NS	NS	NS	NM
	09/26/01 a	NS	NS	NS	NS	NS	NS	NM
	12/29/01 a	NS	NS	NS	NS	NS	NS	NM
675 H	03/13/96 a	NS	NS	NS	NS	NS	NA	NM
	05/27/96 a	NS	NS	NS	NS	NS	NA	NM
	08/29/96 d	NS	NS	NS	NS	NS	NA	NM
	11/26/96	NS	NS	NS	NS	NS	NS	NM
	03/31/97	NS	NS	NS	NS	NS	NS	NM
	06/25/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09/97 f	NS	NS	NS	NS	NS	NS	NM
	11/24/97 f	NS	NS	NS	NS	NS	NS	NM
	03/19/98 f	NS	NS	NS	NS	NS	NS	NM
	06/03/98 f	NS	NS	NS	NS	NS	NS	NM
	09/21/98 a,f	NS	NS	NS	NS	NS	NS	NM
	12/14/98 f	NS	NS	NS	NS	NS	NS	NM
	03/15/99 f	NS	NS	NS	NS	NS	NS	NM
	06/14/99 f	NS	NS	NS	NS	NS	NS	NM
	09/15/99 f	NS	NS	NS	NS	NS	NS	NM
	12/08/99 f	NS	NS	NS	NS	NS	NS	NM
	03/15/00 f	NS	NS	NS	NS	NS	NS	NM
	06/13/00 f	NS	NS	NS	NS	NS	NS	NM
	09/19/00 f	NS	NS	NS	NS	NS	NS	NM

Table 3
Groundwater Analytical Data
Domestic Irrigation Wells

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Address	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)	Dissolved Oxygen (ppm)
675 H	12/14/00 f	NS	NS	NS	NS	NS	NS	NM
(cont.)	03/08/01 f	NS	NS	NS	NS	NS	NS	NM
	06/14/01 f	NS	NS	NS	NS	NS	NS	NM
	09/26/01 f	NS	NS	NS	NS	NS	NS	NM
	12/29/01 f	NS	NS	NS	NS	NS	NS	NM
17197 VM	03/15/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/27/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/29/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	11/26/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/31/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/25/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.0
	11/24/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.4
	03/19/98	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.2
	06/03/98	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.2
	09/21/98	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.0
	12/14/98	<50	<0.50	<0.50	<0.50	<0.50	<2.0	2.4
	03/15/99	<50	<0.50	<0.50	<0.50	<0.50	<5.0	1.6
	06/14/99	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.8
	09/15/99	<50	<0.50	<0.50	<0.50	<0.50	<5.0	1.0
	12/08/99 a	NS	NS	NS	NS	NS	NS	NM
	03/15/00 a	NS	NS	NS	NS	NS	NS	NM
	06/13/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/19/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	12/14/00 f	NS	NS	NS	NS	NS	NS	NM
	03/08/01 f	NS	NS	NS	NS	NS	NS	NM
	06/14/01 f	NS	NS	NS	NS	NS	NS	NM
	09/26/01 f	NS	NS	NS	NS	NS	NS	NM
	12/29/01 f	NS	NS	NS	NS	NS	NS	NM
17200 VM	03/15/96	730	<1.0	<1.0	1.5	1.7	NA	NM
	05/27/96	200	<0.50	<0.50	1.4	1.8	NA	NM
	08/29/96	Well Destroyed						
17203 VM	03/15/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/27/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/29/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	11/26/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/31/97 f	NS	NS	NS	NS	NS	NS	NM
	06/25/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09/97 f	NS	NS	NS	NS	NS	NS	NM
	11/24/97 f	NS	NS	NS	NS	NS	NS	NM
	03/19/98	Well Dry						
	06/03/98 f	NS	NS	NS	NS	NS	NS	NM
	09/21/98 f	NS	NS	NS	NS	NS	NS	NM
	12/14/98 f	NS	NS	NS	NS	NS	NS	NM
	03/15/99 f	NS	NS	NS	NS	NS	NS	NM
	06/14/99 f	NS	NS	NS	NS	NS	NS	NM
	09/15/99 f	NS	NS	NS	NS	NS	NS	NM
	12/08/99 f	NS	NS	NS	NS	NS	NS	NM
	03/15/00 f	NS	NS	NS	NS	NS	NS	NM
	06/13/00 f	NS	NS	NS	NS	NS	NS	NM
	09/19/00 f	NS	NS	NS	NS	NS	NS	NM
	12/14/00 f	NS	NS	NS	NS	NS	NS	NM
	03/08/01 f	NS	NS	NS	NS	NS	NS	NM
	06/14/01 f	NS	NS	NS	NS	NS	NS	NM
	09/26/01 f	NS	NS	NS	NS	NS	NS	NM
	12/29/01 f	NS	NS	NS	NS	NS	NS	NM
17302 VM	03/15/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/27/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/29/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM

Table 3
Groundwater Analytical Data
Domestic Irrigation Wells

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San Lorenzo, California

Well Address	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)		Dissolved Oxygen (ppm)
17302 VM	11/26/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5		NM
(cont.)	03/31/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5		NM
	09/09/97 f	NS	NS	NS	NS	NS	NS		NM
	11/24/97 f	NS	NS	NS	NS	NS	NS		NM
	03/19/98 f	NS	NS	NS	NS	NS	NS		NM
	06/03/98 f	NS	NS	NS	NS	NS	NS		NM
	09/21/98 f	NS	NS	NS	NS	NS	NS		NM
	12/14/98 f	NS	NS	NS	NS	NS	NS		NM
	03/15/99 f	NS	NS	NS	NS	NS	NS		NM
	06/14/99 f	NS	NS	NS	NS	NS	NS		NM
	09/15/99 f	NS	NS	NS	NS	NS	NS		NM
	12/08/99 f	NS	NS	NS	NS	NS	NS		NM
	12/08/99 f	NS	NS	NS	NS	NS	NS		NM
	03/15/00 f	NS	NS	NS	NS	NS	NS		NM
	06/13/00 f	NS	NS	NS	NS	NS	NS		NM
	09/19/00 f	NS	NS	NS	NS	NS	NS		NM
	12/14/00 f	NS	NS	NS	NS	NS	NS		NM
	03/08/01 f	NS	NS	NS	NS	NS	NS		NM
	06/14/01 f	NS	NS	NS	NS	NS	NS		NM
	09/26/01 f	NS	NS	NS	NS	NS	NS		NM
17348 VE	03/13/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	05/27/96	Well Dry							
	08/29/96	Well Dry							
	11/26/96	Well Dry							
	03/31/97	Well Dry							
	06/25/97	Well Inaccessible							
	09/09/97 g	NS	NS	NS	NS	NS	NS		NM
	11/24/97 g	NS	NS	NS	NS	NS	NS		NM
	03/19/98 a	NS	NS	NS	NS	NS	NS		NM
	06/03/98 a	NS	NS	NS	NS	NS	NS		NM
	09/21/98 a	NS	NS	NS	NS	NS	NS		NM
	12/14/98 a	NS	NS	NS	NS	NS	NS		NM
	03/15/99 a	NS	NS	NS	NS	NS	NS		NM
	06/14/99 f	NS	NS	NS	NS	NS	NS		NM
	09/15/99 f	NS	NS	NS	NS	NS	NS		NM
	12/08/99 f	NS	NS	NS	NS	NS	NS		NM
	03/15/00 a	NS	NS	NS	NS	NS	NS		NM
	06/13/00 f	NS	NS	NS	NS	NS	NS		NM
	09/19/00 f	NS	NS	NS	NS	NS	NS		NM
	12/14/00 f	NS	NS	NS	NS	NS	NS		NM
	03/08/01 f	NS	NS	NS	NS	NS	NS		NM
	06/14/01 f	NS	NS	NS	NS	NS	NS		NM
	09/26/01 f	NS	NS	NS	NS	NS	NS		NM
	12/29/01 f	NS	NS	NS	NS	NS	NS		NM
17349 VM	03/15/96	1,700	<2.0	<2.0	2.5	13	NA		NM
	05/27/96	320	4.2	1.3	0.95	0.71	NA		NM
	08/29/96	410	7.5	<0.50	<0.50	1.1	NA		NM
	11/26/96	300	<1.0	1.7	<1.0	2.1	55	*	NM
	03/31/97	430	<1.0	2.7	<1.0	1.0	57	c	NM
	06/25/97 **	2,100	30	<5.0	<5.0	6.7	140		NM
	08/18/97	320	2.0	<0.5	<0.5	<0.5	34		NM
	08/18/97	--	--	--	--	--	31	c	NM
	09/09/97	380	6.0	1.4	0.98	<0.50	38		3.0
	09/09/97	--	--	--	--	--	34	c	NM
	11/24/97	240	<1.0	1.1	<1.0	1.4	53		2.4
	11/24/97	--	--	--	--	--	33	c†	NM
	03/19/98	1,300	14	<0.50	<0.50	1.2	250		1.0
	03/19/98	--	--	--	--	--	27	c	NM

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Well Address	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)		Dissolved Oxygen (ppm)
17349 VM	06/03/98	860	8.7	<0.50	0.7	8.0	38		4.9
(cont.)	07/29/98	860	20	2.1	<1.2	<1.2	27		NM
	07/29/98	--	--	--	--	--	25	c	NM
	09/21/98	200	<0.50	<0.50	<0.50	14	14		5.2
	12/14/98	254	<0.50	6.92	0.604	1.58	21.7		1.0
	03/15/99	172	1.35	<0.50	<0.50	<0.50	24.2		3.6
	06/14/99	91	<0.50	3.53	<0.50	<0.50	88.3		2.8
	09/15/99 a	133	<0.50	<0.50	<0.50	<0.50	184		2.2
	12/08/99	136	0.681	<0.50	<0.50	<0.50	267	c	2.4
	03/15/00	<50	<0.50	<0.50	<0.50	<0.50	82.1	c	2.8
	06/13/00	319	5.28	<0.5	<0.50	<0.50	97.1		NM
	06/13/00	--	--	--	--	--	85.1	c	NM
	09/19/00	106	<0.50	2	<0.50	<0.50	204.0		NM
	09/19/00	--	--	--	--	--	84.0	c	NM
	12/14/00	65.9	0.61	<0.50	<0.50	<0.50	188.0		1.8
	12/14/00	--	--	--	--	--	197.0	c	NM
	03/08/01	<50	<0.50	<0.50	<0.50	<0.50	91.8		1.8
	03/08/01	--	--	--	--	--	98.3	c	NM
	06/14/01	<50	<0.50	<0.50	<0.50	<0.50	68.0		2.8
	06/14/01	--	--	--	--	--	99.0	c	NM
	09/26/01	52	0.53	<0.50	<0.50	<0.50	49.0		1.8
	09/26/01	--	--	--	--	--	54.0	c	
	12/29/01	<50.0	<0.50	0.78	<0.50	<0.50	58.0		NM
	12/29/01	--	--	--	--	--	48.0	c	NM
17371 VM	03/13/96 e	NS	NS	NS	NS	NS	NA		NM
	05/27/96 e	NS	NS	NS	NS	NS	NA		NM
	08/29/96 e	NS	NS	NS	NS	NS	NA		NM
	11/26/96 e	NS	NS	NS	NS	NS	NS		NM
	03/31/97 e	NS	NS	NS	NS	NS	NS		NM
	06/25/97 e	NS	NS	NS	NS	NS	NS		NM
	09/09/97 e	NS	NS	NS	NS	NS	NS		NM
	11/24/97 e	NS	NS	NS	NS	NS	NS		NM
	03/19/98 e	NS	NS	NS	NS	NS	NS		NM
	06/03/98 e	NS	NS	NS	NS	NS	NS		NM
	09/21/98 e	NS	NS	NS	NS	NS	NS		NM
	12/14/98 e	NS	NS	NS	NS	NS	NS		NM
	03/15/99 e	NS	NS	NS	NS	NS	NS		NM
	06/14/99 e	NS	NS	NS	NS	NS	NS		NM
	09/15/99 e	NS	NS	NS	NS	NS	NS		NM
	12/08/99 f	NS	NS	NS	NS	NS	NS		NM
	03/15/00 f	NS	NS	NS	NS	NS	NS		NM
	06/13/00 f	NS	NS	NS	NS	NS	NS		NM
	09/19/00 f	NS	NS	NS	NS	NS	NS		NM
	12/14/00 f	NS	NS	NS	NS	NS	NS		NM
	03/08/01 f	NS	NS	NS	NS	NS	NS		NM
	06/14/01 f	NS	NS	NS	NS	NS	NS		NM
	09/26/01 f	NS	NS	NS	NS	NS	NS		NM
	12/29/01 f	NS	NS	NS	NS	NS	NS		NM
17372 VM	03/14/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	05/27/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	08/29/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	11/26/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5		NM
	03/31/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5		NM
	06/25/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5		NM
	09/09/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5		4.0
	11/24/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5		2.0
	03/19/98	<50	<0.50	<0.50	<0.50	<0.50	1,200		1.8
	03/19/98	--	--	--	--	--	1,400	c	NM
	06/03/98	<50	<0.50	<0.50	<0.50	<0.50	16,000		1.8
	07/29/98	<200	<2.0	<2.0	<2.0	<2.0	940		NM

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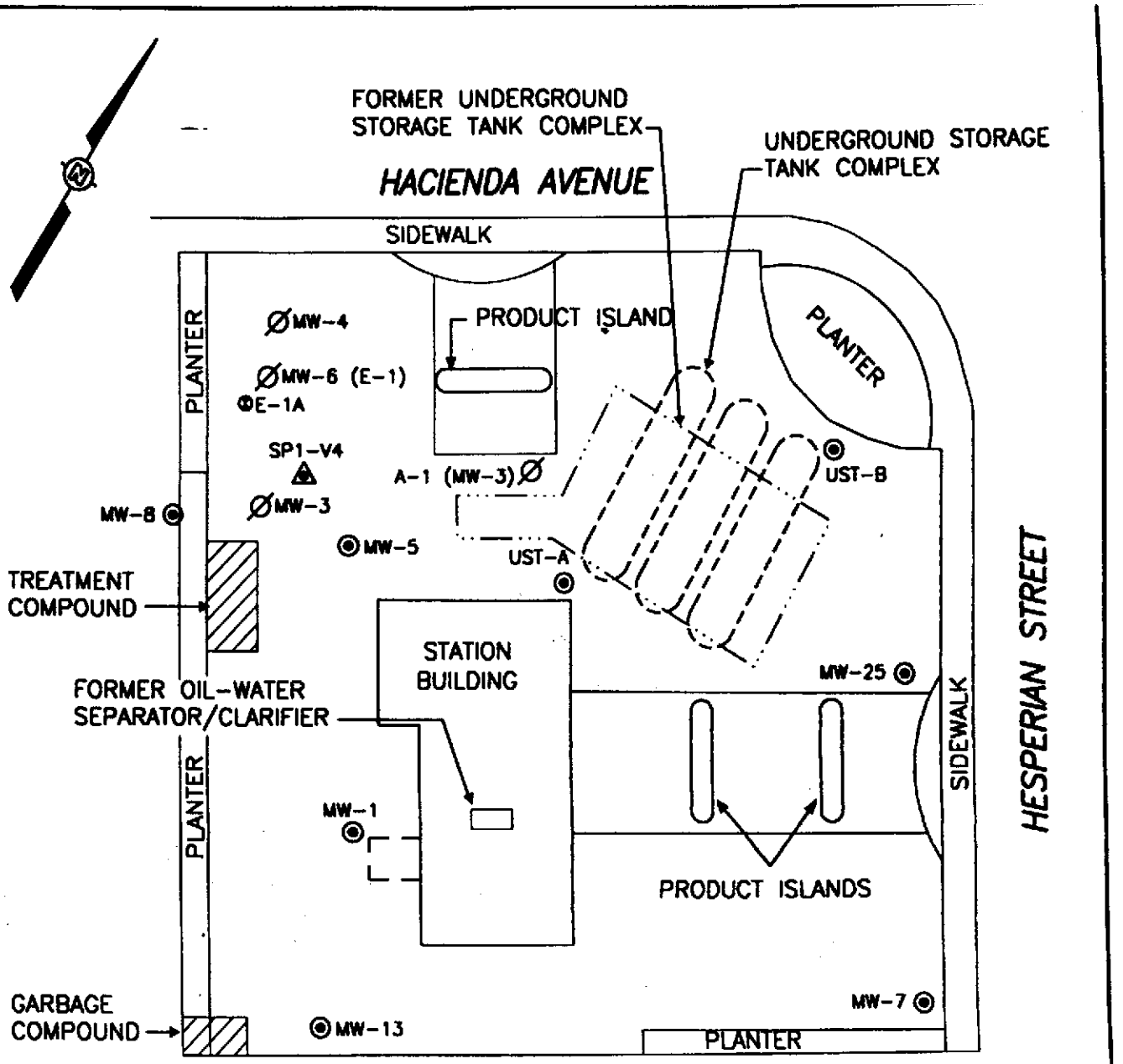
Well Address	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)		Dissolved Oxygen (ppm)
17372 VM	07/29/98	--	--	--	--	--	1,100	c	NM
(cont.)	09/21/98	<50	<0.50	<0.50	<0.50	<0.50	200		1.6
	09/21/98	--	--	--	--	--	360	c	NM
	12/14/98	<50	<0.50	0.823	<0.50	<0.50	20.1		3.8
	03/15/99	<50	<0.50	<0.50	<0.50	<0.50	6.66		4.6
	06/14/99	<50	<0.50	<0.50	<0.50	<0.50	3.33		4.0
	09/15/99	<50	<0.50	<0.50	<0.50	<0.50	<5.0		2.0
	12/08/99	<50	<0.50	<0.50	<0.50	<0.50	<5.0		NM
	03/15/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5		1.6
	06/13/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5		NM
	09/19/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5		NM
	12/14/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5		2.0
	03/08/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5		2.4
	06/14/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5		2.8
	09/26/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5		2.2
	12/29/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5		2.1
17393 VM	03/14/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	05/27/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	08/29/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
VM	11/26/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5		NM
	03/31/97 a	NS	NS	NS	NS	NS	NS		NM
	06/25/97	Well Destroyed							

TPPH = Total purgeable petroleum hydrocarbons
MtBE = Methyl tert-butyl ether
NA = Not analyzed
NS = Not sampled
ppb = Parts ber billion
H = Hacienda Avenue
VM = Via Magdalena
VE = Via Encinas
< = Less than laboratory detection limit stated to the right.
* = MtBE data maybe anamolous; unable to confirm with EPA Method 8260.
** = Concentration data are suspect due to inadequate purging. Well resampled on August 18, 1997 for confirmation purposes.
a. Owner not available to approve sampling access; well not sampled.
b. Well resampled to confirm data of March 14, 1996.
c. MtBE result confirmed by EPA Method 8260.
d. Pumping equipment obstructing sampling access; well not sampled.
e. Access denied by owner; well not sampled.
f. Pump on well does not work.
g. Well blocked and pump non-operational; well cannot be sampled.

Notes:
Homeowners are contacted 1 week prior to sampling event.
Please see certified analytical reports for laboratory notes and definitions



PROJECT NUMBER 330-006.2Q

APPROVED BY	CHECKED BY	DRAWN BY
--	--	J-9-00
		L. Madigan

LEGEND

- GROUNDWATER MONITORING WELL
- GROUNDWATER EXTRACTION WELL
- DESTROYED GROUNDWATER MONITORING WELL
- DUAL VAPOR EXTRACTION/SPARSE WELL

SCALE

0 30 60 FEET

IT CORPORATION

ARCO SERVICE STATION 0608

FIGURE 1
SITE MAP

17601 HESPERIAN BLVD AT HACIENDA AVE
SAN LORENZO, CALIFORNIA

PROJECT NUMBER 821803
APPROVED BY
CHECKED BY
DRAWN BY 2-28-02
L. Wahlgren

VIA MANZANAS
VIA MEDIA
VIA FLORES
VIA MAGDALENA
POTRERO CT.
VIA ARRIBA
APARTMENTS
APARTMENTS
SHOPS
HESPERIAN BOULEVARD
RESTAURANT
CHURCH AND SCHOOL
RESIDENTIAL
RESTAURANT
RESIDENTIAL
VIA ENCINAS COURT
HACIENDA AVENUE
VIA ALAMO
SHOPS
RESIDENTIAL

MW-20
MW-19†
MW-21 (20.86)
MW-18 (21.46)
MW-17
17200
MW-14 (22.84)
MW-24†
MW-26 (23.30)
MW-9 (22.29)
E-1A (10.66)
MW-10 (22.61)
MW-8 (22.94)
MW-5 (23.02)
MW-25 (23.49)
MW-7†
MW-13†
SP-1/V-4
590
MW-11 (22.63)
SP-2/V-5
633
MW-16 (21.68)
MW-15 (22.00)
17393
642
634
17349
17371
17348
675
MW-22 (20.51)
MW-23 (20.57)
17197
17203
17302
17372
23
22
21
11

LEGEND

- GROUNDWATER MONITORING WELL
- △ DUAL COMPLETION AIR SPARGING/ SOIL VAPOR EXTRATION WELL
- ∅ DESTROYED WELL
- ⊗ GROUNDWATER EXTRACTION WELL
- ■ DOMESTIC IRRIGATION WELL
- (22.29) GROUNDWATER ELEVATION (FT.–MSL): MEASURED 12–29–01
- GROUNDWATER ELEVATION CONTOUR (FT.–MSL)
- † WELL REMOVED FROM MONITORING PROGRAM

APPROXIMATE DIRECTION OR GROUNDWATER FLOW

APPROXIMATE GRADIENT = 0.003

SCALE
0 150 300

IT CORPORATION

ARCO SERVICE STATION 0608

FIGURE 2
GROUNDWATER ELEVATION CONTOUR MAP
FOURTH QUARTER 2001
17601 HESPERIAN BLVD at HACIENDA AVE
SAN LORENZO, CALIFORNIA

N:\cad\DWG\Arco0608\GWC.dwg Thu, 28/Feb/02 04:22pm lwahlgren

PROJECT NUMBER 821803
APPROVED BY
CHECKED BY
DRAWN BY 2-4-02
K. Block

LEGEND

- ◉ GROUNDWATER MONITORING WELL
- △ DUAL COMPLETION AIR SPARGING/ SOIL VAPOR EXTRATION WELL
- ∅ DESTROYED WELL
- ⊗ GROUNDWATER EXTRACTION WELL
- ■ DOMESTIC IRRIGATION WELL
- 73 / <0.50 / 94 TPPH-G/BENZENE/MtBE by EPA 8020 (MtBE by 8260) CONCENTRATIONS IN GROUNDWATER (PARTS PER BILLION); SAMPLED 12-29-01
- NS NOT SAMPLED
- * WELL SAMPLED ANNUALLY IN FIRST QUARTER
- † WELL REMOVED FROM SAMPLING PROGRAM

VIA MANZANAS
POTRERO COURT
MW-20
MW-19 †
VIA MAGDALENA
APARTMENTS
APARTMENTS
VIA ARRIBA
SHOPS
HESPERIAN BOULEVARD
RESTAURANT
CHURCH AND SCHOOL
17200
MW-17
MW-18 *
MW-14 *
MW-24 †
RESIDENTIAL
MW-26 *
RESTAURANT
MW-9 <50 / <0.50 / <2.5
E-1A <50 / <0.50 / 190
MW-25 73 / <0.50 / 94
MW-5 <50 / <0.50 / 370
MW-7 †
MW-13 †
MW-10 410 / <0.50 / 950
<50 / <0.50 / 560
MW-8
SP-1/V-4
590
SP-2/V-5
633
MW-11 <50 / <0.50 / <2.5
MW-15 <50 / <0.50 / 30
MW-16 <50 / <0.50 / <2.5
17302 NS
17372 <50 / <0.50 / <2.5
17197 NS
17203 NS
MW-21 *
VIA MEDIA
VIA FLORES
RESIDENTIAL
MW-22 <50 / <0.50 / <2.5
17349 <50 / <0.50 / 58 (48)
17371 NS
VIA ENCINAS COURT
17393
17348 NS
675 NS
MW-23 *
HACIENDA AVENUE
642 NS
634 NS
RESIDENTIAL
SHOPS
VIA ALAMO

SCALE
0 150 300

IT CORPORATION

ARCO SERVICE STATION 0608

FIGURE 3
TPPH-g/BENZENE/MtBE CONCENTRATION MAP
FOURTH QUARTER 2001
17601 HESPERIAN BLVD at HACIENDA AVE
SAN LORENZO, CALIFORNIA

N:\cad\DWG\Arco0608\CHEM.dwg Thu, 28/Feb/02 04:26pm lwahlgren

ATTACHMENT A

FIELD AND LABORATORY PROCEDURES

ATTACHMENT A
FIELD AND LABORATORY PROCEDURES

Sampling Procedures

The sampling procedure for each well consists first of measuring the water level and checking for the presence of separate-phase hydrocarbons (SPH), using either an electronic indicator and a clear Teflon® bailer, or an oil-water interface probe. Wells not containing SPH are then purged of approximately three casing volumes of water (or to dryness) using a centrifugal pump, gas displacement pump, or bailer. Equipment used for the current sampling event is noted on the attached field data sheets. During purging, temperature, pH, and electrical conductivity are monitored in order to document that these parameters are stable prior to collecting samples. After purging, water levels are allowed to partially recover. Groundwater samples are collected using a Teflon® bailer, placed into appropriate EPA-approved containers, labeled, logged onto chain-of-custody documents, and transported on ice to a California State-certified laboratory.

Analytical Procedures

Laboratory. The groundwater samples were analyzed for the presence of total purgeable petroleum hydrocarbons; benzene, toluene, ethylbenzene, and xylenes; and methyl tert-butyl ether. The analyses were performed according to EPA Methods 8015 (modified) and 8020, utilizing a purge-and-trap extraction technique. Final detection was by gas chromatography using flame- and photo-ionization detectors. The methods of analysis for the groundwater samples are documented in the certified analytical report. The certified analytical report, chain-of-custody documentation, and field data sheets are presented as Attachment B.

Field. Dissolved oxygen is measured in the field utilizing Hydac AccuVac test kit.

ATTACHMENT B

CERTIFIED ANALYTICAL REPORTS, CHAIN-OF-CUSTODY DOCUMENTATION, AND FIELD DATA SHEETS

Sequoia
Analytical

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31 January, 2002

Shaw Garakani
Pacific Environmental Group (Arco)
1921 Ringwood Avenue
San Jose, CA 95131

RE: Facility 0608, San Lorenzo,Ca
Sequoia Report: MLA0027

Enclosed are the results of analyses for samples received by the laboratory on 12/31/01 12:25. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

James Hartley
Project Manager

CA ELAP Certificate #1210

Sequoia Analytical

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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo,Ca	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Shaw Garakani	01/31/02 15:05

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-5	MLA0027-01	Water	12/29/01 13:25	12/31/01 12:25
MW-8	MLA0027-02	Water	12/29/01 11:00	12/31/01 12:25
MW-9	MLA0027-03	Water	12/29/01 10:30	12/31/01 12:25
MW-10	MLA0027-04	Water	12/29/01 11:40	12/31/01 12:25
MW-11	MLA0027-05	Water	12/29/01 10:00	12/31/01 12:25
MW-15	MLA0027-06	Water	12/29/01 09:35	12/31/01 12:25
MW-16	MLA0027-07	Water	12/29/01 09:15	12/31/01 12:25
MW-22	MLA0027-08	Water	12/29/01 08:30	12/31/01 12:25
MW-25	MLA0027-09	Water	12/29/01 13:00	12/31/01 12:25
E1-A	MLA0027-10	Water	12/29/01 13:40	12/31/01 12:25
17372VM	MLA0027-11	Water	12/29/01 11:45	12/31/01 12:25
17349VM	MLA0027-12	Water	12/29/01 12:15	12/31/01 12:25

Sequoia Analytical - Morgan Hill

James Hartley, 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.

Sequoia Analytical

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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo,Ca	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Shaw Garakani	01/31/02 15:05

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
MW-5 (MLA0027-01) Water Sampled: 12/29/01 13:25 Received: 12/31/01 12:25									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2A09004	01/09/02	01/09/02	8015Bm/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	**0.95**	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**370**	25	"	10	"	"	"	"	A-01,M-03
Surrogate: a,a,a-Trifluorotoluene		*93.7 %*	*70-130*		"	"	"	"	
MW-8 (MLA0027-02) Water Sampled: 12/29/01 11:00 Received: 12/31/01 12:25									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2A08005	01/08/02	01/08/02	8015Bm/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**560**	25	"	10	"	"	"	"	A-01a,M-03
Surrogate: a,a,a-Trifluorotoluene		*96.6 %*	*70-130*		"	"	"	"	
MW-9 (MLA0027-03) Water Sampled: 12/29/01 10:30 Received: 12/31/01 12:25									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2A08005	01/08/02	01/08/02	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	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*92.9 %*	*70-130*		"	"	"	"	

Sequoia Analytical

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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo,Ca	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Shaw Garakani	01/31/02 15:05

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
MW-10 (MLA0027-04) Water Sampled: 12/29/01 11:40 Received: 12/31/01 12:25									
Gasoline Range Organics (C6-C10)	**410**	50	ug/l	1	2A09004	01/09/02	01/09/02	8015Bm/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	**6.7**	0.50	"	"	"	"	"	"	
Ethylbenzene	**2.5**	0.50	"	"	"	"	"	"	
Xylenes (total)	**2.9**	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**950**	25	"	10	"	"	"	"	A-01,M-03
Surrogate: a,a,a-Trifluorotoluene		*102 %*	*70-130*		"	"	"	"	
MW-11 (MLA0027-05) Water Sampled: 12/29/01 10:00 Received: 12/31/01 12:25									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2A08005	01/08/02	01/08/02	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	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*97.1 %*	*70-130*		"	"	"	"	
MW-15 (MLA0027-06) Water Sampled: 12/29/01 09:35 Received: 12/31/01 12:25									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2A08005	01/08/02	01/08/02	8015Bm/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**30**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*94.2 %*	*70-130*		"	"	"	"	

Sequoia Analytical

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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo,Ca	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Shaw Garakani	01/31/02 15:05

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
MW-16 (MLA0027-07) Water Sampled: 12/29/01 09:15 Received: 12/31/01 12:25									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2A08005	01/08/02	01/08/02	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	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*94.6 %*	*70-130*		"	"	"	"	
MW-22 (MLA0027-08) Water Sampled: 12/29/01 08:30 Received: 12/31/01 12:25									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2A08005	01/08/02	01/08/02	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	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*91.5 %*	*70-130*		"	"	"	"	
MW-25 (MLA0027-09) Water Sampled: 12/29/01 13:00 Received: 12/31/01 12:25									
Gasoline Range Organics (C6-C10)	**73**	50	ug/l	1	2A08005	01/08/02	01/08/02	8015Bm/8021B	P-03
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	**1.4**	0.50	"	"	"	"	"	"	
Xylenes (total)	**7.1**	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**94**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*94.4 %*	*70-130*		"	"	"	"	

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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo,Ca	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Shaw Garakani	01/31/02 15:05

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
E1-A (MLA0027-10) Water Sampled: 12/29/01 13:40 Received: 12/31/01 12:25									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2A08005	01/08/02	01/08/02	8015Bm/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**190**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*96.7 %*	*70-130*		"	"	"	"	
17372VM (MLA0027-11) Water Sampled: 12/29/01 11:45 Received: 12/31/01 12:25									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2A08004	01/08/02	01/08/02	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	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*87.6 %*	*70-130*		"	"	"	"	
17349VM (MLA0027-12) Water Sampled: 12/29/01 12:15 Received: 12/31/01 12:25									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2A08004	01/08/02	01/08/02	8015Bm/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	**0.78**	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**58**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*92.3 %*	*70-130*		"	"	"	"	

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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo,Ca	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Shaw Garakani	01/31/02 15:05

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
17349VM (MLA0027-12) Water Sampled: 12/29/01 12:15 Received: 12/31/01 12:25									
Methyl tert-butyl ether	**48**	1.0	ug/l	2	2A09025	01/09/02	01/09/02	EPA 8260B	
Benzene	ND	1.0	"	"	"	"	"	"	
Bromobenzene	ND	1.0	"	"	"	"	"	"	
Bromochloromethane	ND	1.0	"	"	"	"	"	"	
Bromodichloromethane	ND	1.0	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.0	"	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"	"	"	"	"	
Chloroethane	ND	1.0	"	"	"	"	"	"	
Chloroform	ND	1.0	"	"	"	"	"	"	
Chloromethane	ND	1.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.0	"	"	"	"	"	"	
Dibromomethane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	2.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	ND	10	"	"	"	"	"	"	

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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo,Ca	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Shaw Garakani	01/31/02 15:05

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
17349VM (MLA0027-12) Water Sampled: 12/29/01 12:15 Received: 12/31/01 12:25									
n-Propylbenzene	ND	1.0	ug/l	2	2A09025	01/09/02	01/09/02	EPA 8260B	
Styrene	ND	1.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
Total Xylenes	ND	1.0	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*117 %*	*50-150*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*106 %*	*50-150*		"	"	"	"	
Surrogate: Toluene-d8		*113 %*	*50-150*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*	*50-150*		"	"	"	"	

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1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Shaw Garakani	01/31/02 15:05

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 2A08004 - EPA 5030B [P/T]										
Blank (2A08004-BLK1)				Prepared & Analyzed: 01/08/02						
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	*9.09*		"	*10.0*		*90.9*	*70-130*			
LCS (2A08004-BS1)				Prepared & Analyzed: 01/08/02						
Benzene	9.53	0.50	ug/l	10.0		95.3	70-130			
Toluene	8.82	0.50	"	10.0		88.2	70-130			
Ethylbenzene	9.90	0.50	"	10.0		99.0	70-130			
Xylenes (total)	28.4	0.50	"	30.0		94.7	70-130			
Surrogate: a,a,a-Trifluorotoluene	*8.97*		"	*10.0*		*89.7*	*70-130*			
LCS (2A08004-BS2)				Prepared & Analyzed: 01/08/02						
Gasoline Range Organics (C6-C10)	233	50	ug/l	250		93.2	70-130			
Surrogate: a,a,a-Trifluorotoluene	*13.0*		"	*10.0*		*130*	*70-130*			
Matrix Spike (2A08004-MS1)		**Source: MLA0022-03**		Prepared & Analyzed: 01/08/02						
Gasoline Range Organics (C6-C10)	485	50	ug/l	550	ND	84.5	60-140			
Benzene	7.00	0.50	"	6.60	ND	106	60-140			
Toluene	36.0	0.50	"	39.7	ND	90.5	60-140			
Ethylbenzene	9.56	0.50	"	9.20	ND	104	60-140			
Xylenes (total)	45.7	0.50	"	46.1	ND	99.1	60-140			
Surrogate: a,a,a-Trifluorotoluene	*12.5*		"	*10.0*		*125*	*70-130*			
Matrix Spike Dup (2A08004-MSD1)		**Source: MLA0022-03**		Prepared & Analyzed: 01/08/02						
Gasoline Range Organics (C6-C10)	487	50	ug/l	550	ND	84.9	60-140	0.412	25	
Benzene	7.02	0.50	"	6.60	ND	106	60-140	0.285	25	
Toluene	36.4	0.50	"	39.7	ND	91.5	60-140	1.10	25	
Ethylbenzene	9.56	0.50	"	9.20	ND	104	60-140	0.00	25	
Xylenes (total)	46.1	0.50	"	46.1	ND	100	60-140	0.871	25	
Surrogate: a,a,a-Trifluorotoluene	*12.6*		"	*10.0*		*126*	*70-130*			

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1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Shaw Garakani	01/31/02 15:05

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 2A08005 - EPA 5030B [P/T]										
Blank (2A08005-BLK1)				Prepared & Analyzed: 01/08/02						
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	*9.01*		"	*10.0*		*90.1*	*70-130*			
LCS (2A08005-BS1)				Prepared & Analyzed: 01/08/02						
Benzene	9.76	0.50	ug/l	10.0		97.6	70-130			
Toluene	9.43	0.50	"	10.0		94.3	70-130			
Ethylbenzene	10.1	0.50	"	10.0		101	70-130			
Xylenes (total)	32.7	0.50	"	30.0		109	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.45*		"	*10.0*		*94.5*	*70-130*			
LCS (2A08005-BS2)				Prepared & Analyzed: 01/08/02						
Gasoline Range Organics (C6-C10)	255	50	ug/l	250		102	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.15*		"	*10.0*		*91.5*	*70-130*			
Matrix Spike (2A08005-MS1)		**Source: MLA0027-05**		Prepared & Analyzed: 01/08/02						
Gasoline Range Organics (C6-C10)	569	50	ug/l	550	ND	103	60-140			
Benzene	8.68	0.50	"	6.60	ND	132	60-140			
Toluene	38.3	0.50	"	39.7	ND	96.5	60-140			
Ethylbenzene	9.08	0.50	"	9.20	ND	98.7	60-140			
Xylenes (total)	45.1	0.50	"	46.1	ND	97.8	60-140			
Surrogate: a,a,a-Trifluorotoluene	*10.0*		"	*10.0*		*100*	*70-130*			
Matrix Spike Dup (2A08005-MSD1)		**Source: MLA0027-05**		Prepared & Analyzed: 01/08/02						
Gasoline Range Organics (C6-C10)	536	50	ug/l	550	ND	97.5	60-140	5.97	25	
Benzene	6.04	0.50	"	6.60	ND	91.5	60-140	35.9	25	QR-02
Toluene	30.3	0.50	"	39.7	ND	76.3	60-140	23.3	25	
Ethylbenzene	6.22	0.50	"	9.20	ND	67.6	60-140	37.4	25	QR-02
Xylenes (total)	41.6	0.50	"	46.1	ND	90.2	60-140	8.07	25	
Surrogate: a,a,a-Trifluorotoluene	*11.1*		"	*10.0*		*111*	*70-130*			

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1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Shaw Garakani	01/31/02 15:05

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 2A09004 - EPA 5030B [P/T]										
Blank (2A09004-BLK1)				Prepared & Analyzed: 01/09/02						
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	*8.51*		"	*10.0*		*85.1*	*70-130*			
LCS (2A09004-BS1)				Prepared & Analyzed: 01/09/02						
Benzene	9.09	0.50	ug/l	10.0		90.9	70-130			
Toluene	8.53	0.50	"	10.0		85.3	70-130			
Ethylbenzene	9.58	0.50	"	10.0		95.8	70-130			
Xylenes (total)	27.8	0.50	"	30.0		92.7	70-130			
Surrogate: a,a,a-Trifluorotoluene	*8.90*		"	*10.0*		*89.0*	*70-130*			
LCS (2A09004-BS2)				Prepared & Analyzed: 01/09/02						
Gasoline Range Organics (C6-C10)	220	50	ug/l	250		88.0	70-130			
Surrogate: a,a,a-Trifluorotoluene	*6.02*		"	*10.0*		*60.2*	*70-130*			*S-04*
LCS (2A09004-BS3)				Prepared & Analyzed: 01/09/02						
Gasoline Range Organics (C6-C10)	470	50	ug/l	550		85.5	70-130			
Benzene	8.31	0.50	"	6.60		126	70-130			
Toluene	35.1	0.50	"	39.7		88.4	70-130			
Ethylbenzene	9.50	0.50	"	9.20		103	70-130			
Xylenes (total)	45.4	0.50	"	46.1		98.5	70-130			
Surrogate: a,a,a-Trifluorotoluene	*11.2*		"	*10.0*		*112*	*70-130*			
LCS Dup (2A09004-BSD3)				Prepared & Analyzed: 01/09/02						
Gasoline Range Organics (C6-C10)	460	50	ug/l	550		83.6	70-130	2.15	25	
Benzene	8.22	0.50	"	6.60		125	70-130	1.09	25	
Toluene	36.5	0.50	"	39.7		91.9	70-130	3.91	25	
Ethylbenzene	9.49	0.50	"	9.20		103	70-130	0.105	25	
Xylenes (total)	45.9	0.50	"	46.1		99.6	70-130	1.10	25	
Surrogate: a,a,a-Trifluorotoluene	*11.4*		"	*10.0*		*114*	*70-130*			

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San Jose CA, 95131	Project Manager: Shaw Garakani	01/31/02 15:05

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2A09025 - EPA 5030B MeOH										
Blank (2A09025-BLK1)				Prepared & Analyzed: 01/09/02						
Methyl tert-butyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	"							
Bromobenzene	ND	0.50	"							
Bromochloromethane	ND	0.50	"							
Bromodichloromethane	ND	0.50	"							
Bromoform	ND	0.50	"							
Bromomethane	ND	0.50	"							
n-Butylbenzene	ND	0.50	"							
sec-Butylbenzene	ND	0.50	"							
tert-Butylbenzene	ND	0.50	"							
Carbon tetrachloride	ND	0.50	"							
Chlorobenzene	ND	0.50	"							
Chloroethane	ND	0.50	"							
Chloroform	ND	0.50	"							
Chloromethane	ND	0.50	"							
2-Chlorotoluene	ND	0.50	"							
4-Chlorotoluene	ND	0.50	"							
Dibromochloromethane	ND	0.50	"							
1,2-Dibromoethane	ND	0.50	"							
Dibromomethane	ND	0.50	"							
1,2-Dibromo-3-chloropropane	ND	1.0	"							
1,2-Dichlorobenzene	ND	0.50	"							
1,3-Dichlorobenzene	ND	0.50	"							
1,4-Dichlorobenzene	ND	0.50	"							
Dichlorodifluoromethane	ND	0.50	"							
1,1-Dichloroethane	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
1,1-Dichloroethene	ND	0.50	"							
cis-1,2-Dichloroethene	ND	0.50	"							
trans-1,2-Dichloroethene	ND	0.50	"							
1,2-Dichloropropane	ND	0.50	"							
1,3-Dichloropropane	ND	0.50	"							
2,2-Dichloropropane	ND	2.0	"							
1,1-Dichloropropene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Hexachlorobutadiene	ND	2.0	"							

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San Jose CA, 95131	Project Manager: Shaw Garakani	01/31/02 15:05

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2A09025 - EPA 5030B MeOH										
Blank (2A09025-BLK1)				Prepared & Analyzed: 01/09/02						
Isopropylbenzene	ND	0.50	ug/l							
p-Isopropyltoluene	ND	0.50	"							
Methylene chloride	ND	0.50	"							
Naphthalene	ND	5.0	"							
n-Propylbenzene	ND	0.50	"							
Styrene	ND	0.50	"							
1,1,1,2-Tetrachloroethane	ND	0.50	"							
1,1,2,2-Tetrachloroethane	ND	0.50	"							
Tetrachloroethene	ND	0.50	"							
Toluene	ND	0.50	"							
1,2,3-Trichlorobenzene	ND	0.50	"							
1,2,4-Trichlorobenzene	ND	0.50	"							
1,1,1-Trichloroethane	ND	0.50	"							
1,1,2-Trichloroethane	ND	0.50	"							
Trichloroethene	ND	0.50	"							
Trichlorofluoromethane	ND	0.50	"							
1,2,3-Trichloropropane	ND	0.50	"							
1,2,4-Trimethylbenzene	ND	0.50	"							
1,3,5-Trimethylbenzene	ND	0.50	"							
Vinyl chloride	ND	0.50	"							
Total Xylenes	ND	0.50	"							
Surrogate: Dibromofluoromethane	*11.7*		"	*10.0*		*117*	*50-150*			
Surrogate: 1,2-Dichloroethane-d4	*10.7*		"	*10.0*		*107*	*50-150*			
Surrogate: Toluene-d8	*11.3*		"	*10.0*		*113*	*50-150*			
Surrogate: 4-Bromofluorobenzene	*10.1*		"	*10.0*		*101*	*50-150*			
LCS (2A09025-BS1)				Prepared & Analyzed: 01/09/02						
Benzene	10.8	0.50	ug/l	10.0		108	70-130			
Chlorobenzene	10.4	0.50	"	10.0		104	70-130			
1,1-Dichloroethene	11.7	0.50	"	10.0		117	70-130			
Toluene	11.5	0.50	"	10.0		115	70-130			
Trichloroethene	11.3	0.50	"	10.0		113	70-130			
Surrogate: Dibromofluoromethane	*11.8*		"	*10.0*		*118*	*50-150*			
Surrogate: 1,2-Dichloroethane-d4	*10.4*		"	*10.0*		*104*	*50-150*			
Surrogate: Toluene-d8	*11.3*		"	*10.0*		*113*	*50-150*			
Surrogate: 4-Bromofluorobenzene	*10.0*		"	*10.0*		*100*	*50-150*			

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San Jose CA, 95131	Project Manager: Shaw Garakani	01/31/02 15:05

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2A09025 - EPA 5030B MeOH										
LCS Dup (2A09025-BSD1)				Prepared & Analyzed: 01/09/02						
Benzene	10.9	0.50	ug/l	10.0		109	70-130	0.922	25	
Chlorobenzene	10.9	0.50	"	10.0		109	70-130	4.69	25	
1,1-Dichloroethene	11.8	0.50	"	10.0		118	70-130	0.851	25	
Toluene	11.5	0.50	"	10.0		115	70-130	0.00	25	
Trichloroethene	11.6	0.50	"	10.0		116	70-130	2.62	25	
Surrogate: Dibromofluoromethane	*11.9*		"	*10.0*		*119*	*50-150*			
Surrogate: 1,2-Dichloroethane-d4	*10.7*		"	*10.0*		*107*	*50-150*			
Surrogate: Toluene-d8	*11.4*		"	*10.0*		*114*	*50-150*			
Surrogate: 4-Bromofluorobenzene	*10.3*		"	*10.0*		*103*	*50-150*			

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Notes and Definitions

A-01	MTBE was analyzed on 1/8/02.
A-01a	MTBE was analyzed on 1/9/02.
M-03	This result is from a second dilution of the sample. An initial result was reported from a previous dilution of the sample necessary to report other analytes in a different range.
P-03	Chromatogram Pattern: Unidentified Hydrocarbons C6-C10
QR-02	The RPD result exceeded the control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
S-04	The surrogate recovery for this sample is outside control limits due to interference from the sample matrix.
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

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☐ 1455 McDowell Blvd. North, Suite D • Petaluma, CA 94954 • (707) 792-1865 • FAX (707) 792-0342
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 • FAX (916) 921-0100
☐ 1551 Industrial Road • San Carlos, CA 94070 • (650) 232-9600 • FAX (650) 232-9612
☐ 404 N. Wiget Lane • Walnut Creek, CA 94598 • (925) 988-9600 • FAX (925) 988-9673

Company Name: IT Group
Project: 821803 17601 Hesperian Blvd
Mailing Address: 1921 Ringwood Av.
Billing Address (if different): San Lorenzo CA.
City: San Jose State: CA Zip Code: 95131
Mike Whelan ARCO Engineer
Telephone: (408) 4537300 Fax #: (408) 4372526
P.O. #: Task Order 24152.00
Report To: Shaw Garakani E-Mail: Don Waterpadah
QC Data: ☐ Level II (Standard) ☐ Level III ☐ Level IV
Sampler: Pedro E Ruiz Date / Time Results Required:
Sequoia's Work Order #: MLA0027

Turnaround Time: ☒ 10 - 15 Working Days (Standard TAT) ☐ 7 Working Days ☐ 5 Working Days ☐ 72 Hours ☐ 48 Hours ☐ 24 Hours ☐ 2-8 Hours

MANDATORY: ☐ SDWA (Drinking Water) ☒ CWA (Waste Water) ☐ RCRA (Hazardous Waste) ☐ Other

ANALYSES REQUESTED (Please provide method): BTEX/TPH MTBE 8021B ; H602/8010 8015

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Container Type	Sequoia's Sample #	BTEX/TPH MTBE 8021B H602/8010 8015											Comments/ Temp.(If required)
1. MW5	122901 1325	W	3	40ml HCL	01	X											
2. MW8	1100	↓	↓	↓	02	↓											
3. MW9	1030				03												
4. MW10	1140				04												
5. MW11	1000				05												
6. MW-15	9:35				06												
7. MW-16	9:15				07												
8. MW-22	8:30				08												
9. MW25	1300				09												
10. E1-A	13:40	↓	↓	↓	10	↓											

Relinquished By: [signature] IT Group 122901 17:45	Received By: [signature]	Date / Time: 12/31/01 1127	
Relinquished By: [signature]	Received By: [signature]	Date / Time: 12/3/01 12:25	
Relinquished By:	Received By:	Date / Time	
Relinquished By:	Received By:	Date / Time:	

Samples Received in Good Condition? ☒ Yes ☐ No Samples on Ice? ☒ Yes ☐ No Method of Shipment: Sequoia Page 1 of 2

Pink - Client Yellow - Sequoia White - Sequoia

WELL SAMPLING REQUEST

SAMPLING PROTOCOL								
Project No.	Station #	Project Name	SEQUENCE	Project Manager	Approval	Date/s	Laboratory:	Client Engineer:
821803	608		4Q00				Sequoia 24152 00	Mike Wheilan

Well Number	Sampling Order	Sample I.D.	Gauge/Sample Frequency	Analyses	TOB TOC	Well Depth	Top of Screen	Casing Diameter	Well goes Dry?	Comments
MW-5	16		QLY/QLY	MtBE/GAS/BTEX	TOB/TOC	14		4"	YES	Please repair or replace
MW-7	15		--	**Removed from Program**	--	19		3"	NO	missing or broken locks, j-plugs,
MW-8	17		QLY/QLY	MtBE/GAS/BTEX	TOB/TOC	22		3"	NO	slip caps, lid bolts ect. Please
MW-9	14		QLY/QLY	MtBE/GAS/BTEX	TOB/TOC	19		3"	YES	note any repairs performed or that
MW-10	18		QLY/QLY	MtBE/GAS/BTEX	TOB/TOC	22		3"	YES	need to be performed.
MW-11	10		QLY/QLY	MtBE/GAS/BTEX	TOB/TOC	19		3"	YES	
MW-13	9		--	**Removed from Program**	--	23.5		3"	YES	
MW-14	8		**QLY/ANNUAL 1Q**	MtBE/GAS/BTEX	TOB/TOC	24		3"	YES	
MW-15	7		QLY/QLY	MtBE/GAS/BTEX	TOB/TOC	24		3"	YES	
MW-16	6		QLY/QLY	MtBE/GAS/BTEX	TOB/TOC	23		3"	YES	
MW-18	5		**QLY/ANNUAL 1Q**	MtBE/GAS/BTEX	TOB/TOC	22		3"	YES	
MW-19	4		--	**Removed from Program**	--	22		3"	YES	
MW-21	3		**QLY/ANNUAL 1Q**	MtBE/GAS/BTEX	TOB/TOC	22		3"	YES	
MW-22	2		QLY/QLY	MtBE/GAS/BTEX	TOB/TOC	22		3"	YES	
MW-23	1		**QLY/ANNUAL 1Q**	MtBE/GAS/BTEX	TOB/TOC	22		3"	YES	
MW-24	11		--	**Removed from Program**	--	20		2"	YES	
MW-25	12		QLY/QLY	MtBE/GAS/BTEX	TOB/TOC	21		2"	YES	
MW-26	13		**QLY/ANNUAL 1Q**	MtBE/GAS/BTEX	TOB/TOC	20		2"	YES	
E-1A	19		QLY/QLY	MtBE/GAS/BTEX	TOB/TOC	26		?	YES	

WELL SAMPLING REQUEST

SAMPLING PROTOCOL								
Project No.	Station #	Project Name	SEQUENCE	Project Manager	Approval	Date/s	Laboratory:	Client Engineer:
809628	608	17601 Hesperian San Lorenzo	4Q00	Shaw Garakani			Sequoia 22340	Mike Whelan

Well Number	Ideal Sampling Order	Sample I.D.	Sampling Frequency	Analyses	TOB TOC	Well Depth	Casing Diameter	Top of Screen	Well goes Dry?	Comments
		~~630 Hacienda~~	QLY	GAS/BTEX/MtBE	TOB/TOC					well destroyed 9/15
		~~633 Hacienda~~	QLY	GAS/BTEX/MtBE	TOB/TOC					well destroyed 9/15
Mrs Albright		634 Hacienda	QLY	GAS/BTEX/MtBE	TOB/TOC					
Ms. Corregedor		642 Hacienda	QLY	GAS/BTEX/MtBE	TOB/TOC					
Mr/Mrs Roberts		675 Hacienda	QLY	GAS/BTEX/MtBE	TOB/TOC	Confirm Pump is Down				
Mr Luehrs		17348 Via Encinas	QLY	GAS/BTEX/MtBE	TOB/TOC	No one Home				
Mr. Gordin (?)		17197 Via Magdalena	QLY	GAS/BTEX/MtBE	TOB/TOC	willing to Fix Pump				
~~Cavalry Church~~		~~17200 Via Magdalena~~	QLY	GAS/BTEX/MtBE	TOB/TOC					well paved over
Mrs. Gomez (?)		17203 Via Magdalena	QLY	GAS/BTEX/MtBE	TOB/TOC	willing to Fix Pump				
Mr/Mrs Johanson		17302 Via Magdalena	QLY	GAS/BTEX/MtBE	TOB/TOC					
Mr. Kast		17349 Via Magdalena	QLY	GAS/BTEX/MtBE	TOB/TOC					
Mr. Manry		17371 Via Magdalena	QLY	GAS/BTEX/MtBE	TOB/TOC					
Mr. Pimental		17372 Via Magdalena	QLY	GAS/BTEX/MtBE	TOB/TOC					
~~Mr. Whaley~~		~~17600 Via Magdalena~~	QLY	GAS/BTEX/MtBE	TOB/TOC					well abandoned 7/97

See Map attached for House for Sale
674 Hacienda 510 481 0581
659 Via Alamo 510 505 1697

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FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 801803 LOCATION: 7601 Hopyard Blvd DATE: 10/29/01

CLIENT/STATION NO.: _____ FIELD TECHNICIAN: PS DAY OF WEEK: Sat

PROBE TYPE/ID No.
- ☐ Oil/Water IF/ _____
- ☐ H_2O level indicator _____
- ☐ Other: _____

Dtw Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock	Expanding Cap	Total Depth (feet)	First Depth to Water (feet) TOB/TOC	Second Depth to Water (feet) TOB/TOC	SERARATE-PHASE HYDROCARBONS (SPH): SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	COLOR: Fresh	Weathered	Gas	Oil	VISCOSITY: Lite	Medium	Heavy	LIQUID REMOVED (gallons): SPH / H_2O
	MW5		-	-	-	o	-		10.40 / 10.40	10.99 / 10.97										/
	MW7								/	/										/
	MW8		-	-	-	-	-		9.09 / 9.02	9.95 / 9.85										/
	MW9		-	-	-	-	-		8.25 / 8.25	8.80 / 8.82										/
	MW10		-	-	-	-	-		8.40 / 8.40	9.06 / 9.06										/
	MW11		-	-	-	-	-		9.48 / 9.48	9.91 / 9.91										/
	MW13								/	/										/
	MW14		-	-	-	-	-		7.30 / 7.30	7.62 / 7.62										/
	MW16		-	-	-	-	-		8.95 / 8.95	9.41 / 9.41										/
	Effl		-	-	-	o	-			22.40	DRAW	DRAW								/

Comments: Most of well boxes were full w/ rain water

the group

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 821803 LOCATION: 17001 Hosperian Blvd DATE: 10/20/01

CLIENT/STATION NO.: ARCO 608 FIELD TECHNICIAN: PE. DAY OF WEEK: Sat

PROBE TYPE/ID No.
- ☐ Oil/Water IF/
- ☐ H_2O level indicator
- ☐ Other:

Dtw Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock	Expanding Cap	Total Depth (feet)	First Depth to Water (feet) TOB/TOC (TOC circled)	Second Depth to Water (feet) TOB/TOC (TOB circled)	SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	Color: Fresh	Color: Weathered	Color: Gas	Color: Oil	Viscosity: Lite	Viscosity: Medium	Viscosity: Heavy	Liquid Removed (gallons) SPH / H_2O
	MW-16		-	-	-	-	-		9.26 / 9.26	9.71 / 9.71										
	MW-18		-	-	-	-	-		7.95 / 7.95	8.24 / 8.24										
	MW-19																			
	MW-21		-	-	-	-	-		7.33 / 7.33	7.86										
	MW-22		-	-	-	-	-		8.50 / 8.50	8.78 / 8.78										
	MW-23		-	-	-	-	-		10.12 / 10.12	10.42 / 10.42										
	MW-24																			
	MW-25		-	-	-	-	-	18.47	9.90 / 9.90	10.32 / 10.32										
	MW-26		-	-	-	-	-		9.97 / 9.97	10.41 / 10.41										

Comments: MW-21 COVER W/ ASPHALT SEALER UNCOVER/LOCATE W/ METAL DETECTOR TO GAIN ACCESS
MOST OF WELLS WERE COVER W/ ASPHALT SEALER

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 821803 LOCATION 7601 Hesperian Blvd WELL ID #: MW-5

CLIENT/STATION No.: Arco - 608 FIELD TECHNICIAN: Pedro E. Ruiz

WELL INFORMATION

Depth to Liquid: _____ TOB _____ TOC
Depth to water: _____ TOB _____ TOC
Total depth: _____ TOB _____ TOC
Date: _____ Time (2400): _____

Probe Type and I.D. #
- ☐ Oil/Water interface _____
- ☐ Electronic indicator _____
- ☐ Other; _____

CASING DIAMETER		GAL/ LINEAR FT.
☐	2	0.17
☑	3	0.38
☐	4	0.66
☐	4.5	0.83
☐	5	1.02
☐	6	1.5
☐	8	2.6

SAMPLE TYPE
- ☑ Groundwater
- ☐ Duplicate
- ☐ Extraction well
- ☐ Trip blank
- ☐ Field blank
- ☐ Equipment blank
- ☐ Other; _____

TD 1400 DTW 10.40 = 3.60 x Gal/Linear Foot .66 = 2.37 x Number of Casings 3 = Calculated Purge 7.12

DATE PURGED: 12/29/01 START: 13:10 END (2400 hr): _____ PURGED BY: PE

DATE SAMPLED: 12/29/01 START: 13:25 END (2400 hr): _____ SAMPLED BY: PE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 2 5°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
13:13	2	7.01	791	64.7	Cloudy	Mod	None
13:17	4	7.03	788	655	Cloudy	Mod	None
13:20	6	7.05	789	65.7			

Pumped dry Yes / (No)

Color: Cobalt 0-100, Clear, Cloudy, Yellow, Brown
Turbidity: NTU 0-200, Heavy, Moderate, Light, Trace
Odor: Strong, Moderate, Faint, None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☑ Centrifugal Pump: _____
- ☐ Other: _____
- ☐ Airlift Pump: _____
- ☐ Dedicated: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: Teflon
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
122901		13:25	3	40ml	VOA	HCL	GAS-BTEX-MTBE
MW5							

REMARKS: D.O. 2.4

SIGNATURE: _____

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FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 821803 LOCATION 1760 HESPERIAN Blvd WELL ID #: MW-8

CLIENT/STATION No.: ARCO - 608 FIELD TECHNICIAN: PEDRO E. RUIZ

WELL INFORMATION

Depth to Liquid: _____ TOB _____ TOC
Depth to water: _____ TOB _____ TOC
Total depth: _____ TOB _____ TOC
Date: _____ Time (2400): _____

Probe Type and I.D. #
- ☐ Oil/Water interface _____
- ☐ Electronic indicator _____
- ☐ Other; _____

CASING DIAMETER		GAL/ LINEAR FT.
☐	2	0.17
☑	3	0.38
☐	4	0.66
☐	4.5	0.83
☐	5	1.02
☐	6	1.5
☐	8	2.6

SAMPLE TYPE
- ☑ Groundwater
- ☐ Duplicate
- ☐ Extraction well
- ☐ Trip blank
- ☐ Field blank
- ☐ Equipment blank
- ☐ Other; _____

TD 0182 DTW 902 = 128 x Gal/Linear Foot .38 = 48.6 Number of Casings 3 Calculated = Purge 14.59

DATE PURGED: 12/29/01 START: 10:48 END (2400 hr): ——— PURGED BY: RE

DATE SAMPLED: 12/29/01 START: 11:00 END (2400 hr): ——— SAMPLED BY: RE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
1051	4.75	7.00	9330	643	Cloudy	Mod	None
1054	9.5	7.23	9290	647	Cloudy	Light	None
1057	13.25	7.24	9320	646	Cloudy	Light	None

Pumped dry Yes / No

Cobalt 0-100: Clear, Cloudy, Yellow, Brown
NTU 0-200: Heavy, Moderate, Light, Trace
Strong, Moderate, Faint, None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☑ Centrifugal Pump: _____
- ☐ Airlift Pump: _____
- ☐ Dedicated: _____
- ☐ Other: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: _____
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
122901	———	1100	3	40ml	VOA	HCL	GAS-BTEX-MTBE
MW8							

REMARKS: DO: 4.2

SIGNATURE: _____

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FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 821803 LOCATION 7601 Hesperian Blvd WELL ID #: MW-9

CLIENT/STATION No.: Arco - 608 FIELD TECHNICIAN: Pedro E. Ruiz

WELL INFORMATION

Depth to Liquid: _____ TOB _____ TOC
Depth to water: _____ TOB _____ TOC
Total depth: _____ TOB _____ TOC
Date: _____ Time (2400): _____

Probe Type and I.D. #
- ☐ Oil/Water interface _____
- ☐ Electronic indicator _____
- ☐ Other; _____

CASING DIAMETER		GAL/ LINEAR FT.
☐	2	0.17
☑	3	0.38
☐	4	0.66
☐	4.5	0.83
☐	5	1.02
☐	6	1.5
☐	8	2.6

SAMPLE TYPE
- ☑ Groundwater
- ☐ Duplicate
- ☐ Extraction well
- ☐ Trip blank
- ☐ Field blank
- ☐ Equipment blank
- ☐ Other; _____

TD 18.41 - DTW 8.25 = 10.16 x Gal/Linear Foot .38 = 3.86 x Number of Casings 3 = Calculated Purge 11.58

DATE PURGED: 12/29/01 START: 10:19 END (2400 hr): ——— PURGED BY: PE

DATE SAMPLED: 12/29/01 START: 10:30 END (2400 hr): ——— SAMPLED BY: PE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
10:22	3.75	7.22	888	630	Cloudy Mod	Mod	Mod
10:26	7.5	7.16	881	638	Cloudy Mod	Mod	Mod
10:28	11.26	7.20	889	644	Cloudy Mod	Mod	Mod

Pumped dry Yes / (No)

Cobalt 0-100: Clear, Cloudy, Yellow, Brown
NTU 0-200: Heavy, Moderate, Light, Trace
Strong, Moderate, Faint, None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☑ Centrifugal Pump: _____
- ☐ Other: _____
- ☐ Airlift Pump: _____
- ☐ Dedicated: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: D-2003
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
122901		10:30	3	40ml	VOA	HCL	GAS-BTEX-MTBE
MW9							

REMARKS: 20.20

SIGNATURE: _____

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FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 821803 LOCATION 17601 Hesperian Blvd WELL ID #: MW-10

CLIENT/STATION No.: ARCO - 608 FIELD TECHNICIAN: PEDRO E. RUIZ

WELL INFORMATION

Depth to Liquid: _____ TOB _____ TOC
Depth to water: _____ TOB _____ TOC
Total depth: _____ TOB _____ TOC
Date: _____ Time (2400): _____

Probe Type and I.D. #
- ☐ Oil/Water interface _____
- ☐ Electronic indicator _____
- ☐ Other; _____

CASING DIAMETER		GAL/ LINEAR FT.
☐	2	0.17
☑	3	0.38
☐	4	0.66
☐	4.5	0.83
☐	5	1.02
☐	6	1.5
☐	8	2.6

SAMPLE TYPE
- ☑ Groundwater
- ☐ Duplicate
- ☐ Extraction well
- ☐ Trip blank
- ☐ Field blank
- ☐ Equipment blank
- ☐ Other; _____

TD 22.89 DTW 8.40 = 14.49 x Gal/Linear Foot .38560 x Number of Casings 3 = Calculated Purge 16.31

DATE PURGED: 12/29/01 START: 11:27 END (2400 hr): _____ PURGED BY: PE

DATE SAMPLED: 12/29/01 START: 12:40 END (2400 hr): _____ SAMPLED BY: PE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
11:30	5.5	7.11	1190	63.3	Cloudy	Mod	Mod
11:34	11	7.23	1190	64.1	Cloudy	Light	Mod
11:37	16.5		1190	64.4	Cloudy	Light	Mod

Pumped dry Yes / ~~No~~

Color: Cobalt 0-100, Clear, Cloudy, Yellow, Brown
Turbidity: NTU 0-200, Heavy, Moderate, Light, Trace
Odor: Strong, Moderate, Faint, None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☐ Airlift Pump: _____
- ☑ Centrifugal Pump: _____
- ☐ Dedicated: _____
- ☐ Other: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: _____
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
12/29/01	_____	12:40	3	40ml	VOA	HCL	GAS-BTEX-MTBE
MW10							

REMARKS: DO: 3.2

SIGNATURE: _____

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FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 821803 LOCATION 7601 HESPERIAN BLVD WELL ID #: MW-11

CLIENT/STATION No.: ARCO - 608 FIELD TECHNICIAN: PEDRO E. RUIZ

WELL INFORMATION

Depth to Liquid: _____ TOB _____ TOC
Depth to water: _____ TOB _____ TOC
Total depth: _____ TOB _____ TOC
Date: _____ Time (2400): _____

Probe Type and I.D. #
- ☐ Oil/Water interface _____
- ☐ Electronic indicator _____
- ☐ Other; _____

CASING DIAMETER		GAL/ LINEAR FT.
☐	2	0.17
☑	3	0.38
☐	4	0.66
☐	4.5	0.83
☐	5	1.02
☐	6	1.5
☐	8	2.6

SAMPLE TYPE
- ☑ Groundwater
- ☐ Duplicate
- ☐ Extraction well
- ☐ Trip blank
- ☐ Field blank
- ☐ Equipment blank
- ☐ Other; _____

TD 14.01 - DTW 9.48 = 9.53 x Gal/Linear Foot .38 = 3.62 x Number of Casings 3 = Calculated Purge 10.86

DATE PURGED: 122901 START: 9:48 END (2400 hr): ——— PURGED BY: JE

DATE SAMPLED: 122901 START: 10:00 END (2400 hr): ——— SAMPLED BY: JE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
9:51	3.5	7.23	1240	61.9	Cloudy	Mod	Mod
9:55	7	7.24	1260	62.8	Cloudy	Mod	Mod
9:58	10.6	7.26	1270	63.4	Cloudy	Mod	Mod

Pumped dry Yes / (No)

Cobalt 0-100: Clear, Cloudy, Yellow, Brown
NTU 0-200: Heavy, Moderate, Light, Trace
Strong, Moderate, Faint, None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☑ Centrifugal Pump: _____
- ☐ Other: _____
- ☐ Airlift Pump: _____
- ☐ Dedicated: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: _____
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
122901 MW-11		10:00	3	40ml	VOA	HCL	GAS-BTEX-MTBE

REMARKS:
DO: 2.2

SIGNATURE: _____

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FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 821803 LOCATION 1760 Hesperian Blvd WELL ID #: MW-16

CLIENT/STATION No.: Arco - 608 FIELD TECHNICIAN: Pedro E. Ruiz

WELL INFORMATION

Depth to Liquid: _____ TOB _____ TOC
Depth to water: _____ TOB _____ TOC
Total depth: _____ TOB _____ TOC
Date: _____ Time (2400): _____

Probe Type and I.D. #
- ☐ Oil/Water interface _____
- ☐ Electronic indicator _____
- ☐ Other; _____

CASING DIAMETER		GAL/ LINEAR FT.
☐	2	0.17
☑	3	0.38
☐	4	0.66
☐	4.5	0.83
☐	5	1.02
☐	6	1.5
☐	8	2.6

SAMPLE TYPE
- ☑ Groundwater
- ☐ Duplicate
- ☐ Extraction well
- ☐ Trip blank
- ☐ Field blank
- ☐ Equipment blank
- ☐ Other; _____

TD ~23.68 DTW 8.96=14.73 x Gal/Linear Foot .38 = 5.69 x Number of Casings 3 = Calculated Purge 16.79

DATE PURGED: 12/29/01 START: 9:24 END (2400 hr): ——— PURGED BY: PE

DATE SAMPLED: 12/29/01 START: 9:35 END (2400 hr): ——— SAMPLED BY: PE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
9:27	5.5	7.11	1000	Cal.Co	Cloudy	Mod	None
9:30	11	7.05	1020	62.4	Cloudy	Mod	None
9:33	16.5	7.00	1020	63.3	Cloudy	Mod	None

Pumped dry Yes (No)

Cobalt 0-100: Clear, Cloudy, Yellow, Brown
NTU 0-200: Heavy, Moderate, Light, Trace
Strong, Moderate, Faint, None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☑ Centrifugal Pump: _____
- ☐ Other: _____
- ☐ Airlift Pump: _____
- ☐ Dedicated: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: P-2805.
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
122901 MW16		9:35	3	40ml	VOA	HCL	GAS-BTEX-MTBE

REMARKS: DO: 02

SIGNATURE: _____

the igroup

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 821803 LOCATION: 7601 Hesperian Blvd WELL ID #: MW-1C

CLIENT/STATION No.: Arco - 608 FIELD TECHNICIAN: Pedro E. Ruiz

WELL INFORMATION

Depth to Liquid: _____ TOB _____ TOC
Depth to water: _____ TOB _____ TOC
Total depth: _____ TOB _____ TOC
Date: _____ Time (2400): _____

Probe Type and I.D. #
- ☐ Oil/Water interface _____
- ☐ Electronic indicator _____
- ☐ Other; _____

CASING DIAMETER		GAL/ LINEAR FT.
☐	2	0.17
☑	3	0.38
☐	4	0.66
☐	4.5	0.83
☐	5	1.02
☐	6	1.5
☐	8	2.6

SAMPLE TYPE
- ☑ Groundwater
- ☐ Duplicate
- ☐ Extraction well
- ☐ Trip blank
- ☐ Field blank
- ☐ Equipment blank
- ☐ Other; _____

TD 2351 DTW 9.25 = 14.26 x Gal/Linear Foot .38 = 5.41 x Number of Casings 3 = Calculated Purge 16.25

DATE PURGED: 12/29/01 START: 9:02 END (2400 hr): ——— PURGED BY: PE

DATE SAMPLED: 12/29/01 START: 9:15 END (2400 hr): ——— SAMPLED BY: PE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 2 5°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
9:05	5.5	7.60	1190	608	Cloudy	Mod	Mod
9:08	11	6.39	1140	620	Cloudy	Mod	Mod
9:12	16.5	6.42	1140	636	Cloudy	Mod	Mod

Pumped dry Yes / (No)

Color: Cobalt 0-100, Clear, Cloudy, Yellow, Brown
Turbidity: NTU 0-200, Heavy, Moderate, Light, Trace
Odor: Strong, Moderate, Faint, None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☑ Centrifugal Pump: _____
- ☐ Other: _____
- ☐ Airlift Pump: _____
- ☐ Dedicated: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: D.S.D.D.
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
12291 MW-1C		9:15	3	40ml	VOA	HCL	GAS-BTEX-MTBE

REMARKS: _____

SIGNATURE: _____

the igroup

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 821803 LOCATION 7600 Hesperian Blvd WELL ID #: MW-22

CLIENT/STATION No.: Arco - 608 FIELD TECHNICIAN: Pedro E. Ruiz

WELL INFORMATION

Depth to Liquid: _____ TOB _____ TOC
Depth to water: _____ TOB _____ TOC
Total depth: _____ TOB _____ TOC
Date: _____ Time (2400): _____

Probe Type and I.D. #
- ☐ Oil/Water interface _____
- ☐ Electronic indicator _____
- ☐ Other; _____

CASING DIAMETER		GAL/ LINEAR FT.
☐	2	0.17
☑	3	0.38
☐	4	0.66
☐	4.5	0.83
☐	5	1.02
☐	6	1.5
☐	8	2.6

SAMPLE TYPE
- ☑ Groundwater
- ☐ Duplicate
- ☐ Extraction well
- ☐ Trip blank
- ☐ Field blank
- ☐ Equipment blank
- ☐ Other; _____

TD 21.72 DTW 8.50 = 13.22 x Gal/Linear Foot .38 = 5.02 x Number of Casings 3 = Calculated Purge 15.07

DATE PURGED: 12/29/01 START: 8:20 END (2400 hr): ——— PURGED BY: PE

DATE SAMPLED: 12/29/01 START: 8:30 END (2400 hr): ——— SAMPLED BY: PE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 2 5°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
8:23	5	7.20	1110	58.3	Cloudy	Mod	None
8:26	10	7.28	1120	59.8	Cloudy	Mod	None
8:29	15	7.32	1130	59.9	Cloudy	Light	None

Pumped dry Yes / (No)

Cobalt 0-100: Clear, Cloudy, Yellow, Brown
NTU 0-200: Heavy, Moderate, Light, Trace
Strong, Moderate, Faint, None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☑ Centrifugal Pump: _____
- ☐ Other: _____
- ☐ Airlift Pump: _____
- ☐ Dedicated: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: _____
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-22	12/29/01	8:30	3	40ml	VOA	HCL	Gas-BTEX-MTBE

REMARKS: _____

SIGNATURE: _____

the group

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 821803 LOCATION: 7601 Hesperian Blvd WELL ID #: MW-25

CLIENT/STATION No.: Arco - 608 FIELD TECHNICIAN: Pedro E. Ruiz

WELL INFORMATION

Depth to Liquid: _____ TOB _____ TOC
Depth to water: _____ TOB _____ TOC
Total depth: _____ TOB _____ TOC
Date: _____ Time (2400): _____

Probe Type and I.D. #
- ☐ Oil/Water interface _____
- ☐ Electronic indicator _____
- ☐ Other; _____

CASING DIAMETER		GAL/ LINEAR FT.
☐ 2		0.17
☑ 3		0.38
☐ 4		0.66
☐ 4.5		0.83
☐ 5		1.02
☐ 6		1.5
☐ 8		2.6

SAMPLE TYPE
- ☑ Groundwater
- ☐ Duplicate
- ☐ Extraction well
- ☐ Trip blank
- ☐ Field blank
- ☐ Equipment blank
- ☐ Other; _____

TD 18.47 DTW 9.90 = 8.57 x Gal/Linear Foot 0.38 = 1.45 x Number of Casings 3 = Calculated Purge 4.36

DATE PURGED: 12/29/01 START: 12:47 END (2400 hr): _____ PURGED BY: PE

DATE SAMPLED: 12/29/01 START: 13:00 END (2400 hr): _____ SAMPLED BY: PE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
12:50	1.6	7.24	1050	63.7	Cloudy	Mod	None
12:53	3	7.23	1060	64.6	Cloudy	Mod	None
12:57	4.6	7.21	1070	64.9	Cloudy	Mod	None

Pumped dry Yes (No)

Cobalt 0-100: Clear, Cloudy, Yellow, Brown
NTU 0-200: Heavy, Moderate, Light, Trace
Strong, Moderate, Faint, None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☐ Airlift Pump: _____
- ☒ Centrifugal Pump: _____
- ☐ Dedicated: _____
- ☐ Other: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: Disp
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
122901	_____	13:00	3	40ml	VOA	HCL	GAS-BTEX-MTBE
MW25							

REMARKS: DO: 0.22

SIGNATURE: _____

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FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 821803 LOCATION 7601 HESPERIAN BLVD WELL ID #: E-1-A

CLIENT/STATION No.: ARCO - 608 FIELD TECHNICIAN: PEDRO E. RUIZ

WELL INFORMATION

Depth to Liquid:_____ TOB_____ TOC
Depth to water:_____ TOB_____ TOC
Total depth:_____ TOB_____ TOC
Date:_____ Time (2400):_____

Probe Type and I.D. #
- ☐ Oil/Water interface_____
- ☐ Electronic indicator_____
- ☐ Other;_____

CASING DIAMETER		GAL/ LINEAR FT.
☐	2	0.17
☑	3	0.38
☐	4	0.66
☐	4.5	0.83
☐	5	1.02
☐	6	1.5
☐	8	2.6

SAMPLE TYPE
- ☑ Groundwater
- ☐ Duplicate
- ☐ Extraction well
- ☐ Trip blank
- ☐ Field blank
- ☐ Equipment blank
- ☐ Other;_____

TD_____ - DTW_____ = _____ x Foot/Linear .38 = _____ x Number of Casings 3 = Calculated Purge_____

DATE PURGED: 12 01 START:_____ END (2400 hr):_____ PURGED BY: JE

DATE SAMPLED: 12 29 01 START: 13:40 END (2400 hr):_____ SAMPLED BY: JE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 2 5°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR

Pumped dry Yes / No

Cobalt 0-100: Clear, Cloudy, Yellow, Brown
NTU 0-200: Heavy, Moderate, Light, Trace
Strong, Moderate, Faint, None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 22.40 TOB/TOC 7.24 1300 66.4 Cloudy Mod Flow

PURGING EQUIPMENT/I.D. #
- ☐ Bailer:_____
- ☐ Airlift Pump:_____
- ☑ Centrifugal Pump:_____
- ☐ Dedicated:_____
- ☐ Other:_____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer:_____
- ☐ Dedicated:_____
- ☒ Other: Grab

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
122901		13:40	3	40ml	VOA	HCL	GAS-BTEX-MTBE
E1A							

REMARKS: 10:20 Sample bottles filled

SIGNATURE: _____

the igroup

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 821803 LOCATION 1760 Hesperian Blvd WELL ID #: MW-1737D

CLIENT/STATION No.: ARCO - 608 FIELD TECHNICIAN: PEDRO E. RUIZ

WELL INFORMATION

Depth to Liquid: _____ TOB _____ TOC
Depth to water: _____ TOB _____ TOC
Total depth: _____ TOB _____ TOC
Date: _____ Time (2400): _____

Probe Type and I.D. #
- ☐ Oil/Water interface _____
- ☐ Electronic indicator _____
- ☐ Other; _____

CASING DIAMETER		GAL/ LINEAR FT.
☐	2	0.17
☑	3	0.38
☐	4	0.66
☐	4.5	0.83
☐	5	1.02
☐	6	1.5
☐	8	2.6

SAMPLE TYPE
- ☑ Groundwater
- ☐ Duplicate
- ☐ Extraction well
- ☐ Trip blank
- ☐ Field blank
- ☐ Equipment blank
- ☐ Other; _____

TD _____ - DTW _____ = _____ x Gal/Linear Foot .38 = _____ x Number of Casings 3 = Calculated Purge _____

DATE PURGED: 12 01 START: _____ END (2400 hr): ——— PURGED BY: PE

DATE SAMPLED: 12 29 01 START: 11:45 END (2400 hr): ——— SAMPLED BY: PE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 2 5°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR

Pumped dry Yes / No

Color: Cobalt 0-100, Clear, Cloudy, Yellow, Brown
Turbidity: NTU 0-200, Heavy, Moderate, Light, Trace
Odor: Strong, Moderate, Faint, None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC 7.00 1050 576 Clear Light None

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☑ Centrifugal Pump: _____
- ☐ Other: _____
- ☐ Airlift Pump: _____
- ☐ Dedicated: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: _____
- ☐ Dedicated: _____
- ☒ Other: Grab

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
122901		11:45	3	40ml	VOA	HCL	GAS-BTEX-MTBE
1737D	VM						

REMARKS: DO 2.7

SIGNATURE: _____

the group

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 821803 LOCATION 7601 Hesperian Blvd WELL ID # MW-1734W

CLIENT/STATION No.: Arco - 608 FIELD TECHNICIAN: Pedro E. Ruiz

WELL INFORMATION

Depth to Liquid: _____ TOB _____ TOC
Depth to water: _____ TOB _____ TOC
Total depth: _____ TOB _____ TOC
Date: _____ Time (2400): _____

Probe Type and I.D. #
- ☐ Oil/Water interface _____
- ☐ Electronic indicator _____
- ☐ Other; _____

CASING DIAMETER	GAL/ LINEAR FT.
☐ 2	0.17
☒ 3	0.38
☐ 4	0.66
☐ 4.5	0.83
☐ 5	1.02
☐ 6	1.5
☐ 8	2.6

SAMPLE TYPE
- ☑ Groundwater
- ☐ Duplicate
- ☐ Extraction well
- ☐ Trip blank
- ☐ Field blank
- ☐ Equipment blank
- ☐ Other; _____

TD _____ - DTW _____ = _____ x Foot .38 = _____ x Number of Casings 3 = Calculated Purge _____ Gal/Linear

DATE PURGED: 12 01 START: _____ END (2400 hr): ——— PURGED BY: JE

DATE SAMPLED: 12 29 01 START: 12:15 END (2400 hr): ——— SAMPLED BY: JE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR

Pumped dry Yes / No

Color: Cobalt 0-100, Clear, Cloudy, Yellow, Brown
Turbidity: NTU 0-200, Heavy, Moderate, Light, Trace
Odor: Strong, Moderate, Faint, None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC 7.24 10:10 6020 Clear Mod Fuel

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☒ Centrifugal Pump: _____
- ☐ Other: _____
- ☐ Airlift Pump: _____
- ☐ Dedicated: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: _____
- ☐ Dedicated: _____
- ☒ Other: Grab

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
122901		12:15	3	40ml	VOA	HCL	GAS-BTEX-MTBE
1734W							

REMARKS: _____

SIGNATURE: _____

the igroup

SEQUOIA ANALYTICAL CHAIN OF CUSTODY

ARCO Products Co.

☑ [redacted]
☐ 1455 McDowell Blvd. North, Suite D • **Petaluma, CA 94954** • (707) 792-1865 • FAX (707) 792-0342
☐ 819 Striker Ave., Suite 8 • **Sacramento, CA 95834** • (916) 921-9600 • FAX (916) 921-0100
☐ 1551 Industrial Road • **San Carlos, CA 94070** • (650) 232-9600 • FAX (650) 232-9612
☐ 404 N. Wiget Lane • **Walnut Creek, CA 94598** • (925) 988-9600 • FAX (925) 988-9673

Company Name: IT Group		Project: 821803 17601 Hesperian Blvd	
Mailing Address: 1921 Ringwood Av.		Billing Address (if different): San Lorenzo CA.	
City: San Jose	State: CA Zip Code: 95131	Mike Whelan Arco Engineer	
Telephone: (408) 4537300	Fax #: (408) 4379526	P.O. #: Task Order 2415200	
Report To: Shaw Garakani	E-Mail: Don Wattenpaugh	QC Data: ☐ Level II (Standard) ☐ Level III ☐ Level IV	
Sampler: Pedro E. Ruiz	Date / Time Results Required:	Sequoia's Work Order #	

Turnaround Time: ☒ 10 - 15 Working Days (Standard TAT) ☐ 7 Working Days ☐ 5 Working Days ☐ 72 Hours ☐ 48 Hours ☐ 24 Hours ☐ 2-8 Hours

MANDATORY: ☐ SDWA (Drinking Water) ☒ CWA (Waste Water) ☐ RCRA (Hazardous Waste) ☐ Other

ANALYSES REQUESTED (Please provide method): BTEX/TPH MTBE by 8260 / H602/8020 / 8015

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Container Type	Sequoia's Sample #	BTEX/TPH MTBE by 8260									Comments/ Temp.(If required)
1. MW-5	122900 13:25	W	3	40ml HCl		X									
2. MW8	11:00	↓	↓	↓		↓									
3. MW9	10:30														
4. MW10	11:40														
5. MW11	10:00														
6. MW-15	9:35														
7. MW-16	9:15														
8. MW-22	8:30														
9. MW25	13:00														
10. E1-A	15:40	↓	↓	↓		↓									

Relinquished By: [signature] IT Group 122900 / 17:45	Received By:	Date / Time:
Relinquished By:	Received By:	Date / Time:
Relinquished By:	Received By:	Date / Time
Relinquished By:	Received By:	Date / Time:

Were Samples Received in Good Condition? ☐ Yes ☐ No Samples on Ice? ☐ Yes ☐ No Method of Shipment ______ Page ____ of ____

Pink - Client Yellow - Sequoia White - Sequoia

SEQUOIA ANALYTICAL CHAIN OF CUSTODY

Arco Products Co

☐ [redacted]
☐ 1455 McDowell Blvd. North, Suite D • **Petaluma, CA 94954** • (707) 792-1865 • FAX (707) 792-0342
☐ 819 Striker Ave., Suite 8 • **Sacramento, CA 95834** • (916) 921-9600 • FAX (916) 921-0100
☐ 1551 Industrial Road • **San Carlos, CA 94070** • (650) 232-9600 • FAX (650) 232-9612
☐ 404 N. Wiget Lane • **Walnut Creek, CA 94598** • (925) 988-9600 • FAX (925) 988-9673

Company Name: IT Group	Project: 801803 Arco 608
Mailing Address: 1901 Ringwood Av	Billing Address (if different): 17001 Hesperian Blvd
City: San Jose State: CA Zip Code: 95131	San Lorenzo CA. Arco Engineer Mike Whelan
Telephone: (408) 453-7300 Fax #: (408) 437-9526	P.O. #: Task Order 2415200
Report To: Don Watenpaugh E-Mail: Shaw Garakani	QC Data: ☐ Level II (Standard) ☐ Level III ☐ Level IV
Sampler: Pedro E. Ruiz Date / Time Results Required:	Sequoia's Work Order #

Turnaround Time: ☒ 10 - 15 Working Days (Standard TAT) ☐ 7 Working Days ☐ 5 Working Days ☐ 72 Hours ☐ 48 Hours ☐ 24 Hours ☐ 2-8 Hours

MANDATORY: ☐ SDWA (Drinking Water) ☒ CWA (Waste Water) ☐ RCRA (Hazardous Waste) ☐ Other

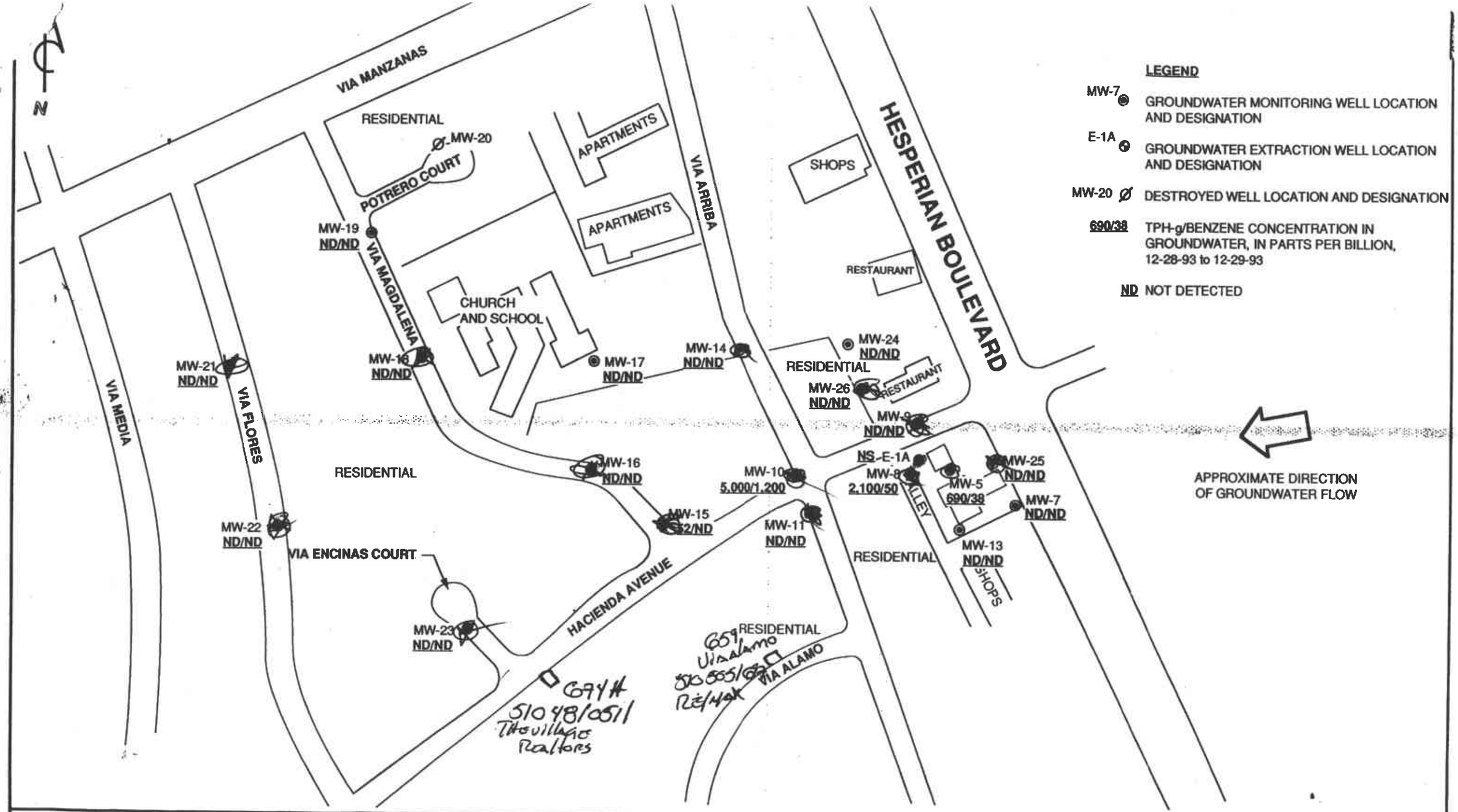
ANALYSES REQUESTED (Please provide method): BTEX/TPH/MTBE EPA M602/8020/2015

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Container Type	Sequoia's Sample #	BTEX/TPH/MTBE EPA M602/8020/2015									Comments/ Temp.(If required)
*17372VM	12/29/01 11:45	W	3	40ml HCL		X									*Run EPA 8260 on this wells w/MTBE greater than 35 ppb
*17349VM	↓ 12:15	↓	↓	↓		↓									
3.															
4.															
5.															
6.															
7.															
8.															
9.															
10.															

Relinquished By: [signature] IT Group 12/29/01 17:45	Received By:	Date / Time:
Relinquished By:	Received By:	Date / Time:
Relinquished By:	Received By:	Date / Time
Relinquished By:	Received By:	Date / Time:

Were Samples Received in Good Condition? ☐ Yes ☐ No Samples on Ice? ☐ Yes ☐ No Method of Shipment ______ Page ____ of ____

Pink - Client Yellow - Sequoia White - Sequoia



PACIFIC ENVIRONMENTAL GROUP, INC.

APPROXIMATE SCALE
0 150 300 FEET

ARCO SERVICE STATION 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

TPH-g/BENZENE CONCENTRATION MAP

FIGURE: 2
PROJECT: 330-006.05

03/10/94

ATTACHMENT C

REMEDIAL SYSTEM PERFORMANCE EVALUATION

ATTACHMENT C
REMEDIAL SYSTEM PERFORMANCE EVALUATION

REMEDIAL SYSTEM PERFORMANCE EVALUATION

Remedial action consisting of groundwater extraction and treatment (GWET) was initiated at the site on September 26, 1991 and was deactivated on August 21, 1995 with approval from the Alameda County Health Care Services Agency (ACHCSA). The GWET system was reactivated June 5, 2000 to address elevated concentrations of metyl tert-butyl ether (MtBE). Remedial objectives from the GWET system at this site include: (1) migration control of the impacted groundwater plume and (2) MtBE mass reduction. To evaluate GWET system performance, IT monitored well water levels, instantaneous and average extraction flow rates. IT also sampled the influent between carbon vessels and the effluent of the treatment system for total purgeable petroleum hydrocarbons as gasoline (TPPH-g); benzene, toluene, ethylbenzene, xylene (BTEX compounds); and Methyl tert Butyl Ether (MtBE) on a monthly basis. Treatment system effluent is also analyzed for chemical oxygen demand, total suspended solids, and pH as requested by the Oro Loma Sanitary District. A brief description and a performance evaluation of the GWE system from September 5 to December 11, 2001 are presented below.

Description

The GWET system is comprised of an extraction well (E-1A) containing an electric submersible pump, and three 1,200-pound granular activated carbon (GAC) vessels to treat the influent groundwater stream before it is discharged into the sanitary sewer. The carbon vessels are arranged in a series, with valves to permit bed order rotation to maximize the useful life of the GAC. This allows for the rotation of the carbon vessels after the carbon in the primary vessel has been renewed. Sample ports are located at the treatment system influent, effluent, and the mid-points between the carbon vessels. Treatment system effluent is discharged into the sanitary sewer system in accordance with Permit No. SDP-037, issued by the Oro Loma Sanitary District on May 15, 2001. The permit will be effective through May 14, 2002. During June and July 2001, reserve remedial piping was installed across the site in conjunction with the station remodeling and upgrade activities.

Migration Control

Progress toward meeting the migration control objective is evaluated by a comparison of the

groundwater elevation map (Figure 2 of the Quarterly Groundwater Monitoring Report) and the TPPH-g, benzene, and MtBE concentrations map (Figure 3 of the Quarterly Groundwater Monitoring Report) from the current quarterly groundwater monitoring event with those from previous monitoring events. Upon completing the above comparisons, IT concludes that MtBE concentrations at offsite Wells MW-8, and MW-10 have risen this quarter. Therefore, IT will closely monitor MtBE concentrations at the above wells during the future quarters, and recommend additional measures if necessary to achieve migration control objectives.

Mass Reduction

Progress toward meeting the mass reduction objective is determined by evaluating GWET system mass removal data and the concentration trends in nearby groundwater monitoring wells. GWE system operational data are collected monthly. The system flow and influent sample analysis data are used to estimate mass removal values. Performance data for the GWET system are presented in Table C-1. GWET system certified analytical reports, chain-of-custody documentation, and field data sheets are presented as Attachment D of this report. Progress toward site remediation is presented in the following table.

	Mass Removed			
Technology	9/05/01 to 12/11/01		Cumulative	
Analyte	(lbs)	(gal)	(lbs)	(gal)
Groundwater Extraction				
TPPH-g	0.02	0.00	6.39	1.05
Benzene	0.000	0.00	0.31	0.04
MtBE*	0.26	0.04	1.69	0.23

lbs = Pounds
gal = Gallons
TPPH-g = Total purgeable petroleum hydrocarbons calculated as gasoline
* = MtBE was not calculated prior to 06/15/00

Graphs of TPPH-g and benzene mass removal rates and concentrations versus time are shown on Figures C-1 and C-2, respectively. Graphical presentations of MtBE mass removal rate and concentration versus time are shown on Figures C-3 and C-4, respectively.

Groundwater Extraction System Operational Data

The GWET system was approximately 98 percent operational during the reporting period. Down time was due to regular system maintenance, automatic system shut down resulting from excess sediment built up in the filter. During the reporting period, the GWE system discharged treated groundwater at an average flow rate of approximately 1.5 gallons per minute (gpm) for a period discharge of 209,480 gallons. Treatment system analytical data are presented in Table C-2.

During the reporting period, IT continued the biologic growth control procedure, by adding

hydrogen peroxide to the extraction well on a monthly basis, and back-washing the GAC vessels on as needed basis.

During this quarter, the GWE system was in compliance with all conditions stipulated in the discharge permit, including pH, total suspended solids, and chemical oxygen demand. Operation and maintenance field data sheets and certified analytical reports are presented as Attachment D of this report.

Table C-1

Groundwater Extraction System Performance Data

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Influent Sample Date		Hour Meter Reading (hours)	System Down Time (%)	Volume Reading (gallons)	Net Volume (gallons)	Average Flow (gpm)	TPPH as Gasoline: Influent Concentration (µg/L)	TPPH as Gasoline: Net Removed (pounds)	TPPH as Gasoline: Removed To Date (pounds)	Benzene: Influent Concentration (µg/L)	Benzene: Net Removed (pounds)	Benzene: Removed To Date (pounds)	MtBE: Influent Concentration (µg/L)	MtBE: Net Removed (pounds)	MtBE: Removed To Date (pounds)	Primary MtBE Carbon Loading (%)	
07/06/95		28,464	0	921,260	72,460	1.6	270	0.08	4.71	2.4	0.001	0.29	N/A	N/A	N/A	N/A	g
08/21/95	d	29,568	0	993,320	72,060	1.1	230	0.15	4.86	1.8	0.001	0.29	N/A	N/A	N/A	N/A	g
06/05/00	e	29,592	N/A	976,600	N/A	N/A	700	N/A	4.88	7.2	N/A	0.29	361	N/A	0.00	N/A	g
06/05/00		29,593	0	979,800	3,200	2.1	700	0.02	4.88	7.2	0.000	0.29	361	0.01	0.01	N/A	g
07/08/00		30,352	4	1,131,560	151,760	3.3	133	0.53	5.40	5.1	0.006	0.30	272	0.40	0.41	N/A	g
08/07/00		30,955	16	1,228,240	96,680	2.7	144	0.11	5.51	2.8	0.003	0.30	126	0.16	0.57	N/A	g
09/08/00		31,528	25	1,306,300	78,060	2.3	261	0.13	5.65	2.7	0.002	0.30	120	0.08	0.65	N/A	g
10/10/00		32,230	9	1,393,820	87,520	2.1	114	0.14	5.78	ND	0.001	0.31	ND	0.04	0.69	N/A	g
11/07/00		32,880	3	1,472,930	79,110	2.0	128	0.08	5.86	ND	0.000	0.31	98.6	0.03	0.73	N/A	g
12/05/00		33,516	5	1,548,840	75,910	2.0	167	0.09	5.96	0.775	0.000	0.31	104	0.06	0.79	N/A	g
01/04/01		33,924	43	1,595,340	46,500	1.9	ND	0.03	5.99	ND	0.000	0.31	86.8	0.04	0.83	N/A	g
02/06/01		34,556	20	1,672,330	76,990	2.0	203	0.07	6.05	0.572	0.000	0.31	80.5	0.05	0.88	N/A	g
03/08/01		34,776	70	1,698,860	26,530	2.0	219	0.05	6.10	ND	0.000	0.31	81.0	0.02	0.90	N/A	g
03/24/01		35,088	19	1,741,170	42,310	2.3	NS †	0.07	6.17	NS †	0.000	0.31	NS †	0.03	0.93	N/A	g
04/18/01		35,335	59	1,770,860	29,690	2.0	74.5	0.04	6.21	ND	0.000	0.31	97.5	0.02	0.95	N/A	g
05/04/01		35,716	1	1,812,690	41,830	1.8	63.3	0.02	6.23	ND	0.000	0.31	93.2	0.03	0.98	N/A	g
06/09/01		36,345	27	1,879,710	67,020	1.8	64	0.04	6.27	ND	0.000	0.31	71	0.05	1.03	N/A	g
07/05/01	h	36,469	60	1,897,180	17,470	2.3	100	0.01	6.28	ND	0.000	0.31	430	0.04	1.07	N/A	g
08/14/01	h	36,822	63	1,926,510	31,330	1.5	290	0.05	6.33	2.2	0.000	0.31	870	0.17	1.24	N/A	g
09/05/01		37,219	25	1,977,050	48,540	2.0	ND(100)	0.06	6.39	ND(1.0)	0.000	0.31	340	0.24	1.48	N/A	g
10/05/01		37,932	1	2,040,950	63,900	1.5	ND	0.00	6.39	ND	0.000	0.31	150	0.13	1.61	N/A	g
11/13/01		38,820	5	2,119,670	78,720	1.5	ND	0.00	6.39	ND	0.000	0.31	92	0.08	1.69	N/A	g
12/11/01		39,496	0	2,186,530	66,860	1.6	65	0.02	6.41	ND	0.000	0.31	83	0.05	1.74	N/A	g

REPORTING PERIOD:	9/5/01 - 12/11/01				
TOTAL GALLONS EXTRACTED:	5,817,978				
PERIOD GALLONS EXTRACTED:	209,480				
TOTAL POUNDS REMOVED:		6.39	0.31	1.69	
TOTAL GALLONS REMOVED:		1.05	0.04	0.23	
AVERAGE PERIOD FLOW RATE (gpm):	1.5				
PERIOD PERCENT OPERATIONAL:	98%				
PERIOD POUNDS REMOVED:		0.02	0.000	0.26	
PERIOD GALLONS REMOVED:		0.00	0.000	0.04	

TPPH = Total purgeable petroleum hydrocarbons
gpm = Gallons per minute
µg/L = Micrograms per liter
N/A = Not available or not applicable
ND = Not detected above detection limit
NS = Not sampled
† = Assume same concentration as prior sampling event

Densities: Gasoline = 6.1 lbs/gallon; Benzene = 7.34 lbs/gallon.
MtBE not quantified prior to 6/5/00

a. Totalizer broken; volume estimated from hourmeter and flow rate.
b. Volume estimated from hourmeter and instantaneous flow rate.
c. Sewer totalizer replaced July 28, 1994; volume discharged estimated between July 14 and 28, 1994 at 2.0 gpm.
d. GWE system temporarily shut down August 21, 1995.
e. GWE system restarted June 5, 2000.
f. Prior to June 5, 2000 primary carbon loading for benzene estimated using isotherm of 8 percent by weight.
g. Cannot predict Primary carbon MtBE loading because MtBE wasn't tracked prior to 6/5/00.
h. System down during construction to main sewer line from approx. 6/25/01; restarted 8/14/01.

Equations: Net Dissolved TPH-g Removed [pounds] = TPH-g concentration, [ug/L] x net volume (gallon) x density of gasoline [pound/gallon]
(Net dissolved TPH-g removed is calculated by averaging influent concentrations)

Table C-1

Groundwater Extraction System Performance Data

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Influent Sample Date	Hour Meter Reading (hours)	System Down Time (%)	Volume Reading (gallons)	Net Volume (gallons)	Average Flow (gpm)	TPPH as Gasoline: Influent Concentration (µg/L)	TPPH as Gasoline: Net Removed (pounds)	TPPH as Gasoline: Removed To Date (pounds)	Benzene: Influent Concentration (µg/L)	Benzene: Net Removed (pounds)	Benzene: Removed To Date (pounds)	MtBE: Influent Concentration (µg/L)	MtBE: Net Removed (pounds)	MtBE: Removed To Date (pounds)	Primary MtBE Carbon Loading (%)
09/25/91	0	N/A	0	0	0.0	ND	N/A	0.00	N/A	0.000	0.00	N/A	N/A	N/A	0.0
09/26/91	N/A	N/A	1,144	1,144	N/A	38	0.00	0.00	4.8	0.000	0.00	N/A	N/A	N/A	0.0
10/22/91	26	96	12,844	11,700	7.6	ND	N/A	0.00	ND	0.000	0.00	N/A	N/A	N/A	0.0
11/22/91	77	93	52,532	39,688	13.0	ND	N/A	0.00	0.52	0.000	0.00	N/A	N/A	N/A	0.0
12/19/91	322	62	122,540	70,008	4.6	ND	N/A	0.00	ND	0.000	0.00	N/A	N/A	N/A	0.0
01/16/92	994	0	283,289	160,749	4.0	ND	N/A	0.00	ND	0.000	0.00	N/A	N/A	N/A	0.0
02/19/92	1,809	0	485,200	201,911	4.1	370	0.31	0.31	14	0.012	0.01	N/A	N/A	N/A	0.4
03/17/92	2,462	0	662,847	177,647	4.5	160	0.39	0.70	18	0.024	0.04	N/A	N/A	N/A	0.9
04/15/92	3,150	1	851,100	188,253	4.6	200	0.28	0.99	11	0.023	0.06	N/A	N/A	N/A	1.2
05/14/92	3,849	0	1,030,086	178,986	4.3	45	0.18	1.17	1.4	0.009	0.07	N/A	N/A	N/A	1.5
06/19/92	4,712	0	1,229,960	199,874	3.9	ND	N/A	1.17	ND	0.001	0.07	N/A	N/A	N/A	1.5
07/14/92	5,001	52	1,291,201	61,241	3.5	97	0.02	1.19	25.0	0.006	0.08	N/A	N/A	N/A	1.5
08/18/92	N/A	N/A	1,410,018	118,817	N/A	ND	N/A	1.19	ND	0.012	0.09	N/A	N/A	N/A	1.5
09/15/92	6,298	N/A	1,535,640	125,622	3.1	ND	N/A	1.19	ND	0.000	0.09	N/A	N/A	N/A	1.5
10/16/92	7,012	4	1,651,623	115,983	2.7	ND	N/A	1.19	ND	0.000	0.09	N/A	N/A	N/A	1.5
11/18/92	7,809	0	1,788,076	116,453	2.4	ND	N/A	1.19	ND	0.000	0.09	N/A	N/A	N/A	1.5
12/17/92	8,502	0	1,864,300	96,224	2.3	96	0.04	1.23	7.7	0.003	0.09	N/A	N/A	N/A	1.5
01/18/93	8,796	61	1,915,165	50,865	2.9	100	0.04	1.27	13	0.004	0.10	N/A	N/A	N/A	1.6
02/22/93	9,607	0	2,096,930	181,765	3.7	480	0.44	1.71	36	0.037	0.13	N/A	N/A	N/A	2.1
03/15/93	10,113	0	2,205,833	108,903	3.6	310	0.36	2.07	29	0.030	0.16	N/A	N/A	N/A	2.6
04/09/93	10,517	33	2,298,770	92,937	3.8	140	0.17	2.25	11	0.015	0.18	N/A	N/A	N/A	2.8
05/13/93	11,211	15	2,449,160	150,390	3.6	530	0.42	2.67	27	0.024	0.20	N/A	N/A	N/A	3.3
06/04/93	11,734	1	2,543,500	94,340	3.0	170	0.28	2.94	5.2	0.013	0.21	N/A	N/A	N/A	3.7
07/20/93	12,573	24	2,689,697	146,197	2.9	200	0.23	3.17	12	0.010	0.22	N/A	N/A	N/A	4.0
08/16/93	13,219	0	2,791,366	101,669	2.6	150	0.15	3.32	4.9	0.007	0.23	N/A	N/A	N/A	4.1
09/13/93	13,888	0	2,884,736	93,370	2.3	80	0.09	3.41	2.2	0.003	0.23	N/A	N/A	N/A	4.3
10/08/93	14,485	1	2,951,737	67,001	1.9	ND	0.02	3.43	ND	0.001	0.24	N/A	N/A	N/A	4.3
11/19/93	15,494	0	3,036,032	84,295	1.4	ND	0.00	3.43	ND	0.000	0.24	N/A	N/A	N/A	4.3
12/21/93	16,260	0	3,113,565	77,533	1.7	73	0.02	3.45	3.5	0.001	0.24	N/A	N/A	N/A	4.3
01/18/94	16,939	0	3,190,900	77,335	1.9	60	0.04	3.49	3.1	0.002	0.24	N/A	N/A	N/A	4.4
02/17/94	17,658	0	3,273,720	82,820	1.9	ND	0.02	3.51	2.5	0.002	0.24	N/A	N/A	N/A	4.4
03/15/94	18,235	7	3,344,249	70,529	2.0	ND	0.00	3.51	ND	0.001	0.24	N/A	N/A	N/A	4.4
04/21/94	18,849	31	3,418,537	74,288	2.0	110	0.03	3.55	7.8	0.002	0.24	N/A	N/A	N/A	4.4
05/13/94	19,351	5	3,478,910	60,373	2.0	230	0.09	3.63	6.3	0.004	0.25	N/A	N/A	N/A	4.5
06/14/94	19,680	57	3,518,608 a	39,698	2.0	230	0.08	3.71	12	0.003	0.25	N/A	N/A	N/A	4.6
07/14/94	20,145	35	3,574,408 b	55,800	2.0	270	0.12	3.83	6.8	0.004	0.26	N/A	N/A	N/A	4.8
08/17/94	20,920	5	51,260 c	91,580 c	2.0	ND	0.10	3.93	1.8	0.003	0.26	N/A	N/A	N/A	4.9
09/12/94	21,549	0	120,910	69,650	1.8	ND	0.00	3.93	ND	0.001	0.26	N/A	N/A	N/A	4.9
10/18/94	22,408	1	211,880	90,970	1.8	ND	0.00	3.93	ND	0.000	0.26	N/A	N/A	N/A	4.9
11/15/94	23,060	0	280,840	68,960	1.7	ND	0.00	3.93	0.66	0.000	0.26	N/A	N/A	N/A	4.9
12/05/94	23,489	15	325,830	44,990	1.8	470	0.09	3.99	32	0.006	0.27	N/A	N/A	N/A	5.0
01/04/95	24,205	1	408,740	82,910	1.9	ND	0.16	4.15	1.1	0.011	0.28	N/A	N/A	N/A	5.2
02/06/95	24,926	9	499,690	90,950	2.1	100	0.04	4.19	2.4	0.001	0.28	N/A	N/A	N/A	5.2
03/02/95	25,465	6	569,180	69,490	2.1	ND	0.03	4.22	ND	0.001	0.28	N/A	N/A	N/A	5.3
04/04/95	26,253	1	672,510	103,330	2.2	290	0.12	4.34	6.6	0.003	0.28	N/A	N/A	N/A	5.4
05/02/95	26,924	0	760,350	87,840	2.2	240	0.19	4.54	7.1	0.005	0.29	N/A	N/A	N/A	5.7
06/05/95	27,721	2	848,810	88,460	1.9	ND	0.09	4.62	ND	0.003	0.29	N/A	N/A	N/A	5.8 f

Table C-2
Treatment System Analytical Data
Total Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Date Sampled	TPPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MtBE (µg/L)	COD (mg/L)	TSS (mg/L)	pH (units)
INFL (influent to primary carbon)									
09/26/91	38	4.8	0.6	1.6	1.1	NS	NS	NS	NA
10/22/91	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
11/22/91	<30	0.5	<0.3	<0.3	<0.3	NS	NS	NS	NA
12/19/91	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
01/16/91	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
02/19/92	370	14	0.34	14	2.4	NS	NS	NS	NA
03/17/92	160	18	0.32	0.56	1.6	NS	NS	NS	NA
04/15/92	200	11	<0.3	7.3	0.77	NS	NS	NS	NA
05/14/92	45	1.4	<0.3	<0.3	<0.3	NS	NS	NS	NA
06/19/92	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
07/14/92	97	25	<0.5	8.5	<0.5	NS	NS	NS	NA
08/18/92	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
09/15/92	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
10/16/92	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
11/18/92	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
12/17/92	96	7.7	13	0.56	9.7	NS	NS	NS	NA
01/18/93	100	13	6.6	1.1	11	NS	NS	NS	NA
02/22/93	480	36	29	4.9	96	NS	NS	NS	NA
03/15/93	310	29	14	4.9	55	NS	NS	NS	NA
04/09/93	140	11	2.8	2.6	17	NS	NS	NS	NA
05/13/93	530	27	12	18	96	NS	NS	NS	NA
06/04/93	170	5.2	1.6	2.5	23	NS	NS	NS	NA
07/20/93	200	12	0.91	8.2	29	NS	NS	NS	NA
08/16/93	150	4.9	0.63	2.9	15	NS	NS	NS	NA
09/13/93	80	2.2	<0.5	<0.5	4.8	NS	NS	NS	NA
10/08/93	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
11/19/93	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
12/21/93	73	3.5	<0.5	1.9	8.4	NS	NS	NS	NA
01/18/94	60	3.1	<0.5	3.2	4.3	NS	NS	NS	NA
02/17/94	<50	2.5	<0.5	2.1	3.1	NS	NS	NS	NA
03/15/94	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
04/21/94	110	7.8	<1.0	9.6	<1.0	NS	NS	NS	NA
05/13/94	230	8.3	<0.5	14	6.0	NS	NS	NS	NA
06/14/94	230	12	<0.5	16	1.5	NS	NS	NS	NA
07/14/94	270	6.9	<0.5	15	1.9	NS	NS	NS	NA
08/18/94	<50	1.8	<0.5	1.5	<0.5	NS	NS	NS	NA
09/12/94	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
10/18/94	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
11/05/94	<50	0.66	<0.5	2.6	<0.5	NS	NS	NS	NA
12/05/94	470	32	0.59	29	6.2	NS	NS	NS	NA
01/04/95	<50	1.1	<0.50	1.4	<0.50	NS	NS	NS	NA
02/06/95	100	2.4	1.1	1.2	2.8	NS	NS	NS	NA
03/02/95	<50	<0.50	<0.50	<0.50	<0.50	NS	NS	NS	NA
04/04/95	290	6.6	<0.50	10	1.7	NS	NS	NS	NA
05/02/95	240	7.1	<0.50	3.2	1.6	NS	NS	NS	NA
06/05/95	<50	<0.50	<0.50	<0.50	<0.50	NS	NS	NS	NA
07/06/95	270	2.4	<0.50	7.6	1.0	NS	NS	NS	NA
08/21/95	230	1.8	<0.50	1.6	0.9	NS	NS	NS	NA
06/05/00	700	7.24	<1.00	2.11	<1.00	361	NS	NS	NA
07/08/00	133	5.09	0.598	<0.500	<0.500	272	NS	NS	NA
08/10/00	144	2.80	<0.500	1.04	<0.500	126	NS	NS	NA

Table C-2
Treatment System Analytical Data
Total Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Date Sampled	TPPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MtBE (µg/L)	COD (mg/L)	TSS (mg/L)	pH (units)
INFL (influent to primary carbon) (cont.)									
09/08/00	261	2.74	0.826	0.626	<0.500	120	NS	NS	NA
10/10/00	114	<0.500	1.68	0.843	<0.500	<2.50	NS	NS	NA
11/07/00	128	<0.500	<0.500	<0.500	<0.500	98.6	NS	NS	NA
12/05/00	167	0.775	<0.500	<0.500	<0.500	104	NS	NS	NA
01/04/01	<50.0	<0.500	<0.500	<0.500	<0.500	86.8	NS	NS	NA
02/06/01	203	0.572	<0.500	0.513	<0.500	80.5	NS	NS	NA
03/08/01	219	<0.500	6.16	1.21	0.682	81.0	NS	NS	NA
04/18/01	74.5	<0.500	<0.500	<0.500	<0.500	97.5	NS	NS	NA
05/04/01	63.3	<0.500	<0.500	<0.500	<0.500	93.2	NS	NS	NA
06/09/01	64	<0.50	<0.50	<0.50	<0.50	71	NS	NS	NA
07/05/01	100	<0.50	2.5	<0.50	<0.50	430	NS	NS	NA
08/14/01	290	2.2	3.5	<1.0	<1.0	870	NS	NS	NA
09/05/01	<100	<1.0	<1.0	<1.0	<1.0	340	NS	NS	NA
10/05/01	<50	<0.50	<0.50	<0.50	<0.50	150	NS	NS	NA
11/13/01	<50	<0.50	<0.50	<0.50	<0.50	92	NS	NS	NA
12/11/01	65	<0.50	0.58	<0.50	<0.50	83.0	NS	NS	NA
MID-1 (between primary and secondary carbons)									
09/26/91	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
10/22/91	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
12/19/91	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
01/16/91	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
02/19/92	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
03/17/92	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
04/15/92	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
05/14/92	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
06/19/92	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
07/14/92	NS	NS	NS	NS	NS	NS	NS	NS	NA
08/18/92	NS	NS	NS	NS	NS	NS	NS	NS	NA
09/15/92	NS	NS	NS	NS	NS	NS	NS	NS	NA
10/16/92	NS	NS	NS	NS	NS	NS	NS	NS	NA
11/18/92	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/17/92	NS	NS	NS	NS	NS	NS	NS	NS	NA
01/18/93	NS	NS	NS	NS	NS	NS	NS	NS	NA
02/22/93	NS	NS	NS	NS	NS	NS	NS	NS	NA
03/15/93	NS	NS	NS	NS	NS	NS	NS	NS	NA
04/09/93	NS	NS	NS	NS	NS	NS	NS	NS	NA
05/13/93	NS	NS	NS	NS	NS	NS	NS	NS	NA
06/04/93	NS	NS	NS	NS	NS	NS	NS	NS	NA
07/14/94	ND	ND	ND	ND	ND	NS	NS	NS	NA
08/17/94	NS	NS	NS	NS	NS	NS	NS	NS	NA
09/12/94	NS	NS	NS	NS	NS	NS	NS	NS	NA
10/18/94	NS	NS	NS	NS	NS	NS	NS	NS	NA
11/05/94	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/05/94	NS	NS	NS	NS	NS	NS	NS	NS	NA
01/04/95	NS	NS	NS	NS	NS	NS	NS	NS	NA
02/06/95	NS	NS	NS	NS	NS	NS	NS	NS	NA
03/02/95	NS	NS	NS	NS	NS	NS	NS	NS	NA
06/05/00	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NS	NS	NA
07/08/00	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NS	NS	NA
08/10/00	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NS	NS	NA
09/08/00	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NS	NS	NA
10/10/00	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NS	NS	NA
11/07/00	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NS	NS	NA
12/05/00	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NS	NS	NA

Table C-2
Treatment System Analytical Data
Total Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Date Sampled	TPPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MtBE (µg/L)	COD (mg/L)	TSS (mg/L)	pH (units)
MID-1 (cont.)									
01/04/01	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NS	NS	NA
02/06/01	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NS	NS	NA
03/08/01	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NS	NS	NA
04/18/01	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NS	NS	NA
05/04/01	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NS	NS	NA
06/09/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NS	NS	NA
07/05/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NS	NS	NA
08/14/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NS	NS	NA
09/05/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NS	NS	NA
10/05/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NS	NS	NA
11/13/01	<50	<0.50	<0.50	<0.50	<0.50	3.3	NS	NS	NA
12/11/01	<50	<0.50	<0.50	<0.50	<0.50	5.7	NS	NS	NA
MID-2 (between secondary and teriary carbons)									
06/05/00	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NS	NS	NA
07/08/00	NS	NS	NS	NS	NS	NS	NS	NS	NA
09/08/00	NS	NS	NS	NS	NS	NS	NS	NS	NA
10/10/00	NS	NS	NS	NS	NS	NS	NS	NS	NA
11/07/00	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/05/00	NS	NS	NS	NS	NS	NS	NS	NS	NA
01/04/01	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NS	NS	NA
02/06/01	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NS	NS	NA
03/08/01	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NS	NS	NA
04/18/01	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NS	NS	NA
05/04/01	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NS	NS	NA
06/09/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NS	NS	NA
07/05/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NS	NS	NA
08/14/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NS	NS	NA
09/05/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NS	NS	NA
10/05/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NS	NS	NA
11/13/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NS	NS	NA
12/11/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NS	NS	NA
EFFL (effluent to sewer)									
09/26/91	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
10/22/91	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
11/22/91	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
12/19/91	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
01/16/91	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
02/19/92	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
03/17/92	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
04/15/92	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
05/14/92	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
06/19/92	<30	<0.3	<0.3	<0.3	<0.3	NS	NS	NS	NA
07/14/92	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
08/18/92	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
09/15/92	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
10/16/92	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
11/18/92	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
12/17/92	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
01/18/93	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
02/22/93	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
03/15/93	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
04/09/93	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
05/13/93	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
06/04/93	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA

Table C-2
Treatment System Analytical Data
Total Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Date Sampled	TPPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MtBE (µg/L)	COD (mg/L)	TSS (mg/L)	pH (units)
EFFL (effluent to sewer) (cont.)									
07/20/93	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
08/16/93	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
09/13/93	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
10/08/93	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
11/19/93	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
12/21/93	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
01/18/94	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
02/17/94	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
03/15/94	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
04/21/94	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
05/13/94	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
06/14/94	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
07/14/94	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
08/17/94	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
09/12/94	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
10/18/94	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
11/05/94	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
12/05/94	<50	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NA
01/04/95	<50	<0.50	<0.50	<0.50	<0.50	NS	NS	NS	NA
02/06/95	<50	<0.50	<0.50	<0.50	<0.50	NS	NS	NS	NA
03/02/95	<50	<0.50	<0.50	<0.50	<0.50	NS	NS	NS	NA
04/04/95	<50	<0.50	<0.50	<0.50	<0.50	NS	NS	NS	NA
05/02/95	<50	<0.50	<0.50	<0.50	<0.50	NS	NS	NS	NA
06/05/95	<50	<0.50	<0.50	<0.50	<0.50	NS	NS	NS	NA
07/06/95	<50	<0.50	<0.50	<0.50	<0.50	NS	NS	NS	NA
08/21/95	<50	<0.50	<0.50	<0.50	<0.50	NS	NS	NS	NA
06/05/00	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NS	NS	7.19
06/12/00	<50.0	NS	NS	NS	NS	NS	NS	NS	NA
07/08/00	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	32.1	<10.0	7.08
08/10/00	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	23.4	<10.0	6.67
09/08/00	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	29.2	<10.0	6.82
10/10/00	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	<20.0	<10.0	7.25
11/07/00	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	<20.0	<10.0	7.24
12/05/00	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	44.0	<10.0	7.48
01/04/01	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	<20.0	<10.0	7.00
02/06/01	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	<20.0	10.7	7.03
03/08/01	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	<20.0	<10.0	7.04
04/18/01	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	28.5	<10.0	7.06
05/04/01	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	<20.0	<10.0	7.31
06/09/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	34	<10	7.05
07/05/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	<20	<10	7.10
08/14/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	<20	14	7.09
09/05/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	70	<10	7.07
10/05/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	55	<10	6.89
11/13/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	150	<10	6.98
12/11/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	34	<10	7.01

TPPH = Total purgeable petroleum hydrocarbons
MtBE = Methyl tert Butyl Ether
COD = Chemical oxygen demand
TSS = Total suspended solids
µg/L = Micrograms per liter
mg/L = Miligrams per liter
< = Denotes minimum laboratory detection limit.
NA = Not applicable or not available
NS = Not sampled
ND = Not detected

Figure C-1

Groundwater Extraction System Mass Removal Trend

TPPH-g and Benzene

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

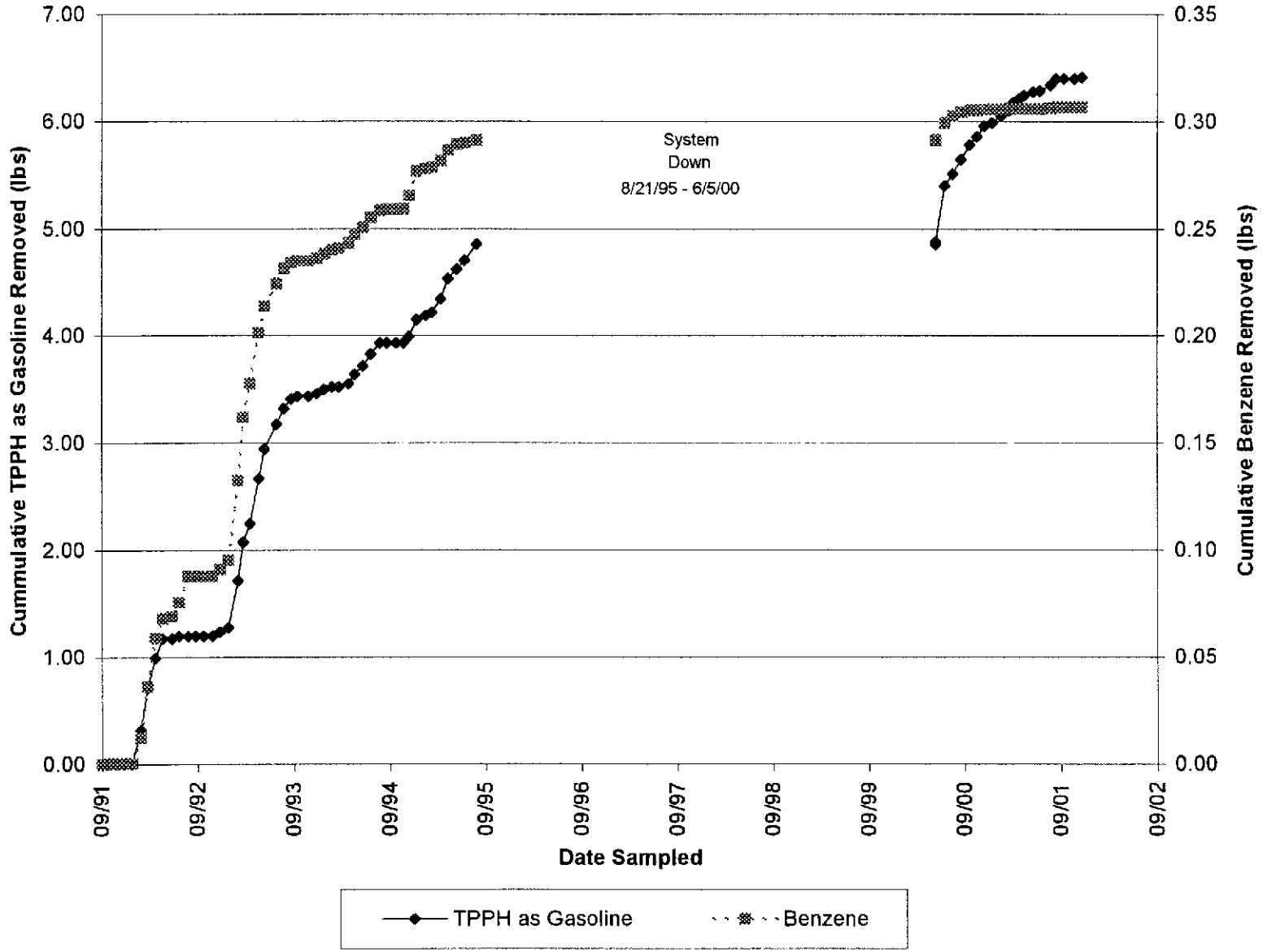
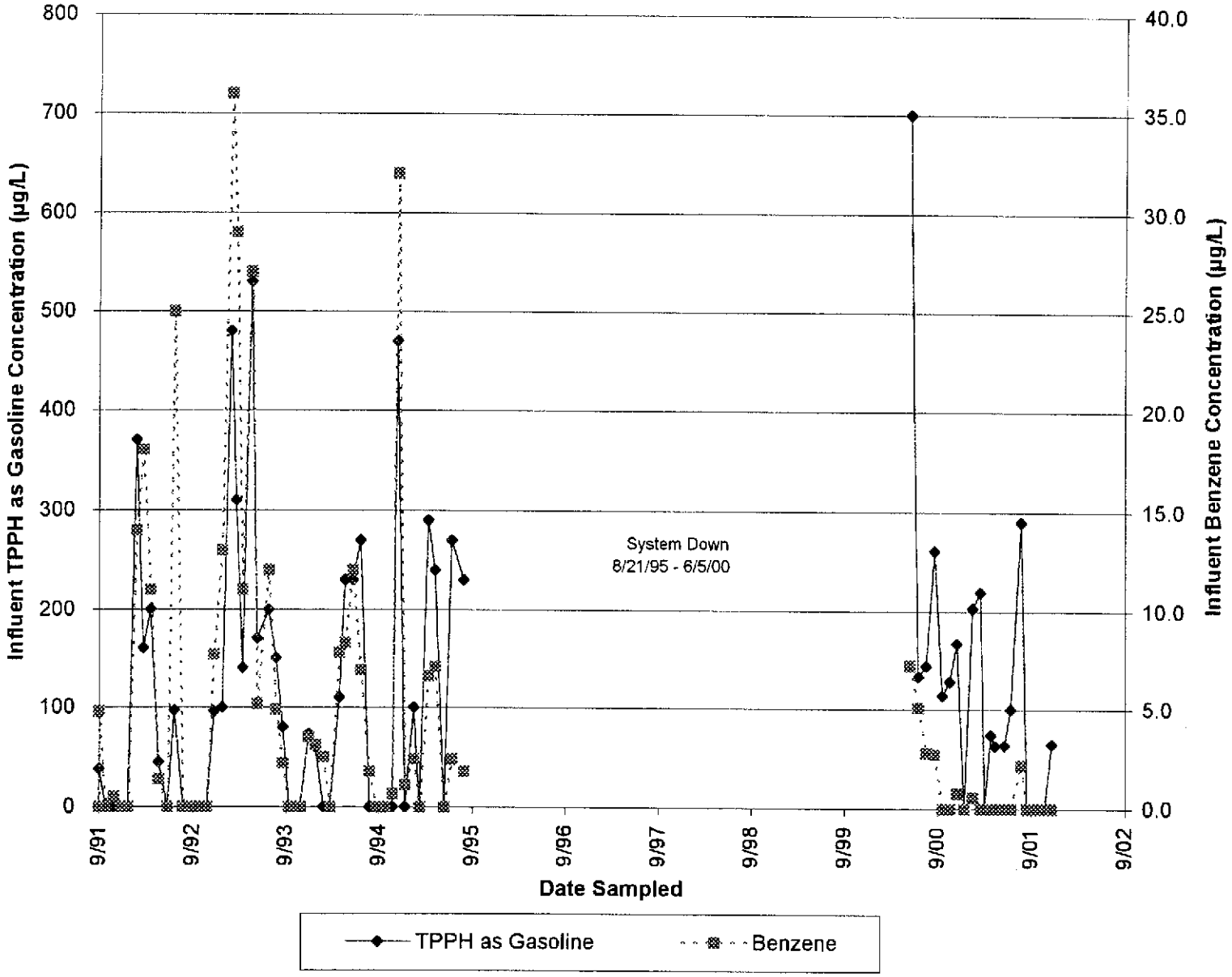


Figure C-2
Groundwater Extraction System Concentration Trend
TPPH-g and Benzene

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California



N:Projects\IT\Arco\809628\Perfdata

2/4/02

Figure C-3
Groundwater Extraction System Mass Removal Trend
MtBE

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

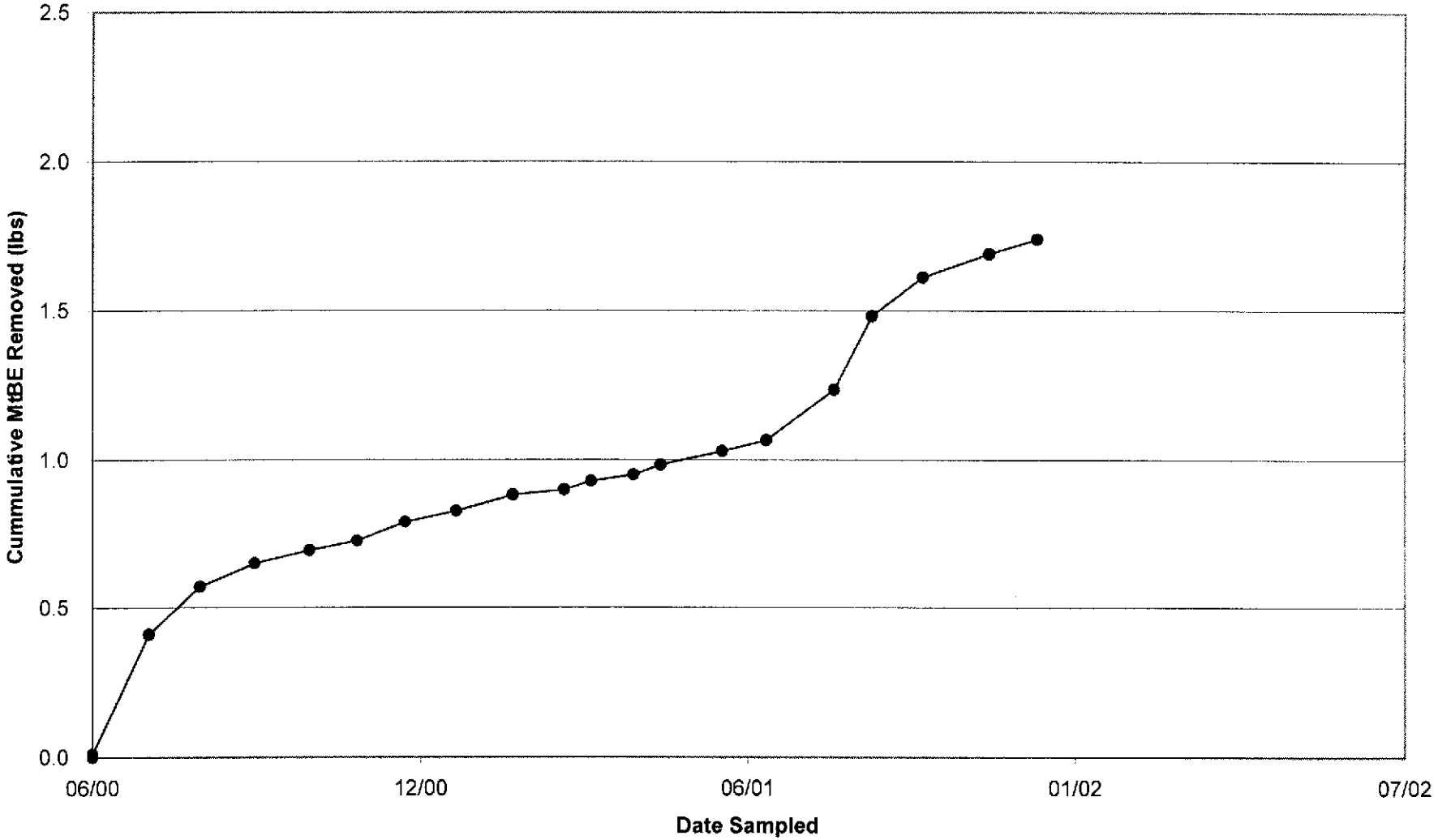
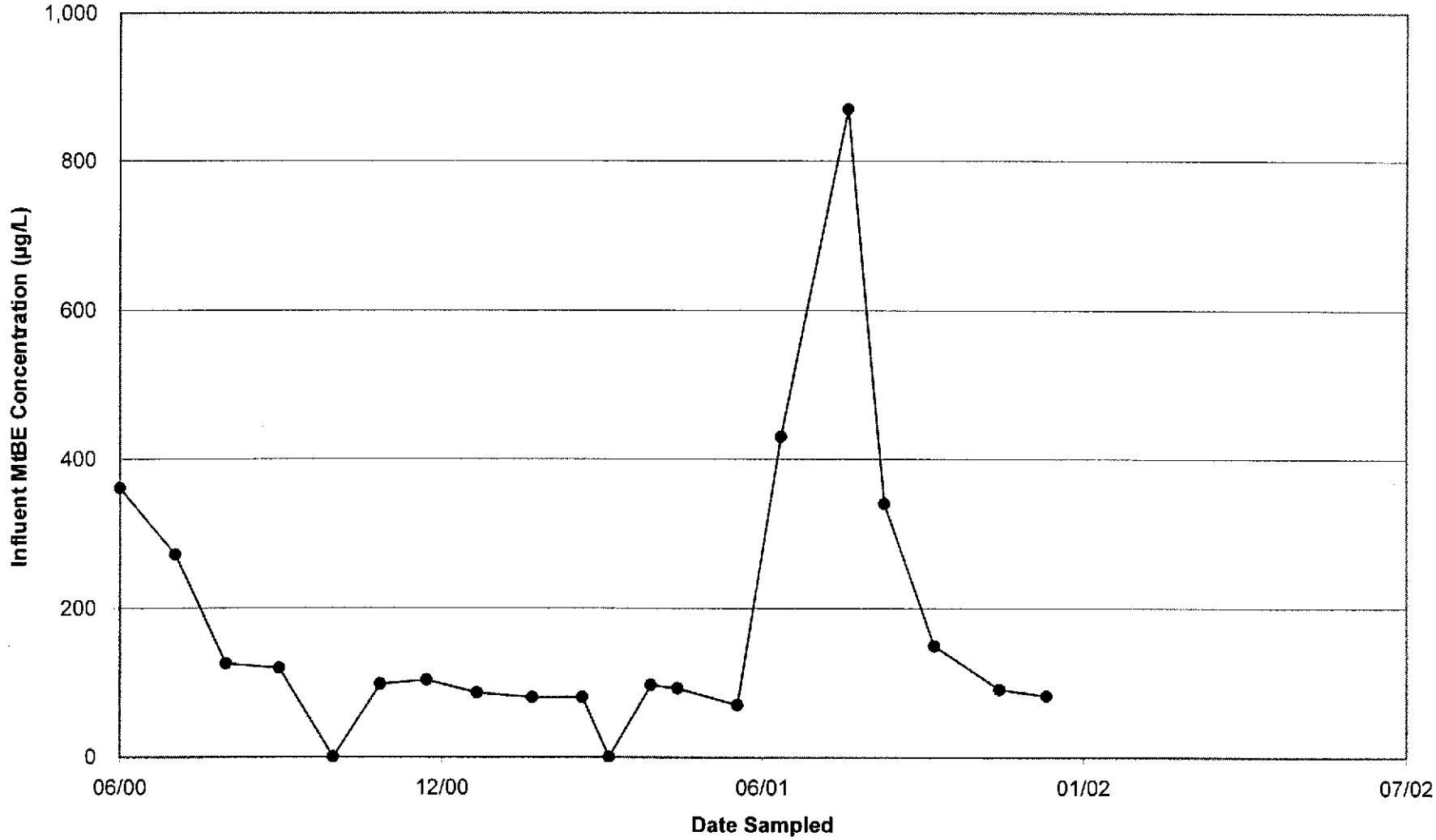


Figure C-4
Groundwater Extraction System Concentration Trend
MtBE

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California



ATTACHMENT D

CERTIFIED ANALYTICAL REPORTS, CHAIN-OF-CUSTODY DOCUMENTATION, AND FIELD DATA SHEETS FOR GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

Work Order #_____

FIELD SERVICES / ROUTINE O&M REQUEST

Identification **Request Frequency:Semi-Monthly**

Project # 821803 (00008000)
Station # 0608
Site Address: 17601 Hesperian Blvd @ Hacienda Avenue
County: Alameda
Project Manager: Shaw Garakani
Requestor: Don Watenpaugh
Technician: Pedro Ruiz
Client: ARCO
Client P.O.C.: Paul Supple
Revision Date: June 14, 2001
Laboratory: Sequoia Analytical

Site Remedial Technologies:

Groundwater Extraction (GWE) [X]

Complete attached Data Sheets as prescribed in the following table:

Scheduling Table

GWE (A, B)	Semi-Monthly				
GWE (C, D, E, F)	Monthly †				
GWE (G)	Quarterly				

† = sampling to be performed

Definition of frequencies:
weekly = N/A
monthly = once a month on week 1
quarterly = on months 3, 6, 9, 12
semi-monthly = twice a month on week 1 and 3

Field Technician Response:

Completed by: _____ Date: 12-29-01
Arrival time: _____ Departure time: _____
Sample this visit?: _____ Engineer contacted? _____

Date: 6/29/01

Groundwater Extraction & Treatment System
ARCO Service Station 0608
17601 Hesperian Boulevard
821803 (00008000)
June 14, 2001

System Description:

Groundwater Pumps

E-1A	Electric	3"	panel	23.9'

Carbon Vessels: Three ASC-1,200
Filter: Rosedale P2 25 micron

PART A: SYSTEM DATA (Semi-Monthly)

System on upon arrival? Rowing (if no, specify reason in comments)

ELECTRIC METER READING (kw hrs)	24316	HOUR METER READING (hrs)	399187

TOTALIZER (gallons)	2231230	2232020
FILTER INLET PRESSURE (psig)	8	(ideal range: 8 to 12 psig) 10
CARBON #1 INLET PRESSURE (psig)	3	(ideal range: 5 to 9 psig) 3
CARBON #2 INLET PRESSURE (psig)	3	(ideal range: 1 to 4 psig) 3
DISCHARGE PRESSURE (psig)		(ideal range: 0 to 2 psig)

PART B: COMMENTS Coordinate visit w/ Bly Sampling. Pump Ronas water from wells into system

Work Order #_____

FIELD SERVICES / ROUTINE O&M REQUEST

Identification **Request Frequency:Semi-Monthly**

Project #	821803 (00008000)
Station #	0608
Site Address:	17601 Hesperian Blvd @ Hacienda Avenue
County:	Alameda
Project Manager:	Shaw Garakani
Requestor:	Don Watenpaugh
Technician:	Pedro Ruiz
Client:	ARCO
Client P.O.C.:	Paul Supple
Revision Date:	June 14, 2001
Laboratory:	Sequoia Analytical

Site Remedial Technologies:

Groundwater Extraction (GWE) [X]

Complete attached Data Sheets as prescribed in the following table:

Scheduling Table

GWE (A, B)	Semi-Monthly				
GWE (C, D, E, F)	Monthly †				
GWE (G)	Quarterly				

† = sampling to be performed

Definition of frequencies:
weekly = N/A
monthly = once a month on week 1
quarterly = on months 3, 6, 9, 12
semi-monthly = twice a month on week 1 and 3

Field Technician Response:

Completed by: _____ Date: 12-11-01
Arrival time: _____ Departure time: _____
Sample this visit? _____ Engineer contacted? _____

Date:_____

Groundwater Extraction & Treatment System
ARCO Service Station 0608
17601 Hesperian Boulevard
821803 (00008000)
June 14, 2001

System Description:

Groundwater Pumps

E-1A	Electric	3"	panel	23.9'

Carbon Vessels: Three ASC-1,200
Filter: Rosedale P2 25 micron

PART A: SYSTEM DATA (Semi-Monthly)

System on upon arrival? Down (if no, specify reason in comments)

ELECTRIC METER READING (kw hrs)	34072	HOUR METER READING (hrs)	394961

TOTALIZER (gallons)	2186390	2186530
FILTER INLET PRESSURE (psig)		(ideal range: 8 to 12 psig) 5
CARBON #1 INLET PRESSURE (psig)		(ideal range: 5 to 9 psig) 3
CARBON #2 INLET PRESSURE (psig)		(ideal range: 1 to 4 psig) 3
DISCHARGE PRESSURE (psig)		(ideal range: 0 to 2 psig) 0

PART B: COMMENTS System was Down upon arrival
High Pressure at Filter, Change Filter out
System shut Down on 12-11-01 11:09

Back Flush Carbon Vessel #4
Clean out Flow Meter & Totalizer

PART C: WELL DATA (Monthly)

* ALLOW SYSTEM TO RUN 1 HOUR BEFORE OBTAINING DTW READINGS

WELL	[illegible]	[illegible]	[illegible] RATE (gpm)	CO[illegible] ADJ[illegible]
E-1A	0100 Draw Down			
UST-A	1140 Dry	N/A	N/A	
UST-B	1140 Dry	N/A	N/A	
SP1-	1143	N/A	N/A	
V4	1140			

PART D: SAMPLING (Monthly)

SAMPLE	[illegible]	
INFLUENT	TPH-gasoline, BTEX compounds, MtBE	1700 RG
EFFLUENT	TPH-gasoline, BTEX compounds, MtBE COD, TSS	17:35 RG
MID-1	TPH-gasoline, BTEX compounds, MtBE	17:25 RG
MID-2	TPH-gasoline, BTEX compounds, MtBE	17:30 RG

PART E: READINGS (Monthly)

EFFLUENT	TEMP (°F)	CONDUCTIVITY (umhos)	pH (units)	DISSOLVED OXYGEN (ppm)
	56.6	1050	7.01	0.0

PART F: SYSTEM MAINTENANCE I (Monthly)

NUMBER OF SPARE FILTERS ON SITE?	26	CHANGE FILTERS? (if necessary)	Y
PUMP AMP DRAW	5.6 amp	H202 injection well EA-1 (if necessary)	NA
SWEEP ENCLOSURE	Y		

PART G: SYSTEM MAINTENANCE II (Quarterly)

TEST ALARM SWITCHES	Y	BACKFLUSH CARBONS	YES
CLEAN TOTALIZERS	YES		

N:Projects/IT/ARCO/809628/O&MDataSheetGWE

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

❑ [redacted] • ❑ 1455 McDowell Blvd North, Suite D • **Petaluma, CA 94954** • (707) 792-1865 • FAX (707) 792-0342
❑ 819 Striker Ave., Suite 8 • **Sacramento, CA 95834** • (916) 921-9600 • FAX (916) 921-0100
❑ 1551 Industrial Road • **San Carlos, CA 94070** • (650) 232-9600 • FAX (650) 232-9612
❑ 404 N. Wiget Lane • **Walnut Creek, CA 94598** • (925) 988-9600 • FAX (925) 988-9673

Company Name: IT GROUP		Project: 821803 ARCO Paul Supple	
Mailing Address: 1921 RINGWOOD AV		Billing Address (if different): 17601 HESPERIAN BLVD	
City: SAN JOSE	State: CA	Zip Code: 95131	SAN LORENZO CA
Telephone: (408) 453-7300	Fax #: (408) 437-9526	P.O. #:	
Report To: Dan Wentworth	E-Mail:	QC Data:	☒ Level II (Standard) ❑ Level III ❑ Level IV
Sampler: Edward Kratz	Date / Time Results Required:	Sequoia's Work Order #	

Pink - Client

Turnaround Time:
- ☒ 10 - 15 Working Days (Standard TAT)
- ❑ 7 Working Days
- ❑ 5 Working Days
- ❑ 72 Hours
- ❑ 48 Hours
- ❑ 24 Hours
- ❑ 2-8 Hours

MANDATORY:
- ❑ **SDWA (Drinking Water)**
- ☒ **CWA (Waste Water)**
- ❑ **RCRA (Hazardous Waste)**
- ❑ **Other**

ANALYSES REQUESTED (Please provide method)

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Container Type	Sequoia's Sample #	TPH Gasoline 8015	BTEX 8020	MTBE 8020	COD 410.1	TSS 160.1	Comments/ Temp.(If required)
1. INFC	12/11/00 17:00	W	3	40ml VOA		X	X	X			
2. MW-1	17:25										
3. MW-2	17:30										
4. ETFC	17:35			40ml VOA					X	X	
5.											
6.											
7.											
8.											
9.											
10.											

Yellow - Sequoia

White - Sequoia

Relinquished By: [signature] 12/11/2000	Received By:	Date / Time:
Relinquished By:	Received By:	Date / Time:
Relinquished By:	Received By:	Date / Time
Relinquished By:	Received By:	Date / Time:

Were Samples Received In Good Condition? ❑ Yes ❑ No Samples on Ice? ❑ Yes ❑ No Method of Shipment _____ Page ____ of ____

Work Order #_____

FIELD SERVICES / ROUTINE O&M REQUEST

Identification **Request Frequency:Semi-Monthly**

Project #	821803 (00008000)
Station #	0608
Site Address:	17601 Hesperian Blvd @ Hacienda Avenue
County:	Alameda
Project Manager:	Shaw Garakani
Requestor:	Don Watenpaugh
Technician:	Pedro Ruiz
Client:	ARCO
Client P.O.C.:	Paul Supple
Revision Date:	June 14, 2001
Laboratory:	Sequoia Analytical

Site Remedial Technologies:

Groundwater Extraction (GWE) [X]

Complete attached Data Sheets as prescribed in the following table:

Scheduling Table

GWE (A, B)	Semi-Monthly				
GWE (C, D, E, F)	Monthly †				
GWE (G)	Quarterly				

† = sampling to be performed

Definition of frequencies:
weekly = N/A
monthly = once a month on week 1
quarterly = on months 3, 6, 9, 12
semi-monthly = twice a month on week 1 and 3

Field Technician Response:

Completed by: _____ Date: 11/2201
Arrival time: _____ Departure time: _____
Sample this visit?: _____ Engineer contacted? _____

Date: 6/20/01

Groundwater Extraction & Treatment System
ARCO Service Station 0608
17601 Hesperian Boulevard
821803 (00008000)
June 14, 2001

System Description:

Groundwater Pumps

Well	Type	Size	Control	Set Depth (bgs)
E-1A	Electric	3"	panel	23.9'

Carbon Vessels: Three ASC-1,200
Filter: Rosedale P2 25 micron

PART A: SYSTEM DATA (Semi-Monthly)

System on upon arrival? RUNNING (if no, specify reason in comments)

ELECTRIC METER READING (kw hrs)	24610	HOUR METER READING (hrs)	3903715

MEASUREMENT	ON ARRIVAL	ON DEPARTURE
TOTALIZER (gallons)		2140700
FILTER INLET PRESSURE (psig)		(ideal range: 8 to 12 psig) 8
CARBON #1 INLET PRESSURE (psig)		(ideal range: 5 to 9 psig) 4
CARBON #2 INLET PRESSURE (psig)		(ideal range: 1 to 4 psig) 4
DISCHARGE PRESSURE (psig)		(ideal range: 0 to 2 psig) 0

PART B: COMMENTS System Running
Swept Enclosure

Work Order #_____

FIELD SERVICES / ROUTINE O&M REQUEST

Identification **Request Frequency:Semi-Monthly**

Project #	821803 (00008000)
Station #	0608
Site Address:	17601 Hesperian Blvd @ Hacienda Avenue
County:	Alameda
Project Manager:	Shaw Garakani
Requestor:	Don Watenpaugh
Technician:	Pedro Ruiz
Client:	ARCO
Client P.O.C.:	Paul Supple
Revision Date:	June 14, 2001
Laboratory:	Sequoia Analytical

Site Remedial Technologies:

Groundwater Extraction (GWE) [X]

Complete attached Data Sheets as prescribed in the following table:

Scheduling Table

GWE (A, B)	Semi-Monthly				
GWE (C, D, E, F)	Monthly †				
GWE (G)	Quarterly				

† = sampling to be performed

Definition of frequencies:
weekly = N/A
monthly = once a month on week 1
quarterly = on months 3, 6, 9, 12
semi-monthly = twice a month on week 1 and 3

Field Technician Response:

Completed by:_____ Date: 11-13-01
Arrival time:_____ Departure time:_____
Sample this visit?:_____ Engineer contacted?_____

Date: 11/13/01

Groundwater Extraction & Treatment System
ARCO Service Station 0608
17601 Hesperian Boulevard
821803 (00008000)
June 14, 2001

System Description:

Groundwater Pumps

E-1A	Electric	3"	panel	23.9'

Carbon Vessels: Three ASC-1,200
Filter: Rosedale P2 25 micron

PART A: SYSTEM DATA (Semi-Monthly)

System on upon arrival? Running (if no, specify reason in comments)

ELECTRIC METER READING (kw hrs)	33558	HOUR METER READING (hrs)	388198

TOTALIZER (gallons)	2119540	2119670
FILTER INLET PRESSURE (psig)	10	(ideal range: 8 to 12 psig) 6
CARBON #1 INLET PRESSURE (psig)	4	(ideal range: 5 to 9 psig) 4
CARBON #2 INLET PRESSURE (psig)	4	(ideal range: 1 to 4 psig) 4
DISCHARGE PRESSURE (psig)	0	(ideal range: 0 to 2 psig) 0

PART B: COMMENTS CHANGE FILTERS OUT / SWEPT COMPOUND. All Samples Taken. WELLS OST A, B Dry

PART C: WELL DATA (Monthly)

*** ALLOW SYSTEM TO RUN 1 HOUR BEFORE OBTAINING DTW READINGS** 11-13-01

WELL	DATE			
E-1A	2200	NA		NONE
UST-A	11:45	N/A	N/A	Dry
UST-B	1203	N/A	N/A	Dry
SP1-V4	shallow 12:40 DEEP 1230	N/A	N/A	

PART D: SAMPLING (Monthly)

INFLUENT	TPH-gasoline, BTEX compounds, MtBE	8:30 RE
EFFLUENT	TPH-gasoline, BTEX compounds, MtBE COD, TSS	8:45 RE
MID-1	TPH-gasoline, BTEX compounds, MtBE	8:35 RE
MID-2	TPH-gasoline, BTEX compounds, MtBE	8:40 RE

PART E: READINGS (Monthly)

	TEMP (°F)	CONDUCTIVITY (umhos)	pH (units)	DISSOLVED OXYGEN (ppm)
EFFLUENT	62.3	1080	6.98	1.4

PART F: SYSTEM MAINTENANCE I (Monthly)

NUMBER OF SPARE FILTERS ON SITE?	27	CHANGE FILTERS? (if necessary)	YES
PUMP AMP DRAW	5.8 amps	H202 injection well EA-1 (if necessary)	No
SWEEP ENCLOSURE	4		

PART G: SYSTEM MAINTENANCE II (Quarterly)

TEST ALARM SWITCHES		BACKFLUSH CARBONS	
CLEAN TOTALIZERS			

SEQUOIA ANALYTICAL CHAIN OF CUSTODY

❑ 885 Jarvis Drive • Morgan Hill, CA 95037 • (408) 776-9600 • FAX (408) 782-6308
❑ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
❑ 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: IT Group
Mailing Address: 1921 Ringwood Av.
City: San Jose State: CA Zip Code: 95131
Telephone: 408)4537300 FAX #: 408)4379526
Report To: Don Wateupaugh Sampler: Pedro E. Ruiz

Project Name: 821803 ARCO #0608
Billing Address (if different): 17601 Hesperian Blvd. San Lorenzo CA
P.O.#: Paul Supple
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

❑ Drinking Water
☒ Waste Water
❑ Other

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	TPH Gas	BTEX Compounds	MTBE	COD	TSS						Comments
1. INFL	11-13-01 8:30		3	40ml		X	X	X								
2. M10-1	↓ 8:35		↓	↓		↓	↓	↓								
3. M10-2	↓ 8:40		↓	↓		↓	↓	↓								
4. EFFL	↓ 8:45		5	40ml 1L		↓	↓	↓	X	X						
5.																
6.																
7.																
8.																
9.																
10.																

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
[signature]	11-13-01	15:00			

Were Samples Received in Good Condition? ❑ Yes ❑ No Samples on Ice? ❑ Yes ❑ No Method of Shipment ______ Page ___ of ___

Pink - Client
Yellow - Sequoia
White - Sequoia

Work Order #_____

FIELD SERVICES / ROUTINE O&M REQUEST

Identification

Request Frequency:Semi-Monthly

Project #	821803 (00008000)
Station #	0608
Site Address:	17601 Hesperian Blvd @ Hacienda Avenue
County:	Alameda
Project Manager:	Shaw Garakani
Requestor:	Don Watenpaugh
Technician:	Pedro Ruiz
Client:	ARCO
Client P.O.C.:	Paul Supple
Revision Date:	June 14, 2001
Laboratory:	Sequoia Analytical

Site Remedial Technologies:

Groundwater Extraction (GWE) [X]

Complete attached Data Sheets as prescribed in the following table:

Scheduling Table

GWE (A, B)	Semi-Monthly				
GWE (C, D, E, F)	Monthly †				
GWE (G)	Quarterly				

† = sampling to be performed

Definition of frequencies:
weekly = N/A
monthly = once a month on week 1
quarterly = on months 3, 6, 9, 12
semi-monthly = twice a month on week 1 and 3

Field Technician Response:

Completed by:_____ Date: 11-13-01
Arrival time:_____ Departure time:_____
Sample this visit?:_____ Engineer contacted?_____

Date: 11/13/01

Groundwater Extraction & Treatment System
ARCO Service Station 0608
17601 Hesperian Boulevard
821803 (00008000)
June 14, 2001

System Description:

Groundwater Pumps

E-1A	Electric	3"	panel	23.9'

Carbon Vessels: Three ASC-1,200
Filter: Rosedale P2 25 micron

PART A: SYSTEM DATA (Semi-Monthly)

System on upon arrival? Running (if no, specify reason in comments)

ELECTRIC METER READING (kw hrs)	33558	HOUR METER READING (hrs)	388198

TOTALIZER (gallons)	2119540	2119670
FILTER INLET PRESSURE (psig)	10	(ideal range: 8 to 12 psig) 6
CARBON #1 INLET PRESSURE (psig)	4	(ideal range: 5 to 9 psig) 4
CARBON #2 INLET PRESSURE (psig)	4	(ideal range: 1 to 4 psig) 4
DISCHARGE PRESSURE (psig)	0	(ideal range: 0 to 2 psig) 0

PART B: COMMENTS Change Filters out / Swept Compound. All Samples taken. Wells OST A, B Dry

PART C: WELL DATA (Monthly)

* ALLOW SYSTEM TO RUN 1 HOUR BEFORE OBTAINING DTW READINGS 11-13-01

WELL				
E-1A	2200	NA		NONE
UST-A	11.45	N/A	N/A	Dry
UST-B	1203	N/A	N/A	Dry
SP1-V4	Shallow 12.40 Deep 1230	N/A	N/A	

PART D: SAMPLING (Monthly)

INFLUENT	TPH-gasoline, BTEX compounds, MtBE	8:30 DE
EFFLUENT	TPH-gasoline, BTEX compounds, MtBE COD, TSS	8:45 DE
MID-1	TPH-gasoline, BTEX compounds, MtBE	8:35 DE
MID-2	TPH-gasoline, BTEX compounds, MtBE	8:40 DE

PART E: READINGS (Monthly)

	TEMP (°F)	CONDUCTIVITY (umhos)	pH (units)	DISSOLVED OXYGEN (ppm)
EFFLUENT	62.3	1080	6.98	1.4

PART F: SYSTEM MAINTENANCE I (Monthly)

NUMBER OF SPARE FILTERS ON SITE?	27	CHANGE FILTERS? (if necessary)	YES
PUMP AMP DRAW	5.8 amps	H202 injection well EA-1 (if necessary)	No
SWEEP ENCLOSURE	Y		

PART G: SYSTEM MAINTENANCE II (Quarterly)

TEST ALARM SWITCHES		BACKFLUSH CARBONS	
CLEAN TOTALIZERS			

SEQUOIA ANALYTICAL CHAIN OF CUSTODY

❑ 885 Jarvis Drive • Morgan Hill, CA 95037 • (408) 776-9600 • FAX (408) 782-6308
❑ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
❑ 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: IT Group
Mailing Address: 1921 Ringwood Av.
City: San Jose State: CA Zip Code: 95131
Telephone: 408) 4537300 FAX #: 408) 4379526
Report To: Don Waterpaugh Sampler: Pedro E. Ruiz

Project Name: 821803 ARCO #0608
Billing Address (if different): 17601 Hesperian Blvd. San Lorenzo CA
P.O. #: Paul Supple
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

❑ Drinking Water ☒ Waste Water ❑ Other

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	TPH Gas	Btex Compounds	MTBE	COD	TSS					Comments
1. IWFC	11-13-01 8:30		3	40ml		X	X	X							
2. M10-1	↓ 8:35		↓	↓		↓	↓	↓							
3. M10-2	↓ 8:40		↓	↓		↓	↓	↓							
4. EFFL	↓ 8:45		5	40ml 1L		↓	↓	↓	X	X					
5.															
6.															
7.															
8.															
9.															
10.															

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
[signature]	11-13-01	15:00			

Were Samples Received in Good Condition? ❑ Yes ❑ No   Samples on Ice? ❑ Yes ❑ No   Method of Shipment ______   Page ___ of ___

Pink - Client / Yellow - Sequoia / White - Sequoia

Work Order #_____

FIELD SERVICES / ROUTINE O&M REQUEST

Identification **Request Frequency:Semi-Monthly**

Project #	821803 (00008000)
Station #	0608
Site Address:	17601 Hesperian Blvd @ Hacienda Avenue
County:	Alameda
Project Manager:	Shaw Garakani
Requestor:	Don Watenpaugh
Technician:	Pedro Ruiz
Client:	ARCO
Client P.O.C.:	Paul Supple
Revision Date:	June 14, 2001
Laboratory:	Sequoia Analytical

Site Remedial Technologies:

Groundwater Extraction (GWE) [X]

Complete attached Data Sheets as prescribed in the following table:

Scheduling Table

GWE (A, B)	Semi-Monthly				
GWE (C, D, E, F)	Monthly †				
GWE (G)	Quarterly				

† = sampling to be performed

Definition of frequencies:
weekly = N/A
monthly = once a month on week 1
quarterly = on months 3, 6, 9, 12
semi-monthly = twice a month on week 1 and 3

Field Technician Response:

Completed by: _____ Date: 10/18/01
Arrival time: _____ Departure time: _____
Sample this visit? _____ Engineer contacted? _____

Date:_____

Groundwater Extraction & Treatment System
ARCO Service Station 0608
17601 Hesperian Boulevard
821803 (00008000)
June 14, 2001

System Description:

Groundwater Pumps

E-1A	Electric	3"	panel	23.9'

Carbon Vessels: Three ASC-1,200
Filter: Rosedale P2 25 micron

PART A: SYSTEM DATA (Semi-Monthly)

System on upon arrival? Down (if no, specify reason in comments)

ELECTRIC METER READING (kw hrs)		HOUR METER READING (hrs)	382005

TOTALIZER (gallons)		2064010
FILTER INLET PRESSURE (psig)		(ideal range: 8 to 12 psig) 3
CARBON #1 INLET PRESSURE (psig)		(ideal range: 5 to 9 psig) 3
CARBON #2 INLET PRESSURE (psig)		(ideal range: 1 to 4 psig) 4
DISCHARGE PRESSURE (psig)		(ideal range: 0 to 2 psig) 0

PART B: COMMENTS Change Filter out
Install a ~~Relief~~ Valve & Pressure
Gauge at the Filter
Install Arrow Flow Tapes on INFL,
MW-1, MW-2, ~~EFFL~~, Install Brass tags
on Sample ports,
Swept Compound.

Work Order #_____

FIELD SERVICES / ROUTINE O&M REQUEST

Identification **Request Frequency:Semi-Monthly**

Project #	821803 (00008000)
Station #	0608
Site Address:	17601 Hesperian Blvd @ Hacienda Avenue
County:	Alameda
Project Manager:	Shaw Garakani
Requestor:	Don Watenpaugh
Technician:	Pedro Ruiz
Client:	ARCO
Client P.O.C.:	Paul Supple
Revision Date:	June 14, 2001
Laboratory:	Sequoia Analytical

Site Remedial Technologies:

Groundwater Extraction (GWE) [X]

Complete attached Data Sheets as prescribed in the following table:

Scheduling Table

GWE (A, B)	Semi-Monthly				
GWE (C, D, E, F)	Monthly †				
GWE (G)	Quarterly				

† = sampling to be performed

Definition of frequencies:
weekly = N/A
monthly = once a month on week 1
quarterly = on months 3, 6, 9, 12
semi-monthly = twice a month on week 1 and 3

Field Technician Response:

Completed by:_____ Date: 10.5.01
Arrival time:_____ Departure time:_____
Sample this visit?:_____ Engineer contacted?_____

Date: 10-501

Groundwater Extraction & Treatment System
ARCO Service Station 0608
17601 Hesperian Boulevard
821803 (00008000)
June 14, 2001

System Description:

Groundwater Pumps

E-1A	Electric	3"	panel	23.9'

Carbon Vessels: Three ASC-1,200
Filter: Rosedale P2 25 micron

PART A: SYSTEM ~~DATA~~ (Semi-Monthly)

System on upon arrival? Powered (if no, specify reason in comments)

ELECTRIC METER READING (kw hrs)	23838	HOUR METER READING (hrs)	379320

TOTALIZER (gallons)	2040840	2040950
FILTER INLET PRESSURE (psig)	12	(ideal range: 8 to 12 psig) 12
CARBON #1 INLET PRESSURE (psig)	3	(ideal range: 5 to 9 psig) 3
CARBON #2 INLET PRESSURE (psig)	3	(ideal range: 1 to 4 psig) 3
DISCHARGE PRESSURE (psig)	0	(ideal range: 0 to 2 psig) 0

PART B: COMMENTS 9-26-01 Totalizer 2019280
Hr 376961

Repair well MW-25 Extend Casing up & Pour Concrete inside Box - Install 4" Cap

PART C: WELL DATA (Monthly)

*** ALLOW SYSTEM TO RUN 1 HOUR BEFORE OBTAINING DTW READINGS** 1050

WELL				
E-1A	21.20	Draw Down		
UST-A	Dry	N/A	N/A	
UST-B	Dry	N/A	N/A	
SP1-V4 Deep Shallow	1255 1250	N/A	N/A	

PART D: SAMPLING (Monthly)

SAMPLED			
INFLUENT	TPH-gasoline, BTEX compounds, MtBE	9:30	PE
EFFLUENT	TPH-gasoline, BTEX compounds, MtBE COD, TSS	9:45	PE
MID-1	TPH-gasoline, BTEX compounds, MtBE	935	PE
MID-2	TPH-gasoline, BTEX compounds, MtBE	9:40	PE

PART E: READINGS (Monthly)

	TEMP (°F)	CONDUCTIVITY (umhos)	pH (units)	DISSOLVED OXYGEN (ppm)
EFFLUENT	64.4	1020	6.89	1.2

PART F: SYSTEM MAINTENANCE I (Monthly)

NUMBER OF SPARE FILTERS ON SITE?	29	CHANGE FILTERS? (if necessary)	NA
PUMP AMP DRAW	Startup 60=5.5	H202 injection well EA-1 (if necessary)	NA
SWEEP ENCLOSURE	YES		

PART G: SYSTEM MAINTENANCE II (Quarterly)

TEST ALARM SWITCHES		BACKFLUSH CARBONS	
CLEAN TOTALIZERS			

ARCO Products Company
Division of AtlanticRichfieldCompany

821803 **Task Order No.**

Chain of Custody

ARCO Facility no. 6008	City (Facility) 1706 Hesperian Blvd	Project manager (Consultant) Don Watenpaugh	Laboratory name SEQUOIA
ARCO engineer Paul Supple	Telephone no. (ARCO) SW Lorenzo	Telephone no. (Consultant) 408 453 7300	Fax no. (Consultant) 408 437 9526
Consultant name IT Group	Address (Consultant) 1921 Ringwood Ave San Jose CA 95131		Contract number

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 MTBE EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ Semi VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐	COD	TSS
INFL		3		W		Y	HCl	10501	9:30		X											
Mid1		↓		↓		↓	↓	↓	9:35		↓											
Mid2		↓		↓		↓	↓	↓	9:40		↓											
EFFL		5		↓		↓	↓	↓	9:45		↓										X	X

Special detection Limit/reporting

Special QA/QC

Remarks

Lab number

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	Date 10501	Time 12:00	Received by
Relinquished by IT Group	Date	Time	Received by
Relinquished by	Date	Time	Received by laboratory

Date | Time

Distribution: White copy — Laboratory; Canary copy — ARCO Environmental Engineering; Pink copy — Consultant

Sequoia
Analytical

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2 January, 2002

Don Watenpaugh
Pacific Environmental Group/ IT
1921 Ringwood Avenue
San Jose, CA 95131

RE: -
Sequoia Report: MKL0256

Enclosed are the results of analyses for samples received by the laboratory on 12/12/01 19:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

James Hartley
Project Manager

CA ELAP Certificate #1210

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Pacific Environmental Group/ IT
1921 Ringwood Avenue
San Jose CA, 95131

Project: -
Project Number: 821803
Project Manager: Don Watenpaugh

Reported:
01/02/02 15:18

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
INF	MKL0256-01	Water	12/11/01 17:20	12/12/01 19:20
Mid-1	MKL0256-02	Water	12/11/01 17:25	12/12/01 19:20
Mid-2	MKL0256-03	Water	12/11/01 17:30	12/12/01 19:20
EFFL	MKL0256-04	Water	12/11/01 17:35	12/12/01 19:20

Sequoia Analytical - Morgan Hill

James Hartley, 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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Pacific Environmental Group/ IT	Project: -	
1921 Ringwood Avenue	Project Number: 821803	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	01/02/02 15:18

Total Purgeable Hydrocarbons (C6-C10) by 8015B modified, BTEX and MTBE by 8021B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
INF (MKL0256-01) Water Sampled: 12/11/01 17:20 Received: 12/12/01 19:20									
Gasoline Range Organics (C6-C10)	**65**	50	ug/l	1	1L20004	12/20/01	12/20/01	8015Bm/8021B	P-03
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	**0.58**	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**83**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*97.6 %*		*70-130*	"	"	"	"	
Mid-1 (MKL0256-02) Water Sampled: 12/11/01 17:25 Received: 12/12/01 19:20									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	1L19005	12/19/01	12/19/01	8015Bm/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**5.7**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*96.4 %*		*70-130*	"	"	"	"	
Mid-2 (MKL0256-03) Water Sampled: 12/11/01 17:30 Received: 12/12/01 19:20									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	1L19005	12/19/01	12/19/01	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	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*92.5 %*		*70-130*	"	"	"	"	

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Pacific Environmental Group/ IT	Project: -	
1921 Ringwood Avenue	Project Number: 821803	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	01/02/02 15:18

Total Purgeable Hydrocarbons (C6-C10) by 8015B modified, BTEX and MTBE by 8021B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EFFL (MKL0256-04) Water Sampled: 12/11/01 17:35 Received: 12/12/01 19:20									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	1L19005	12/19/01	12/19/01	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	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*92.5 %*		*70-130*	"	"	"	"	

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Pacific Environmental Group/ IT	Project: -	
1921 Ringwood Avenue	Project Number: 821803	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	01/02/02 15:18

Conventional Chemistry Parameters by APHA/EPA Methods

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EFFL (MKL0256-04) Water Sampled: 12/11/01 17:35 Received: 12/12/01 19:20									
Chemical Oxygen Demand	**34**	20	mg/l	1	2A02015	01/02/02	01/02/02	EPA 410.4	
Total Suspended Solids	ND	10	"	"	1L18031	12/15/01	12/18/01	EPA 160.2	

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Pacific Environmental Group/ IT	Project: -	
1921 Ringwood Avenue	Project Number: 821803	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	01/02/02 15:18

Total Purgeable Hydrocarbons (C6-C10) by 8015B modified, BTEX and MTBE by 8021B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1L19005 - EPA 5030B [P/T]										
Blank (1L19005-BLK1)				Prepared & Analyzed: 12/19/01						
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	*9.63*		"	*10.0*		*96.3*	*70-130*			
LCS (1L19005-BS1)				Prepared & Analyzed: 12/19/01						
Benzene	7.49	0.50	ug/l	10.0		74.9	70-130			
Toluene	8.50	0.50	"	10.0		85.0	70-130			
Ethylbenzene	9.76	0.50	"	10.0		97.6	70-130			
Xylenes (total)	30.3	0.50	"	30.0		101	70-130			
rogate: a,a,a-Trifluorotoluene	*9.67*		"	*10.0*		*96.7*	*70-130*			
LCS (1L19005-BS2)				Prepared & Analyzed: 12/19/01						
Gasoline Range Organics (C6-C10)	310	50	ug/l	250		124	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.48*		"	*10.0*		*94.8*	*70-130*			
Batch 1L20004 - EPA 5030B [P/T]										
Blank (1L20004-BLK1)				Prepared & Analyzed: 12/20/01						
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	*9.60*		"	*10.0*		*96.0*	*70-130*			

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Pacific Environmental Group/ IT	Project: -	
1921 Ringwood Avenue	Project Number: 821803	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	01/02/02 15:18

Total Purgeable Hydrocarbons (C6-C10) by 8015B modified, BTEX and MTBE by 8021B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1L20004 - EPA 5030B [P/T]										
LCS (1L20004-BS1)				Prepared & Analyzed: 12/20/01						
Benzene	7.88	0.50	ug/l	10.0		78.8	70-130			
Toluene	8.87	0.50	"	10.0		88.7	70-130			
Ethylbenzene	11.4	0.50	"	10.0		114	70-130			
Xylenes (total)	35.0	0.50	"	30.0		117	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.59*		"	*10.0*		*95.9*	*70-130*			
LCS (1L20004-BS2)				Prepared & Analyzed: 12/20/01						
Gasoline Range Organics (C6-C10)	277	50	ug/l	250		111	70-130			
Surrogate: a,a,a-Trifluorotoluene	*6.52*		"	*10.0*		*65.2*	*70-130*			*S-04*

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Pacific Environmental Group/ IT
1921 Ringwood Avenue
San Jose CA, 95131

Project: -
Project Number: 821803
Project Manager: Don Watenpaugh

Reported:
01/02/02 15:18

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1L18031 - General Preparation										
Blank (1L18031-BLK1)				Prepared: 12/15/01 Analyzed: 12/18/01						
Total Suspended Solids	ND	10	mg/l							
Blank (1L18031-BLK2)				Prepared: 12/15/01 Analyzed: 12/18/01						
Total Suspended Solids	ND	10	mg/l							
Duplicate (1L18031-DUP1)		Source: MKL0300-01		Prepared: 12/15/01 Analyzed: 12/18/01						
Total Suspended Solids	49.6	10	mg/l		51			2.78	20	
Batch 2A02015 - General Preparation										
Blank (2A02015-BLK1)				Prepared & Analyzed: 01/02/02						
Chemical Oxygen Demand	ND	20	mg/l							
LCS (2A02015-BS1)				Prepared & Analyzed: 01/02/02						
Chemical Oxygen Demand	106	20	mg/l	100		106	80-120			
atrix Spike (2A02015-MS1)		Source: MKL0256-04		Prepared & Analyzed: 01/02/02						
Chemical Oxygen Demand	169	20	mg/l	100	34	135	75-125			QM-07
Matrix Spike Dup (2A02015-MSD1)		Source: MKL0256-04		Prepared & Analyzed: 01/02/02						
Chemical Oxygen Demand	184	20	mg/l	100	34	150	75-125	8.50	20	QM-07

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Pacific Environmental Group/ IT	Project: -	
1921 Ringwood Avenue	Project Number: 821803	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	01/02/02 15:18

Notes and Definitions

P-03	Chromatogram Pattern: Unidentified Hydrocarbons C6-C10
QM-07	The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
S-04	The surrogate recovery for this sample is outside control limits due to interference from the sample matrix.
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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☐ 819 Striker Ave., Suite 8 • **Sacramento, CA 95834** • (916) 921-9600 • FAX (916) 921-0100
☐ 1551 Industrial Road • **San Carlos, CA 94070** • (650) 232-9600 • FAX (650) 232-9612
☐ 404 N. Wiget Lane • **Walnut Creek, CA 94598** • (925) 988-9600 • FAX (925) 988-9673

Company Name:	Hackett Pipeline Inc.	Project:	
Mailing Address:	P.O. Box 700266	Billing Address (if different):	
City:	San Jose	State: CA	Zip Code: 95176
Telephone:	650-965-1792	Fax #: 650-965-0884	P.O. #:
Report To:	Holly	E-Mail:	QC Data: ☐ Level II (Standard) ☐ Level III ☐ Level IV
Sampler:		Date / Time Results Required:	Sequoia's Work Order # MKL0256

SAME AS

Pink - Client

Turnaround Time:
- ☒ 10 - 15 Working Days (Standard TAT)
- ☐ 7 Working Days
- ☐ 5 Working Days
- ☐ 72 Hours
- ☐ 48 Hours
- ☐ 24 Hours
- ☐ 2-8 Hours

MANDATORY:
- ☒ SDWA (Drinking Water)
- ☐ CWA (Waste Water)
- ☐ RCRA (Hazardous Waste)
- ☐ Other

ANALYSES REQUESTED (Please provide method)

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Container Type	Sequoia's Sample #	TPH/BTEX	TPH/BTEX								Comments/ Temp.(If required)
1. #3	11/12/01 12:59		1		01										
2. #4	11/12/01 10:6		1		02										
3.															
4.															
5.															
6.															
7.															
8.															
9.															
10.															

White - Sequoia Yellow - Sequoia

Relinquished By:	Received By:	Date / Time: 11/14/01 1600
Relinquished By:	Received By:	Date / Time:
Relinquished By:	Received By:	Date / Time
Relinquished By:	Received By:	Date / Time:

Received In Good Condition? ☑ Yes ☐ No Samples on Ice? ☑ Yes ☐ No Method of Shipment _____ Page 1 of 1

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28 November, 2001

Don Watenpaugh
Pacific Environmental Group (Arco)
1921 Ringwood Avenue
San Jose, CA 95131

RE: Facility 0608, San Lorenzo
Sequoia Report: MKK0332

Enclosed are the results of analyses for samples received by the laboratory on 11/14/01 10:25. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

James Hartley
Project Manager

CA ELAP Certificate #1210

Sequoia Analytical

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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	11/28/01 13:17

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Infl	MKK0332-01	Water	11/13/01 08:30	11/14/01 10:25
Mid-1	MKK0332-02	Water	11/13/01 08:35	11/14/01 10:25
Mid-2	MKK0332-03	Water	11/13/01 08:40	11/14/01 10:25
Effl	MKK0332-04	Water	11/13/01 08:45	11/14/01 10:25

Sequoia Analytical - Morgan Hill

James Hartley, 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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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	11/28/01 13:17

Total Purgeable Hydrocarbons (C6-C10) by 8015B modified, BTEX and MTBE by 8021B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Infl (MKK0332-01) Water Sampled: 11/13/01 08:30 Received: 11/14/01 10:25									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	1K19001	11/19/01	11/19/01	8015Bm/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**92**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*88.7 %*	*70-130*		"	"	"	"	
Mid-1 (MKK0332-02) Water Sampled: 11/13/01 08:35 Received: 11/14/01 10:25									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	1K19001	11/19/01	11/19/01	8015Bm/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
ethyl tert-butyl ether	**3.3**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*86.5 %*	*70-130*		"	"	"	"	
Mid-2 (MKK0332-03) Water Sampled: 11/13/01 08:40 Received: 11/14/01 10:25									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	1K19001	11/19/01	11/19/01	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	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*86.8 %*	*70-130*		"	"	"	"	

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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	11/28/01 13:17

Total Purgeable Hydrocarbons (C6-C10) by 8015B modified, BTEX and MTBE by 8021B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Effl (MKK0332-04) Water Sampled: 11/13/01 08:45 Received: 11/14/01 10:25									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	1K19001	11/19/01	11/19/01	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	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*86.3 %*		*70-130*	"	"	"	"	

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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	11/28/01 13:17

Conventional Chemistry Parameters by APHA/EPA Methods

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Effl (MKK0332-04) Water Sampled: 11/13/01 08:45 Received: 11/14/01 10:25									
Chemical Oxygen Demand	**150**	20	mg/l	1	1K20021	11/20/01	11/20/01	EPA 410.4	
Total Suspended Solids	ND	10	"	"	1K17006	11/17/01	11/20/01	EPA 160.2	

Sequoia Analytical

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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	11/28/01 13:17

Total Purgeable Hydrocarbons (C6-C10) by 8015B modified, BTEX and MTBE by 8021B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1K19001 - EPA 5030B [P/T]										
Blank (1K19001-BLK1)				Prepared & Analyzed: 11/19/01						
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	*8.09*		"	*10.0*		*80.9*	*70-130*			
LCS (1K19001-BS1)				Prepared & Analyzed: 11/19/01						
Benzene	8.86	0.50	ug/l	10.0		88.6	70-130			
Toluene	8.89	0.50	"	10.0		88.9	70-130			
Ethylbenzene	8.89	0.50	"	10.0		88.9	70-130			
lenes (total)	27.5	0.50	"	30.0		91.7	70-130			
Surrogate: a,a,a-Trifluorotoluene	*8.79*		"	*10.0*		*87.9*	*70-130*			
LCS (1K19001-BS2)				Prepared & Analyzed: 11/19/01						
Gasoline Range Organics (C6-C10)	228	50	ug/l	250		91.2	70-130			
Surrogate: a,a,a-Trifluorotoluene	*7.59*		"	*10.0*		*75.9*	*70-130*			
Matrix Spike (1K19001-MS1)		**Source: MKK0332-02**		Prepared & Analyzed: 11/19/01						
Gasoline Range Organics (C6-C10)	542	50	ug/l	550	ND	98.5	60-140			
Benzene	7.90	0.50	"	6.60	ND	120	60-140			
Toluene	35.9	0.50	"	39.7	ND	90.4	60-140			
Ethylbenzene	8.26	0.50	"	9.20	ND	89.8	60-140			
Xylenes (total)	40.8	0.50	"	46.1	ND	88.5	60-140			
Surrogate: a,a,a-Trifluorotoluene	*7.94*		"	*10.0*		*79.4*	*70-130*			
Matrix Spike Dup (1K19001-MSD1)		**Source: MKK0332-02**		Prepared & Analyzed: 11/19/01						
Gasoline Range Organics (C6-C10)	546	50	ug/l	550	ND	99.3	60-140	0.735	25	
Benzene	7.23	0.50	"	6.60	ND	110	60-140	8.86	25	
Toluene	36.0	0.50	"	39.7	ND	90.7	60-140	0.278	25	
Ethylbenzene	8.48	0.50	"	9.20	ND	92.2	60-140	2.63	25	
Xylenes (total)	43.2	0.50	"	46.1	ND	93.7	60-140	5.71	25	
Surrogate: a,a,a-Trifluorotoluene	*7.93*		"	*10.0*		*79.3*	*70-130*			

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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	11/28/01 13:17

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1K17006 - General Preparation										
Blank (1K17006-BLK1)				Prepared: 11/17/01 Analyzed: 11/20/01						
Total Suspended Solids	ND	10	mg/l							
Duplicate (1K17006-DUP1)		**Source: MKK0281-01**		Prepared: 11/17/01 Analyzed: 11/20/01						
Total Suspended Solids	ND	10	mg/l		ND			0.00	20	
Batch 1K20021 - General Preparation										
Blank (1K20021-BLK1)				Prepared & Analyzed: 11/20/01						
Chemical Oxygen Demand	ND	20	mg/l							
LCS (1K20021-BS1)				Prepared & Analyzed: 11/20/01						
Chemical Oxygen Demand	106	20	mg/l	100		106	80-120			
Matrix Spike (1K20021-MS1)		**Source: MKK0332-04**		Prepared & Analyzed: 11/20/01						
Chemical Oxygen Demand	100	20	mg/l	100	150	-50.0	75-125			QM-07
Matrix Spike Dup (1K20021-MSD1)		**Source: MKK0332-04**		Prepared & Analyzed: 11/20/01						
Chemical Oxygen Demand	100	20	mg/l	100	150	-50.0	75-125	0.00	20	QM-07

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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	11/28/01 13:17

Notes and Definitions

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

[redacted]
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SEQUOIA ANALYTICAL CHAIN OF CUSTODY

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☐ 1551 Industrial Road • San Carlos, CA 94070 • (650) 232-9600 FAX (650) 232-9612

Company Name: IT Group	Project Name: 821803 ARCO #0608
Mailing Address: 1921 Ringwood Av.	Billing Address (if different):
City: San Jose State: CA Zip Code: 95131	17601 Hesperian Blvd. San Lorenzo CA
Telephone: 408) 453 7300 FAX #: 408) 437 9526	P.O.: Paul Supple
Report To: Don Watenpaugh Sampler: Pedro E. Ruiz	QC Data: ☒ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

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

☐ Drinking Water ☒ Waste Water ☐ Other

Analyses Requested MKK0332

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	TPH Gas	BTEX Compounds	MTBE	COD	TSS					Comments
1. INFL	11-13-01 8:30		3	40ml	01	X	X	X							
2. MW-10-1	8:35		↓	↓	02	↓	↓	↓							
3. MW-10-2	8:40		↓	↓	03	↓	↓	↓							
4. EFFL	↓ 8:45		5	40ml 1L	04	↓	↓	↓	X	X					
5.															
6.															
7.															
8.															
9.															
10.															

Relinquished By: [signature]	Date: 11-13-01	Time: 15:00	Received By: [signature]	Date: 11/14/01	Time: 1005
Relinquished By: [signature]	Date: 11/14/01	Time: 1025	Received By: [signature]	Date: 11-14-01	Time: 1025
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

Received in Good Condition? ☐ Yes ☐ No   Samples on Ice ☐ Yes ☐ No   Method of Shipment________   Page __ of __

Pink - Client   Yellow - Sequoia   White - Sequoia

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22 October, 2001

Don Watenpaugh
Pacific Environmental Group (Arco)
1921 Ringwood Avenue
San Jose, CA 95131

RE: Facility 0608, San Lorenzo
Sequoia Report: MKJ0187

Enclosed are the results of analyses for samples received by the laboratory on 10/08/01 12:15. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

James Hartley
Project Manager

CA ELAP Certificate #1210

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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	10/22/01 18:47

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
INFL	MKJ0187-01	Water	10/05/01 09:30	10/08/01 12:15
Mid-1	MKJ0187-02	Water	10/05/01 09:35	10/08/01 12:15
Mid-2	MKJ0187-03	Water	10/05/01 09:40	10/08/01 12:15
EFFL	MKJ0187-04	Water	10/05/01 09:45	10/08/01 12:15

Sequoia Analytical - Morgan Hill

James Hartley, 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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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	10/22/01 18:47

Total Purgeable Hydrocarbons (C6-C10) by 8015B and BTEX and MTBE by 8021A

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
INFL (MKJ0187-01) Water Sampled: 10/05/01 09:30 Received: 10/08/01 12:15									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	1J15003	10/15/01	10/15/01	8015B/8021A	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**150**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*96.5 %*	*70-130*		"	"	"	"	
Mid-1 (MKJ0187-02) Water Sampled: 10/05/01 09:35 Received: 10/08/01 12:15									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	1J11004	10/11/01	10/11/01	8015B/8021A	
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		*95.0 %*	*70-130*		"	"	"	"	
Mid-2 (MKJ0187-03) Water Sampled: 10/05/01 09:40 Received: 10/08/01 12:15									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	1J11004	10/11/01	10/11/01	8015B/8021A	
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		*91.6 %*	*70-130*		"	"	"	"	

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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	10/22/01 18:47

Total Purgeable Hydrocarbons (C6-C10) by 8015B and BTEX and MTBE by 8021A

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EFFL (MKJ0187-04) Water Sampled: 10/05/01 09:45 Received: 10/08/01 12:15									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	1J11004	10/11/01	10/11/01	8015B/8021A	
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		*92.8 %*		*70-130*	"	"	"	"	

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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	10/22/01 18:47

Conventional Chemistry Parameters by APHA/EPA Methods

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EFFL (MKJ0187-04) Water Sampled: 10/05/01 09:45 Received: 10/08/01 12:15									
Chemical Oxygen Demand	55	20	mg/l	1	1J22005	10/19/01	10/19/01	EPA 410.4	
Total Suspended Solids	ND	10	"	"	1J10030	10/09/01	10/10/01	EPA 160.2	

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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	10/22/01 18:47

Total Purgeable Hydrocarbons (C6-C10) by 8015B and BTEX and MTBE by 8021A - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1J11004 - EPA 5030B [P/T]										
Blank (1J11004-BLK1)				Prepared & Analyzed: 10/11/01						
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	*9.26*		"	*10.0*		*92.6*	*70-130*			
LCS (1J11004-BS1)				Prepared & Analyzed: 10/11/01						
Benzene	8.19	0.50	ug/l	10.0		81.9	70-130			
Toluene	8.84	0.50	"	10.0		88.4	70-130			
Ethylbenzene	9.34	0.50	"	10.0		93.4	70-130			
Xylenes (total)	28.9	0.50	"	30.0		96.3	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.51*		"	*10.0*		*95.1*	*70-130*			
LCS (1J11004-BS2)				Prepared & Analyzed: 10/11/01						
Gasoline Range Organics (C6-C10)	245	50	ug/l	250		98.0	70-130			
Surrogate: a,a,a-Trifluorotoluene	*12.6*		"	*10.0*		*126*	*70-130*			
Matrix Spike (1J11004-MS1)		**Source: MKJ0187-04**		Prepared & Analyzed: 10/11/01						
Gasoline Range Organics (C6-C10)	540	50	ug/l	550	ND	98.2	60-140			
Benzene	7.04	0.50	"	6.60	ND	107	60-140			
Toluene	36.0	0.50	"	39.7	ND	90.7	60-140			
Ethylbenzene	8.69	0.50	"	9.20	ND	94.5	60-140			
Xylenes (total)	43.4	0.50	"	46.1	ND	94.1	60-140			
Surrogate: a,a,a-Trifluorotoluene	*6.00*		"	*10.0*		*60.0*	*70-130*			*S-04*
Matrix Spike Dup (1J11004-MSD1)		**Source: MKJ0187-04**		Prepared & Analyzed: 10/11/01						
Gasoline Range Organics (C6-C10)	501	50	ug/l	550	ND	91.1	60-140	7.49	25	
Benzene	6.70	0.50	"	6.60	ND	102	60-140	4.95	25	
Toluene	34.6	0.50	"	39.7	ND	87.2	60-140	3.97	25	
Ethylbenzene	8.33	0.50	"	9.20	ND	90.5	60-140	4.23	25	
Xylenes (total)	41.1	0.50	"	46.1	ND	89.2	60-140	5.44	25	
Surrogate: a,a,a-Trifluorotoluene	*6.20*		"	*10.0*		*62.0*	*70-130*			*S-04*

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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	10/22/01 18:47

Total Purgeable Hydrocarbons (C6-C10) by 8015B and BTEX and MTBE by 8021A - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1J15003 - EPA 5030B [P/T]										
Blank (1J15003-BLK1)				Prepared & Analyzed: 10/15/01						
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	*9.47*		"	*10.0*		*94.7*	*70-130*			
LCS (1J15003-BS1)				Prepared & Analyzed: 10/15/01						
Benzene	9.39	0.50	ug/l	10.0		93.9	70-130			
Toluene	10.4	0.50	"	10.0		104	70-130			
Ethylbenzene	11.4	0.50	"	10.0		114	70-130			
Xylenes (total)	33.7	0.50	"	30.0		112	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.46*		"	*10.0*		*94.6*	*70-130*			
LCS (1J15003-BS2)				Prepared & Analyzed: 10/15/01						
Gasoline Range Organics (C6-C10)	209	50	ug/l	250		83.6	70-130			
Surrogate: a,a,a-Trifluorotoluene	*10.4*		"	*10.0*		*104*	*70-130*			
Matrix Spike (1J15003-MS1)		**Source: MKJ0256-02**		Prepared & Analyzed: 10/15/01						
Gasoline Range Organics (C6-C10)	530	50	ug/l	550	ND	96.4	60-140			
Benzene	9.48	0.50	"	6.60	ND	144	60-140			QM-07
Toluene	39.3	0.50	"	39.7	ND	99.0	60-140			
Ethylbenzene	10.1	0.50	"	9.20	ND	110	60-140			
Xylenes (total)	48.1	0.50	"	46.1	ND	104	60-140			
Surrogate: a,a,a-Trifluorotoluene	*10.1*		"	*10.0*		*101*	*70-130*			
Matrix Spike Dup (1J15003-MSD1)		**Source: MKJ0256-02**		Prepared & Analyzed: 10/15/01						
Gasoline Range Organics (C6-C10)	514	50	ug/l	550	ND	93.5	60-140	3.07	25	
Benzene	9.85	0.50	"	6.60	ND	149	60-140	3.83	25	QM-07
Toluene	38.8	0.50	"	39.7	ND	97.7	60-140	1.28	25	
Ethylbenzene	9.62	0.50	"	9.20	ND	105	60-140	4.87	25	
Xylenes (total)	46.4	0.50	"	46.1	ND	101	60-140	3.60	25	
Surrogate: a,a,a-Trifluorotoluene	*12.1*		"	*10.0*		*121*	*70-130*			

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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	10/22/01 18:47

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1J10030 - General Preparation										
Blank (1J10030-BLK1)				Prepared: 10/09/01 Analyzed: 10/10/01						
Total Suspended Solids	ND	10	mg/l							
Duplicate (1J10030-DUP1)		**Source: MKJ0187-04**		Prepared: 10/09/01 Analyzed: 10/10/01						
Total Suspended Solids	ND	10	mg/l		ND				20	
Batch 1J22005 - General Preparation										
Blank (1J22005-BLK1)				Prepared & Analyzed: 10/19/01						
Chemical Oxygen Demand	ND	20	mg/l							
LCS (1J22005-BS1)				Prepared & Analyzed: 10/19/01						
Chemical Oxygen Demand	91.2	20	mg/l	100		91.2	80-120			
Matrix Spike (1J22005-MS1)		**Source: MKJ0408-01**		Prepared & Analyzed: 10/19/01						**QM-07**
Chemical Oxygen Demand	724	20	mg/l	100	500	224	75-125			
Matrix Spike Dup (1J22005-MSD1)		**Source: MKJ0408-01**		Prepared & Analyzed: 10/19/01						**QM-07**
Chemical Oxygen Demand	721	20	mg/l	100	500	221	75-125	0.415	20	

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Pacific Environmental Group (Arco)	Project: Facility 0608, San Lorenzo	
1921 Ringwood Avenue	Project Number: 17061 Hesperian Blvd	**Reported:**
San Jose CA, 95131	Project Manager: Don Watenpaugh	10/22/01 18:47

Notes and Definitions

QM-07	The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
S-04	The surrogate recovery for this sample is outside control limits due to interference from the sample matrix.
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