PACIFIC
ENVIRONMENTAL
GROUP, INC.

September 29, 1995
Project 330-006.2B

Mr. Michael Whelan
ARCO Products Company
2155 South Bascom Avenue, Suite 202
Campbell, California 95008

Re: Quarterly Report - Second Quarter 1995
Remedial System Performance Evaluation
ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Dear Mr. Whelan:

This letter, prepared by Pacific Environmental Group, Inc. (PACIFIC) on behalf of ARCO Products Company (ARCO), presents the results of the second quarter 1995 groundwater monitoring and remedial system performance evaluation at the site referenced above. In addition, a summary of work performed and anticipated at the site is included.

QUARTERLY GROUNDWATER MONITORING RESULTS

Groundwater samples were collected from site groundwater monitoring and domestic irrigation wells between May 26 and June 1, 1995, and analyzed for the presence of total petroleum hydrocarbons calculated as gasoline (TPH-g), benzene, toluene, ethylbenzene, and xylenes (BTEX compounds), nitrate, and sulfate. The analytical results for nitrate and sulfate shown on the attached certified analytical reports were documented in PACIFIC's Work Plan and Remedial Investigation/Feasibility Study Supplemental Information Letter (RI/FS) dated June 28, 1995. Therefore, these results are not presented in this letter. Field and laboratory procedures are presented as Attachment A.

Depth to water data collected on May 30, 1995 indicate that groundwater elevations have decreased in site groundwater monitoring wells an average of approximately 1.41 feet since March 13, 1995. Groundwater flow was to the west with an approximate gradient of 0.003. Groundwater elevation data are presented in Table 1. A groundwater elevation contour map based on the May 1995 data is shown on Figure 1.

The results of groundwater monitoring this quarter for site groundwater monitoring wells indicate that TPH-g and benzene concentrations are generally consistent with previous quarters. TPH-g was detected at concentrations ranging from 52 to 1,100 parts per billion (ppb). Benzene was detected at concentrations ranging from 1.0 to 13 ppb. Wells MW-7, MW-9, MW-11, MW-13 through MW-15, MW-18, MW-19, and MW-21 through MW-26 were below detection limits for TPH-g and BTEX compounds. Benzene was below the detection limit in Wells MW-10 and MW-16. Separate-phase hydrocarbons (SPH) were not observed in any site well this quarter. SPH have not been observed in any site well since August 29, 1990. Groundwater analytical data are presented in Table 2. A TPH-g and benzene concentration map is shown on Figure 2.

DOMESTIC IRRIGATION SUPPLY WELLS

The results of sampling this quarter for domestic irrigation wells indicate that TPH-g and benzene concentrations are generally within historical range. This quarter Wells 634 H, 642 H, 675 H, and 17371 VM were not sampled. Well 675 H was not sampled due to an inoperable pump. Wells 634 H and 642 H were not sampled because the homeowners were not available to allow access. Well 17371 VM was not sampled as access was denied by the owner. TPH-g was detected in Wells 17349 VM and 17372 VM at 890 and 60 ppb, respectively. Well 633 H contained 0.93 ppb benzene. Wells 590 H, 17197 VM, 17200 VM, 17203 VM, 17302 VM, 17348 VM, and 17393 VM were below the detection limits for TPH-g and benzene. Well 633 H was below the detection limit for TPH-g. Wells 17349 VM and 17372 VM were below the detection limits for benzene. Certified analytical reports, chain-of-custody documentation, and field data sheets are presented as Attachment B. Groundwater analytical data for domestic irrigation wells are presented in Table 3.

REMEDIAL PERFORMANCE EVALUATION

Remedial action currently in progress at this site consists of groundwater extraction (GWE). The GWE system has been in operation since October 15, 1991. Remedial objectives at this site include: (1) migration control of the impacted groundwater plume, and (2) petroleum hydrocarbon mass reduction. In order to evaluate treatment system performance, PACIFIC monitored well water levels, instantaneous and average extracted water flow rates, and sampled the influent and effluent of the treatment system for TPH-g and BTEX compounds 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 March 2 to June 5, 1995, are presented below.

Description

The GWE system is comprised of one extraction well (E-1A) containing an electric submersible pump. The treatment system includes three 1,200-pound granular activated

carbon vessels to treat the influent groundwater stream before it is discharged into the sanitary sewer. The carbon vessels are arranged in series, with valving to permit bed order rotation. This allows for the primary vessel to become the secondary vessel after the carbon has been renewed. The third vessel serves as a polishing vessel. Sample ports are located at the treatment system influent, effluent, the mid-point between the carbon vessels, and at each individual well head. Treatment system effluent is discharged into the sanitary sewer system in accordance with a permit issued by the Oro Loma Sanitary District on April 4, 1991. The permit was recently renewed and will be effective through April 4, 1996.

Migration Control

Progress toward meeting the migration control objective is evaluated by comparison of the groundwater elevation contour map (Figure 1) and TPH-g and benzene concentration map (Figure 2) from previous and current groundwater monitoring events. The groundwater elevation contour map from this quarter indicates that a groundwater depression extending approximately 20 feet radially from Well E-1A has developed in response to GWE at this site. Additionally, TPH-g and benzene concentrations in downgradient wells are consistent with historical concentrations, indicating the plume is not migrating.

Mass Reduction

Progress toward meeting the mass reduction objective is determined by evaluating GWE system mass removal data and the TPH-g concentration trends in associated groundwater monitoring wells. GWE system operational data are collected monthly. The system flow and influent sample analysis data are used to estimate TPH-g mass removal values. During this quarter, GWE removed 0.3 pound (0.05 gallon) of TPH-g and 0.01 pound (<0.01 gallon) of benzene from the impacted groundwater beneath the site. To date, GWE has removed approximately 4.6 pounds (0.70 gallon) of TPH-g and 0.3 pound (0.04 gallon) of benzene from impacted groundwater beneath the site. Mass removal data for the GWE system are presented in Table 4. Treatment system certified analytical reports, chain-of-custody documentation, and field data sheets are presented as Attachment C. Cumulative progress toward site remediation is presented in the following table.

	Mass Removed			
	03/02/95 to 06/05/95		Cumulative	
Analyte	(lbs)	(gal)	(lbs)	(gal)
Groundwater Extraction				
TPH-g	0.3	0.05	4.6	0.70
Benzene	0.01	< 0.01	0.3	0.04

lbs = Pounds
gal = Gallons
TPH-g = Total petroleum hydrocarbons calculated as gasoline

A graphical presentation of TPH-g and benzene mass removal rate and concentrations versus time have been shown on Figures 3 and 4, respectively.

Groundwater Extraction System Operational Data

The GWE system was approximately 99 percent operational during the reporting period. During the reporting period, the GWE system discharged treated groundwater at an average operational flow rate of approximately 2.1 gallons per minute (gpm) for a period discharge of 279,630 gallons. The instantaneous groundwater system flow rate ranged from 1.9 to 2.2 gpm. Calculations based on 8 percent loading isotherm by weight indicate the primary carbon vessel is approximately 5.3 percent loaded. Treatment system analytical data are presented in Table 5.

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 B.

Conclusions

A dissolved oxygen (DO) enhancement and monitoring program will be initiated in the third quarter 1995. The purpose of the program is to determine if DO can be significantly increased to enhance biodegradation of hydrocarbon in groundwater. This program was proposed in PACIFIC's RI/FS submitted to Alameda County Health Care Services Agency (ACHCSA) on June 28, 1995. The program calls for installing oxygen releasing compounds (ORC) in Wells E-1A, MW-5, and MW-10. DO monitoring will be performed in Wells MW-8, SP-1, and SP-2. As approved by the ACHCSA, the GWE system will be shut down to allow natural transport of oxygen in groundwater.

SUMMARY OF WORK

Work Performed Second Quarter 1995

- Continued monitoring GWE system performance.
- Prepared and submitted first quarter 1995 groundwater monitoring and remedial system performance evaluation report.
- Continued domestic irrigation well owner reimbursement program with owners who have discontinued well use.
- Sampled site groundwater monitoring and domestic irrigation wells for second quarter 1995 groundwater monitoring program.

- Prepare second quarter 1995 groundwater monitoring and remedial system performance evaluation report.
- Prepared and submitted Work Plan and RI/FS Supplementation Information on June 28, 1995.

Work Anticipated Third Quarter 1995

- Continue monitoring GWE system performance.
- Prepare and submit second quarter 1995 groundwater monitoring and remedial system performance evaluation report.
- Sample site groundwater monitoring and domestic irrigation wells for third quarter 1995 groundwater monitoring program.
- Prepare third quarter 1995 groundwater monitoring and remedial system performance evaluation report.
- Continue domestic irrigation well owner reimbursement program with owners who have discontinued well use.
- Implement biodegradation enhancement and monitoring program.

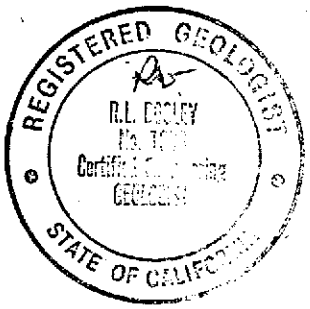
If there are any questions regarding the contents of this letter, please call.

Sincerely,

Pacific Environmental Group, Inc.

Shaw Garakani
Project Engineer

R. Lee Dooley
Senior Geologist
CEG 1006



Attachments:

- Table 1 - Groundwater Elevation Data
- Table 2 - Groundwater Analytical Data - Groundwater Monitoring Wells, Total Petroleum Hydrocarbons (TPH as Gasoline and BTEX Compounds)
- Table 3 - Groundwater Analytical Data - Domestic Irrigation Wells Total Petroleum Hydrocarbons (TPH as Gasoline and BTEX Compounds)
- Table 4 - Groundwater Extraction System Performance Data
- Table 5 - Treatment System Analytical Data - Total Petroleum Hydrocarbons (TPH as Gasoline and BTEX Compounds)
- Figure 1 - Groundwater Elevation Contour Map
- Figure 2 - TPH-g/Benzene Concentration Map
- Figure 3 - Mass Removal Trend for the Groundwater Extraction System
- Figure 4 - Concentration Trends for the Groundwater Extraction System
- Attachment A - Field and Laboratory Procedures
- Attachment B - Certified Analytical Reports, Chain-of-Custody Documentation, and Field Data Sheets
- Attachment C - Treatment System Certified Analytical Reports and Chain-of-Custody Documentation

cc: Mr. Ron Sykora, David D. Bohannon Organization
Ms. Amy Leech, Alameda County Health Care Services Agency
Mr. Kevin Graves, Regional Water Quality Control Board - S.F. Bay Region

Table 1
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-1	01/11/88	N/A	N/A	--	N/A
	06/14/88	----------	Well Destroyed	----------	
MW-2	07/05/85	N/A	N/A	--	N/A
	01/11/88	N/A	N/A	--	N/A
	06/14/88	----------	Well Destroyed	----------	
MW-3	01/11/88	33.27	N/A	--	N/A
	03/07/89		11.96	--	21.31
	06/21/89		12.85	--	20.42
	12/12/89		13.46	--	19.81
	03/29/90		13.21	--	20.06
	05/08/90		13.23	--	20.04
	06/22/90		N/A	--	N/A
	07/18/90	----------	Well Destroyed	----------	
MW-4	01/11/88	32.43	N/A	--	N/A
	09/12/88		N/A	--	N/A
	03/07/89		10.76	--	21.67
	06/21/89		11.96	--	20.47
	12/12/89		N/A	--	N/A
	03/29/90		11.72	0.01	20.71
	05/08/90		12.19	--	20.24
	06/22/90		N/A	--	N/A
	07/18/90	----------	Well Destroyed	----------	
MW-5	01/16/92	----------	Well Dry	----------	
	02/19/92	33.99	13.50	--	20.49
	03/17/92		11.90	--	22.09
	04/15/92		12.18	--	21.81
	05/14/92		12.78	--	21.21
	06/15/92	----------	Well Dry	----------	
	07/14/92	----------	Well Dry	----------	
	08/18/92	----------	Well Dry	----------	
	09/15/92	----------	Well Dry	----------	
	10/16/92	----------	Well Dry	----------	
	11/18/92	----------	Well Dry	----------	
	12/17/92		12.74	--	21.25
	01/19/93		10.92	--	23.07
	02/22/93		11.10	--	22.89
	03/15/93		11.13	--	22.86
	04/09/93		11.46	--	22.53
	05/13/93		12.19	--	21.80
	06/04/93		12.51	--	21.48
	06/15/93		12.59	--	21.40
	09/13/93		13.40	--	20.59
	12/28/93		13.25	--	20.74
	03/28/94		12.22	--	21.77
	06/13/94		12.54	--	21.45

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-5	09/19/94		13.55	--	20.44
(cont.)	12/19/94		12.43	--	21.56
	03/13/95		10.72	--	23.27
	05/30/95		11.88	--	22.11
MW-6	06/21/89	32.95	12.48	--	20.47
(E-1)	12/12/89		13.16	--	19.79
	03/29/90		12.39	--	20.56
	05/08/90		12.93	--	20.02
	06/22/90		12.94	--	20.01
	07/18/90		Well Destroyed		
MW-7	01/16/92	34.40	13.33	--	21.07
	02/19/92		12.16	--	N/A
	03/17/92		11.86	--	22.54
	04/15/92		12.30	--	22.10
	05/14/92		13.04	--	21.36
	06/15/92		13.78	--	20.62
	07/14/92		14.20	--	20.20
	08/18/92		14.79	--	19.61
	09/15/92		15.12	--	19.28
	10/16/92		15.38	--	19.02
	11/18/92		15.10	--	19.30
	12/17/92		13.69	--	20.71
	01/19/93		10.92	--	23.48
	02/22/93		10.91	--	23.49
	03/15/93		11.13	--	23.27
	04/09/93		11.46	--	22.94
	05/13/93		12.22	--	22.18
	06/04/93		12.51	--	21.89
	06/15/93		12.66	--	21.74
	09/13/93		13.78	--	20.62
	12/28/93		13.43	--	20.97
	03/28/94		12.32	--	22.08
	06/13/94		12.70	--	21.70
	09/19/94		14.16	--	20.24
	12/19/94		12.32	--	22.08
	03/13/95		10.72	--	23.68
	05/30/95		11.68	--	22.72
MW-8	01/16/92	32.79	13.40	--	19.39
	02/19/92		11.26	--	21.53
	03/17/92		10.90	--	21.89
	04/15/92		11.35	--	21.44
	05/14/92		12.06	--	20.73
	06/15/92		12.83	--	19.96
	07/14/92		12.75	--	20.04
	08/18/92		13.83	--	18.96
	09/15/92		14.17	--	18.62

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-8	10/16/92		14.51	--	18.28
(cont.)	11/18/92		14.15	--	18.64
	12/17/92		12.68	--	20.11
	01/19/93		9.79	--	23.00
	02/22/93		9.95	--	22.84
	03/15/93		10.31	--	22.48
	04/09/93		10.47	--	22.32
	05/13/93		11.18	--	21.61
	06/04/93		11.47	--	21.32
	06/15/93		11.62	--	21.17
	09/13/93		12.70	--	20.09
	12/28/93		12.23	--	20.56
	03/28/94		11.28	--	21.51
	06/13/94		11.60	--	21.19
	09/19/94		13.07	--	19.72
	12/19/94		11.22	--	21.57
	03/13/95		9.66	--	23.13
	05/30/95		10.87	--	21.92
MW-9	01/16/92	32.11	12.45	--	19.66
	02/19/92		10.25	--	21.86
	03/17/92		10.01	--	22.10
	04/15/92		10.49	--	21.62
	05/14/92		11.19	--	20.92
	06/15/92		11.86	--	20.25
	07/14/92		12.28	--	19.83
	08/18/92		12.89	--	19.22
	09/15/92		13.28	--	18.83
	10/16/92		13.60	--	18.51
	11/18/92		13.24	--	18.87
	12/17/92		11.76	--	20.35
	01/19/93		8.99	--	23.12
	02/22/93		9.13	--	22.98
	03/15/93		9.48	--	22.63
	04/09/93		9.63	--	22.48
	05/13/93		10.35	--	21.76
	06/04/93		10.65	--	21.46
	06/15/93		10.81	--	21.30
	09/13/93		11.87	--	20.24
	12/28/93		11.61	--	20.50
	03/28/94		10.48	--	21.63
	06/13/94		10.80	--	21.31
	09/19/94		12.25	--	19.86
	12/19/94		10.40	--	21.71
	03/13/95		8.70	--	23.41
	05/30/95		10.01	--	22.10

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-10	01/16/92	31.67	12.55	--	19.12
	02/19/92		10.50	--	21.17
	03/18/92		10.12	--	21.55
	04/15/92		10.59	--	21.08
	05/14/92		11.30	--	20.37
	06/15/92		11.93	--	19.74
	07/14/92		12.42	--	19.25
	08/18/92		13.03	--	18.64
	09/15/92		13.42	--	18.25
	10/16/92		13.74	--	17.93
	11/18/92		13.42	--	18.25
	12/17/92		11.94	--	19.73
	01/19/93		9.13	--	22.54
	02/22/93		9.22	--	22.45
	03/15/93		9.64	--	22.03
	04/09/93		9.75	--	21.92
	05/13/93		10.49	--	21.18
	06/04/93		10.78	--	20.89
	06/15/93		10.93	--	20.74
	09/13/93		12.01	--	19.66
	12/28/93		11.41	--	20.26
	03/28/94		10.60	--	21.07
	06/13/94		10.95	--	20.72
	09/19/94		12.37	--	19.30
	12/19/94		10.64	--	21.03
	03/13/95		8.93	--	22.74
	05/30/95		10.18	--	21.49
MW-11	01/16/92	32.54	13.28	--	19.26
	02/19/92		11.29	--	21.25
	03/17/92		10.81	--	21.73
	04/15/92		11.23	--	21.31
	05/14/92		11.96	--	20.58
	06/15/92		12.64	--	19.90
	07/14/92		13.08	--	19.46
	08/18/92		13.72	--	18.82
	09/15/92		14.13	--	18.41
	10/16/92		14.45	--	18.09
	11/18/92		14.11	--	18.43
	12/17/92		12.69	--	19.85
	01/19/93		9.91	--	22.63
	02/22/93		9.95	--	22.59
	03/15/93		10.30	--	22.24
	04/09/93		10.42	--	22.12
	05/13/93		11.16	--	21.38
	06/04/93		11.44	--	21.10
	06/15/93		11.59	--	20.95
	09/13/93		12.68	--	19.86
	12/28/93		12.05	--	20.49

Table 1 (continued)
Groundwater Elevation Data

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Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-11	03/28/94		11.23	--	21.31
(cont.)	06/13/94		11.62	--	20.92
	09/19/94		13.05	--	19.49
	12/19/94		11.45	--	21.09
	03/13/95		9.70	--	22.84
	05/30/95		10.89	--	21.65
E-1A	01/16/92	33.06	23.68	--	9.38
(MW-12)	02/19/92		18.71	--	14.35
	03/17/92		23.10	--	9.96
	04/15/92		20.54	--	12.52
	05/14/92		23.09	--	9.97
	06/15/92		23.72	--	9.34
	07/14/92		13.25	--	19.81
	08/18/92		23.73	--	9.33
	09/15/92		23.62	--	9.44
	10/16/92		23.78	--	9.28
	11/18/92		23.80	--	9.26
	12/17/92		22.65	--	10.41
	01/19/93		23.65	--	9.41
	02/22/93		23.70	--	9.36
	03/15/93		22.92	--	10.14
	04/09/93		22.50	--	10.56
	05/13/93		20.40	--	12.66
	06/04/93		18.74	--	14.32
	06/15/93		20.00	--	13.06
	09/13/93		19.50	--	13.56
	12/28/93		20.35	--	12.71
	03/28/94		18.13	--	14.93
	06/13/94		11.60	--	21.46
	09/19/94		19.61	--	13.45
	12/19/94		19.80	--	13.26
	03/13/95		21.75	--	11.31
	05/30/95		17.38	--	15.68
MW-13	01/16/92	35.42	15.70	--	19.72
	02/19/92		13.60	--	21.82
	03/17/92		13.20	--	22.22
	04/15/92		13.64	--	21.78
	05/14/92		14.34	--	21.08
	06/15/92		15.13	--	20.29
	07/14/92		15.45	--	19.97
	08/18/92		16.15	--	19.27
	09/15/92		16.51	--	18.91
	10/16/92		16.81	--	18.61
	11/18/92		16.50	--	18.92
	12/17/92		15.07	--	20.35
	01/19/93		12.40	--	23.02
	02/22/93		12.35	--	23.07

Table 1 (continued)
Groundwater Elevation Data

ARCO Service Station 0608
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San Lorenzo, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-13	03/15/93		12.69	--	22.73
(cont.)	04/09/93		12.85	--	22.57
	05/13/93		13.55	--	21.87
	06/04/93		13.83	--	21.59
	06/15/93		13.97	--	21.45
	09/13/93		15.09	--	20.33
	12/28/93		14.47	--	20.95
	03/28/94		13.64	--	21.78
	06/13/94		13.98	--	21.44
	09/19/94		15.45	--	19.97
	12/19/94		13.60	--	21.82
	03/13/95		12.06	--	23.36
	05/30/95		13.25	--	22.17
MW-14	01/16/92	30.46	11.34	--	19.12
	02/19/92		9.32	--	21.14
	03/17/92		9.04	--	21.42
	06/15/92		10.83	--	19.63
	09/15/92		12.27	--	18.19
	12/17/92		10.69	--	19.77
	03/15/93		8.70	--	21.76
	06/15/93		9.90	--	20.56
	09/13/93		10.89	--	19.57
	12/28/93		10.24	--	20.22
	03/28/94		9.55	--	20.91
	06/13/94		9.92	--	20.54
	09/19/94		11.25	--	19.21
	12/19/94		9.52	--	20.94
	03/13/95		7.77	--	22.69
	05/30/95		9.18	--	21.28
MW-15	01/16/92	31.41	12.80	--	18.61
	02/19/92		10.85	--	20.56
	03/18/92		10.41	--	21.00
	06/15/92		12.19	--	19.22
	09/15/92		13.69	--	17.72
	12/17/92		12.26	--	19.15
	03/15/93		10.05	--	21.36
	06/15/93		11.32	--	20.09
	09/13/93		12.35	--	19.06
	12/28/93		11.76	--	19.65
	03/28/94		10.95	--	20.46
	06/13/94		11.34	--	20.07
	09/19/94		12.68	--	18.73
	12/19/94		11.03	--	20.38
	03/13/95		9.32	--	22.09
	05/30/95		10.57	--	20.84

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-16	01/16/92	31.39	13.09	--	18.30
	02/19/92		10.99	--	20.40
	03/18/92		10.85	--	20.54
	06/15/92		12.64	--	18.75
	09/15/92		14.07	--	17.32
	12/17/92		12.56	--	18.83
	03/15/93		10.60	--	20.79
	06/15/93		11.86	--	19.53
	09/13/93		12.83	--	18.56
	12/28/93		12.14	--	19.25
	03/28/94		11.46	--	19.93
	06/13/94		11.87	--	19.52
	09/19/94		13.15	--	18.24
	12/19/94		11.36	--	20.03
	03/13/95		9.60	--	21.79
	05/30/95		11.17	--	20.22
MW-17	01/16/92	32.43	13.92	--	18.51
	02/19/92		11.65	--	20.78
	03/18/92		11.71	--	20.72
	06/15/92		13.50	--	18.93
	09/15/92		14.95	--	17.48
	12/17/92		13.34	--	19.09
	03/15/93		11.47	--	20.96
	06/15/93		12.69	--	19.74
	09/13/93		13.66	--	18.77
	12/28/93		12.96	--	19.47
	03/28/94		12.33	--	20.10
	06/13/94		12.71	--	19.72
	09/19/94		14.00	--	18.43
	12/19/94		12.27	--	20.16
	03/13/95		10.64	--	21.79
	05/30/95		12.02	--	20.41
MW-18	03/18/92	29.70	9.73	--	19.97
	06/15/92		11.50	--	18.20
	09/15/92		12.90	--	16.80
	12/17/92		11.21	--	18.49
	03/15/93		9.62	--	20.08
	06/15/93		10.85	--	18.85
	09/13/93		11.75	--	17.95
	12/28/93		11.06	--	18.64
	03/28/94		10.43	--	19.27
	06/13/94		10.80	--	18.90
	09/19/94		12.03	--	17.67
	12/19/94		10.30	--	19.40
	03/13/95		8.52	--	21.18
	05/30/95		10.21	--	19.49

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-19	03/18/92	29.02	9.22	--	19.80
	06/15/92		10.94	--	18.08
	09/15/92		12.38	--	16.64
	12/17/92		10.51	--	18.51
	03/15/93		9.23	--	19.79
	06/15/93		10.28	--	18.74
	09/13/93		11.16	--	17.86
	12/28/93		10.58	--	18.44
	03/28/94		9.92	--	19.10
	06/13/94		10.26	--	18.76
	09/19/94		11.45	--	17.57
	12/19/94		9.72	--	19.30
	03/13/95		8.04	--	20.98
	05/30/95		9.76	--	19.26
MW-20	03/18/92	29.54	9.49	--	20.05
	06/15/92		11.11	--	18.43
	09/15/92		12.50	--	17.04
	12/17/92		10.74	--	18.80
	03/15/93		9.44	--	20.10
	06/05/93		10.45	--	19.09
	10/11/93	---------- Well Destroyed ----------			
MW-21	03/18/92	28.72	9.55	--	19.17
	06/15/92		11.30	--	17.42
	09/15/92		12.78	--	15.94
	12/17/92		10.80	--	17.92
	03/15/93		9.59	--	19.13
	06/15/93		10.77	--	17.95
	09/13/93		11.63	--	17.09
	12/28/93		11.02	--	17.70
	03/28/94		10.30	--	18.42
	06/13/94		10.69	--	18.03
	09/19/94		11.89	--	16.83
	12/19/94		10.07	--	18.65
	03/13/95		8.34	--	20.38
	05/30/95		10.15	--	18.57
MW-22	03/17/92	29.29	10.05	--	19.24
	06/15/92		11.84	--	17.45
	09/15/92		13.27	--	16.02
	12/17/92		11.58	--	17.71
	03/15/93		10.03	--	19.26
	06/15/93		11.22	--	18.07
	09/13/93		12.17	--	17.12
	12/28/93		11.34	--	17.95
	03/28/94		10.78	--	18.51
	06/13/94		11.24	--	18.05
	09/19/94		12.43	--	16.86

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-22	12/19/94		10.62	--	18.67
(cont.)	03/13/95		8.78	--	20.51
	05/30/95		10.61	--	18.68
MW-23	03/17/92	30.99	11.20	--	19.79
	06/15/92		12.94	--	18.05
	09/15/92		14.40	--	16.59
	12/17/92		13.01	--	17.98
	03/15/93		11.01	--	19.98
	06/15/93		12.26	--	18.73
	09/13/93		13.23	--	17.76
	12/28/93		12.57	--	18.42
	03/28/94		11.86	--	19.13
	06/13/94		12.26	--	18.73
	09/19/94		13.55	--	17.44
	12/19/94		11.81	--	19.18
	03/13/95		10.05	--	20.94
	05/30/95		11.67	--	19.32
MW-24	06/15/93	34.38	13.39	--	20.99
	09/13/93		14.38	--	20.00
	12/28/93		13.83	--	20.55
	03/28/94		13.02	--	21.36
	06/13/94		13.37	--	21.01
	09/19/94		14.72	--	19.66
	12/19/94		13.05	--	21.33
	03/13/95		11.10	--	23.28
	05/30/95		12.62	--	21.76
MW-25	04/09/93	34.12	11.18	--	22.94
	06/15/93		12.35	--	21.77
	09/13/93		13.45	--	20.67
	12/28/93		12.89	--	21.23
	03/28/94		12.02	--	22.10
	06/13/94		12.39	--	21.73
	09/19/94		13.82	--	20.30
	12/19/94		12.00	--	22.12
	03/13/95		10.30	--	23.82
	05/30/95		11.58	--	22.54
MW-26	06/15/93	33.71	12.66	--	21.05
	09/13/93		13.70	--	20.01
	12/28/93		13.06	--	20.65
	03/28/94		12.30	--	21.41
	06/13/94		12.65	--	21.06
	09/19/94		14.05	--	19.66

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-26	12/19/94		12.39	--	21.32
(cont.)	03/13/95		10.48	--	23.23
	05/30/95		11.93	--	21.78

SPH = Separate-phase hydrocarbons
MSL = Mean sea level
TOB = Top of box
N/A = Not available
Well elevations are measured from set mark at top of vault box.
For groundwater elevation data prior to January 1992, see previous groundwater monitoring reports.

Table 2
Groundwater Analytical Data
Groundwater Monitoring Wells
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

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

Well Number	Date Sampled		TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-1	01/11/88		300	20	10	50	80
	06/14/88		Well Destroyed				
MW-2	07/05/85	a	32,000	1,000	690	N/A	1,500
	01/11/88		3,300	804	115	168	166
	06/14/88		Well Destroyed				
MW-3	01/11/88		1,800	20	20	80	60
	03/07/89		150,000	4,600	5,200	5,600	13,000
	06/21/89		63,000	2,700	5,800	3,300	12,000
	12/12/89		Well Dry				
	03/29/90	b	1,100,000	13,000	60,000	17,000	91,000
	06/22/90		Well Dry				
	07/18/90		Well Destroyed				
MW-4	01/11/88		62,000	2,700	7,900	850	5,200
	09/12/88		Separate-Phase Hydrocarbon Sheen				
	03/07/89		84,000	2,400	3,400	2,500	7,600
	06/21/89		31,000	400	800	200	1,500
	12/12/89		Well Dry				
	03/29/90		0.01 foot of Separate-Phase Hydrocarbon				
	06/22/90		Well Dry				
	07/18/90		Well Destroyed				
MW-5	01/11/88		31,000	4,000	2,700	3,800	5,500
	03/07/89		1,300	340	ND	140	50
	06/21/89		1,100	200	ND	130	40
	12/12/89		Well Dry				
	03/29/90		Well Dry				
	06/22/90		Well Dry				
	09/19/90		Well Dry				
	12/27/90		Well Dry				
	03/21/91		Well Dry				
	06/26/91		Well Dry				
	09/24/91		Well Dry				
	12/19/91		Well Dry				
	03/18/92		11,000	110	2	410	150
	06/15/92		Well Dry				
	09/16/92		Well Dry				
	12/22/92		960	220	6.5	4	2
	03/17/93		2,600	180	1.4	28	1.2
	06/17/93		2,500	450	7.5	55	<5
	09/17/93		1,400	230	<5.0	6.7	<5.0
	12/29/93		690	38	2.1	2.7	3.8
	03/30/94		1,400	30	<5	<5	<5
	06/14/94		1,700	42	<5	<5	<5
	09/20/94		500	18	<0.5	<0.5	0.52

Table 2 (continued)
Groundwater Analytical Data
Groundwater Monitoring Wells
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

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

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-5	12/20/94	840	19	2.2	1.1	2.3
(cont.)	03/14/95	2,300	16	<5.0	8.6	<5.0
	06/01/95	750	13	<0.50	1.1	<0.50
MW-6	06/21/89	1,700	170	170	85	290
(E-1)	12/12/89	500	26	7	8	18
	03/29/90	130	14	9	4	11
	06/22/90	150	15	5	4	13
	07/18/90	---------- Well Destroyed ----------				
MW-7	04/13/90	<50	<0.3	<0.3	<0.3	<0.3
	06/22/90	<50	0.5	1	0.6	3
	09/19/90	<50	<0.3	<0.3	<0.3	<0.3
	12/27/90	69	<0.3	0.3	0.4	2
	03/21/91	<30	<0.3	<0.3	<0.3	<0.3
	06/26/91	<30	<0.3	<0.3	<0.3	<0.3
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/17/92	<30	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/14/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/14/95	<50	<0.50	<0.50	<0.50	<0.50
	06/01/95	<50	<0.50	<0.50	<0.50	<0.50
MW-8	04/13/90	4,900	350	16	450	33
	06/22/90	3,700	370	12	330	28
	09/19/90	140	4	3	3	3
	12/27/90	1,200	7	0.3	53	<0.3
	03/21/91	540	8.8	<6.0	21	9.6
	06/26/91	2,100	290	<6.0	56	<6.0
	09/24/91	260	51	0.34	7.9	<0.3
	12/19/91	5,300	300	<3.0	21	4.6
	03/17/92	9,200	370	3	48	4.9
	06/17/92	3,300	460	2.7	63	6.9
	09/16/92	1,500	58	<0.5	6.1	4.5
	12/22/92	3,600	410	56	62	4.4
	03/18/93	3,800	61	<0.5	11	1.2
	06/17/93	2,400	430	<5	11	<5

Table 2 (continued)
Groundwater Analytical Data
Groundwater Monitoring Wells
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

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

Well Number	Date Sampled		TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-8	09/14/93		1,900	36	1.4	32	8.6
(cont.)	12/29/93		2,100	50	0.65	2.9	4.7
	03/29/94		1,900	220	<10	<10	<10
	06/14/94		2,800	340	<5	<5	<5
	09/20/94		2,100	46	<1.0	<1.0	<1.0
	12/20/94		1,800	120	<2.5	<2.5	<2.5
	03/14/95		840	17	<2.0	<2.0	<2.0
	06/01/95	c	810	5.2	<0.50	0.69	0.71
MW-9	04/13/90		<50	<0.3	<0.3	<0.3	2
	06/22/90		12,000	200	3	250	180
	09/19/90		<50	<0.3	<0.3	<0.3	0.6
	12/27/90		<50	<0.3	<0.3	<0.3	<0.3
	03/21/91		<30	<0.3	<0.3	<0.3	<0.3
	06/26/91		<30	<0.3	<0.3	<0.3	<0.3
	09/24/91		<30	<0.3	<0.3	<0.3	<0.3
	12/19/91		<30	<0.3	<0.3	<0.3	<0.3
	03/17/92		<30	<0.3	<0.3	<0.3	<0.3
	06/16/92		<30	<0.3	<0.3	<0.3	<0.3
	09/16/92		<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	c	75	<0.5	<0.5	<0.5	<0.5
	03/16/93		<50	<0.5	<0.5	<0.5	<0.5
	06/15/93		<50	<0.5	<0.5	<0.5	<0.5
	09/14/93		<50	<0.5	<0.5	<0.5	<0.5
	12/29/93		<50	<0.5	<0.5	<0.5	<0.5
	03/29/94		<50	<0.5	<0.5	<0.5	<0.5
	06/14/94		<50	<0.5	<0.5	<0.5	<0.5
	09/20/94		<50	<0.5	<0.5	<0.5	<0.5
	12/20/94		<50	<0.5	<0.5	<0.5	<0.5
	03/14/95		<50	<0.50	<0.50	<0.50	<0.50
	06/01/95		<50	<0.50	<0.50	<0.50	<0.50
MW-10	04/13/90		10,000	150	4	280	200
	06/22/90		9,700	28	<0.3	131	210
	09/19/90		1,800	<0.3	4	0.8	10
	12/27/90		5,700	7	3	95	61
	03/21/91		6,900	22	<15	92	33
	06/26/91		9,300	51	<0.3	59	34
	09/24/91		360	8.6	5.2	14	6.2
	12/19/91		3,300	9.2	8.4	11	17
	03/18/92		4,700	14	<6.0	29	10
	06/16/92		4,800	0.46	0.34	7.4	3.8
	09/16/92		2,000	8.3	3	3.3	5.5
	12/22/92	c	2,700	6.2	<1.0	7.5	2.8
	03/16/93		4,100	340	2.4	58	54
	06/17/93		4,900	860	<10	540	92
	09/17/93		4,500	670	<10.0	240	7.2

Table 2 (continued)
Groundwater Analytical Data
Groundwater Monitoring Wells
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

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

Well Number	Date Sampled		TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-10	12/28/93	d	5,000	1,200	12	46	31
(cont.)	03/29/94		4,700	470	<10	29	45
	06/14/94		3,700	370	<1.0	<1.0	<1.0
	09/20/94		2,600	79	<2.5	7.4	2.7
	12/20/94		3,000	150	<5.0	<5.0	<5.0
	03/13/95		2,500	18	<5.0	<5.0	<5.0
	06/01/95	c	1,100	<1.2	<1.2	<1.2	<1.2
MW-11	04/13/90		<50	<0.3	<0.3	<0.3	<0.3
	06/22/90		63	0.4	0.9	0.7	3
	09/19/90		<50	<0.3	<0.3	<0.3	<0.3
	12/27/90		<50	<0.3	<0.3	<0.3	<0.3
	03/21/91		<30	<0.3	<0.3	<0.3	<0.3
	06/26/91		<30	<0.3	<0.3	<0.3	<0.3
	09/24/91		<30	<0.3	<0.3	<0.3	<0.3
	12/19/91		<30	<0.3	<0.3	<0.3	<0.3
	03/17/92		<30	<0.3	<0.3	<0.3	<0.3
	06/16/92		<30	<0.3	<0.3	<0.3	<0.3
	09/16/92		<50	<0.5	<0.5	<0.5	<0.5
	12/22/92		<50	<0.5	<0.5	<0.5	<0.5
	03/16/93		<50	<0.5	<0.5	<0.5	<0.5
	06/16/93		<50	<0.5	<0.5	<0.5	<0.5
	09/14/93		<50	<0.5	<0.5	<0.5	<0.5
	12/29/93		<50	<0.5	<0.5	<0.5	<0.5
	03/29/94		<50	<0.5	<0.5	<0.5	<0.5
	06/13/94		<50	<0.5	<0.5	<0.5	<0.5
	09/20/94		<50	<0.5	<0.5	<0.5	<0.5
	12/20/94		<50	<0.5	<0.5	<0.5	<0.5
	03/13/95		<50	<0.50	<0.50	<0.50	<0.50
	06/01/95		<50	<0.50	<0.50	<0.50	<0.50
E-1A	09/19/90		<50	7	0.9	1	2
(MW-12)	12/27/90		<50	3	0.5	1	1
	03/21/91		<30	4.2	<0.3	1.1	0.89
	06/26/91		41	6.3	<0.3	1.2	0.59
			Converted to Extraction Well 8/91				
	03/28/94		120	4.8	<0.50	5.7	4.1
	06/14/94	*	230	12	<0.5	16	1.5
	09/20/94	*	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94		<50	2.4	<0.5	1.9	<0.5
	03/14/95		<50	<0.50	<0.50	<0.50	<0.50
	06/01/95		680	4.9	<0.50	18	2.4
MW-13	07/03/91		<30	<0.3	<0.3	<0.3	<0.3
	09/24/91		<30	<0.3	<0.3	<0.3	<0.3
	12/19/91		<30	<0.3	<0.3	<0.3	<0.3
	03/17/92		<30	<0.3	<0.3	<0.3	<0.3

Table 2 (continued)
Groundwater Analytical Data
Groundwater Monitoring Wells
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

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

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-13	06/17/92	<30	<0.3	<0.3	<0.3	<0.3
(cont.)	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/14/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/14/95 c	570	2.0	<0.50	3.9	7.9
	06/01/95	<50	<0.50	<0.50	<0.50	<0.50
MW-14	07/03/91	<30	<0.3	<0.3	<0.3	<0.3
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/16/92	<30	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/22/92	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/15/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	06/01/95	<50	<0.50	<0.50	<0.50	<0.50
MW-15	07/03/91	570	1.8	1	1	2.2
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	360	<0.6	<0.6	0.64	<0.6
	03/18/92	730	0.74	0.98	1.8	0.68
	06/16/92	310	0.54	0.34	0.96	2.5
	09/16/92	100	1	<0.5	<0.5	<0.5
	12/22/92	130 c	<0.5	<0.5	<0.5	<0.5
	03/18/93	130 c	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5
	09/17/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	52	<0.5	<0.5	<0.5	1.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5

Table 2 (continued)
Groundwater Analytical Data
Groundwater Monitoring Wells
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

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

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-15	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
(cont.)	05/31/95	<50	<0.50	<0.50	<0.50	<0.50
MW-16	07/03/91	2,700	31	6.9	4.6	3.1
	09/24/91	430	1.8	1.3	1.9	1.5
	12/19/91	75	<0.3	<0.3	<0.3	<0.3
	03/18/92	1,500	4	0.73	2.2	1.3
	06/16/92	80	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/22/92	<50	<0.5	<0.5	<0.5	<0.5
	03/18/93	380 c	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5
	09/17/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	0.72	<0.5
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	52	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	05/31/95 c	52	<0.50	<0.50	<0.50	<0.50
MW-17	07/03/91	1,200	12	1.9	28	40
	09/24/91	150	2.7	0.5	3.9	0.59
	12/19/91	370	2.6	<0.3	7.2	6.5
	03/18/92	470	3.1	<0.3	9.1	8.6
	06/16/92	310	1.7	0.56	12	9.6
	09/16/92	77	1.5	<0.5	1.2	1
	12/21/92	220	1.2	<0.5	9.8	9.4
	03/17/93	250	<0.5	<0.5	7.8	3.3
	06/17/93	90	0.92	<0.5	2.7	2.4
	09/16/93	140	<0.5	<0.5	5.4	3.9
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	62	<0.5	<0.5	1.2	<0.90
	09/19/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	77	<0.5	<0.5	1.6	0.67
	03/13/95	110	<0.50	<0.50	2.9	1.2
	05/30/95	93	1.0	<0.50	1.2	<0.50
MW-18	10/04/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/18/92	<30	<0.3	<0.3	<0.3	<0.3
	06/15/92	<30	<0.3	<0.3	<0.3	<0.3
	09/15/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5

Table 2 (continued)
Groundwater Analytical Data
Groundwater Monitoring Wells
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

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

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-18	09/16/93	<50	<0.5	<0.5	<0.5	<0.5
(cont.)	12/28/93	<50	<0.5	<0.5	<0.5	<0.5
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	05/30/95	<50	<0.50	<0.50	<0.50	<0.50
MW-19	10/04/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/18/92	<30	<0.3	<0.3	<0.3	<0.3
	06/15/92	<30	<0.3	<0.3	<0.3	<0.3
	09/15/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	09/16/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	<0.5	<0.5
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/19/94	<50	<0.5	<0.5	<0.5	<0.5
	12/19/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	05/30/95	<50	<0.50	<0.50	<0.50	<0.50
MW-20	10/04/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/18/92	<30	<0.3	<0.3	<0.3	<0.3
	06/15/92	<30	<0.3	<0.3	<0.3	<0.3
	09/15/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	10/11/93	Well Destroyed				
MW-21	10/04/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/18/92	<30	<0.3	<0.3	<0.3	<0.3
	06/15/92	<30	<0.3	<0.3	<0.3	<0.3
	09/15/92	<50	<0.5	<0.5	<0.5	<0.5
	12/22/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	09/16/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	<0.5	<0.5
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5

Table 2 (continued)
Groundwater Analytical Data
Groundwater Monitoring Wells
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

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

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-21	09/19/94	<50	<0.5	<0.5	<0.5	<0.5
(cont.)	12/19/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	05/30/95	<50	<0.50	<0.50	<0.50	<0.50
MW-22	10/04/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/15/92	<30	<0.3	<0.3	<0.3	<0.3
	09/15/92	<50	<0.5	<0.5	<0.5	<0.5
	12/22/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	09/16/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	<0.5	<0.5
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/19/94	<50	<0.5	<0.5	<0.5	<0.5
	12/19/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	05/30/95	<50	<0.50	<0.50	<0.50	<0.50
MW-23	10/04/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/15/92	<30	<0.3	<0.3	<0.3	<0.3
	09/15/92	<50	<0.5	<0.5	<0.5	<0.5
	12/22/92	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	09/15/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	<0.5	<0.5
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/19/94	<50	<0.5	<0.5	<0.5	<0.5
	12/19/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	05/30/95	<50	<0.50	<0.50	<0.50	<0.50
MW-24	03/29/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5

Table 2 (continued)
Groundwater Analytical Data
Groundwater Monitoring Wells
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

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

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-24	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
(cont.)	06/01/95	<50	<0.50	<0.50	<0.50	<0.50
MW-25	03/29/93	<50	0.69	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/14/95	<50	<0.50	<0.50	<0.50	<0.50
	06/01/95	<50	<0.50	<0.50	<0.50	<0.50
MW-26	03/29/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	06/01/95	<50	<0.50	<0.50	<0.50	<0.50

ppb = Parts per billion
N/A = Not available
ND = Not detected
a. Ethylbenzene and xylenes given as a combined value.
b. Well contained slight product sheen.
c. Non-typical gasoline chromatograph pattern.
d. Anomalous data point.
< = Denotes minimum laboratory detection limit. See certified analytical report for detection limits.
• = Value taken from system influent sampling.
Wells MW-1 and MW-2 destroyed prior to March 7, 1989 sampling event.
Wells MW-3, MW-4, and MW-6 (E-1) destroyed June 18, 1990.

Table 3
Groundwater Analytical Data
Domestic Irrigation Wells
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

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

Well Address	Date Sampled		TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
590 H	11/13/91		<30	<0.3	<0.3	<0.3	<0.3
	10/14/92		<50	<0.5	<0.5	<0.5	<0.5
	12/21/92		<50	<0.5	<0.5	<0.5	<0.5
	03/16/93		<50	<0.5	<0.5	<0.5	<0.5
	06/17/93		<50	<0.5	<0.5	<0.5	<0.5
	09/16/93		<50	<0.5	<0.5	<0.5	<0.5
	12/30/93	a	NS	NS	NS	NS	NS
	03/29/94		<50	<0.5	<0.5	<0.5	<0.5
	06/16/94		<50	<0.5	<0.5	<0.5	<0.5
	09/21/94		<50	<0.5	<0.5	<0.5	<0.5
	12/21/94		<50	<0.5	<0.5	<0.5	<0.5
	03/15/95		<50	<0.50	<0.50	<0.50	<0.50
	05/26/95		<50	<0.50	<0.50	<0.50	<0.50
633 H	09/11/91	b,d	NS	NS	NS	NS	NS
	10/14/92	a	NS	NS	NS	NS	NS
	12/21/92		<50	<0.5	<0.5	<0.5	<0.5
	03/16/93		<50	<0.5	<0.5	<0.5	<0.5
	06/17/93		<50	<0.5	<0.5	<0.5	<0.5
	09/15/93	b,d	NS	NS	NS	NS	NS
	12/30/93	b,d	NS	NS	NS	NS	NS
	03/29/94	b,d	NS	NS	NS	NS	NS
	06/15/94	b,d	NS	NS	NS	NS	NS
	09/21/94	b,d	NS	NS	NS	NS	NS
	10/07/94		<50	<0.5	<0.5	<0.5	<0.5
	12/21/94		<50	<0.5	<0.5	<0.5	<0.5
	03/15/95		250	5.1	9.8	0.65	46
	03/15/95	e	<50	<0.50	<0.50	<0.50	<0.50
	05/31/95		<50	0.93	2.4	<0.50	14
634 H	09/11/91	b,d	NS	NS	NS	NS	NS
	10/14/92	a	NS	NS	NS	NS	NS
	12/21/92	b,d	NS	NS	NS	NS	NS
	03/16/93	b,d	NS	NS	NS	NS	NS
	06/17/93	b,d	NS	NS	NS	NS	NS
	09/15/93	a	NS	NS	NS	NS	NS
	12/30/93	b,d	NS	NS	NS	NS	NS
	03/29/94	b,d	NS	NS	NS	NS	NS
	06/15/94		NS	NS	NS	NS	NS
	09/21/94	b,d	NS	NS	NS	NS	NS
	12/21/94	b,d	NS	NS	NS	NS	NS
	03/15/95	b,d	NS	NS	NS	NS	NS
	05/31/95	a	NS	NS	NS	NS	NS
642 H	11/13/91		<30	<0.3	<0.3	<0.3	<0.3
	10/16/92		<50	<0.5	<0.5	<0.5	<0.5
	12/21/92		<50	<0.5	<0.5	<0.5	<0.5

Table 3 (continued)
Groundwater Analytical Data
Domestic Irrigation Wells
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

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

Well Address	Date Sampled		TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
642 H	03/16/93		<50	<0.5	<0.5	<0.5	<0.5
(cont.)	06/17/93		<50	<0.5	<0.5	<0.5	<0.5
	09/16/93		<50	<0.5	<0.5	<0.5	<0.5
	12/30/93	a	NS	NS	NS	NS	NS
	03/30/94		<50	<0.5	<0.5	<0.5	<0.5
	06/15/94		NS	NS	NS	NS	NS
	09/21/94	b,d	NS	NS	NS	NS	NS
	12/21/94	b,d	NS	NS	NS	NS	NS
	03/15/95		<50	<0.50	<0.50	<0.50	<0.50
	05/31/95	a	NS	NS	NS	NS	NS
675 H	09/11/91	b,d	NS	NS	NS	NS	NS
	10/14/92	a	NS	NS	NS	NS	NS
	12/21/92	b,d	NS	NS	NS	NS	NS
	03/16/93	b,d	NS	NS	NS	NS	NS
	06/17/93	b,d	NS	NS	NS	NS	NS
	09/15/93	a	NS	NS	NS	NS	NS
	12/30/93	a	NS	NS	NS	NS	NS
	03/29/94	a	NS	NS	NS	NS	NS
	06/15/94	a	NS	NS	NS	NS	NS
	09/22/94		<50	<0.5	<0.5	<0.5	<0.5
	12/21/94	b,d	NS	NS	NS	NS	NS
	03/15/95	b,d	NS	NS	NS	NS	NS
	05/31/95	b,d	NS	NS	NS	NS	NS
17197 VM	11/13/91		<30	<0.3	<0.3	<0.3	<0.3
	10/14/92		<50	<0.5	<0.5	<0.5	<0.5
	12/21/92		<50	<0.5	<0.5	<0.5	<0.5
	03/16/93		<50	<0.5	<0.5	<0.5	<0.5
	06/17/93		<50	<0.5	<0.5	<0.5	<0.5
	09/16/93		<50	<0.5	<0.5	<0.5	<0.5
	12/30/93		<50	<0.5	<0.5	<0.5	<0.5
	03/30/94		<50	<0.5	<0.5	<0.5	<0.5
	06/15/94		<50	<0.5	<0.5	<0.5	<0.5
	09/21/94	a	NS	NS	NS	NS	NS
	12/21/94		<50	<0.5	<0.5	<0.5	<0.5
	03/15/95		<50	<0.50	<0.50	<0.50	<0.50
	05/31/95		<50	<0.50	<0.50	<0.50	<0.50
17200 VM	11/13/91		440	2.7	<0.3	<0.3	12
	10/14/92	a	NS	NS	NS	NS	NS
	12/18/92		160	1.4	<0.5	<0.5	3.4
	03/16/93		<50	<0.5	<0.5	<0.5	<0.5
	06/16/93		<50	<0.5	<0.5	<0.5	<0.5
	09/15/93		<50	<0.5	<0.5	<0.5	<0.5
	12/30/93		<50	<0.5	<0.5	<0.5	<0.5
	03/29/94		<50	<0.5	<0.5	<0.5	<0.5

Table 3 (continued)
Groundwater Analytical Data
Domestic Irrigation Wells
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

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

Well Address	Date Sampled		TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
17200 VM	06/15/94		<50	<0.5	<0.5	<0.5	<0.5
(cont.)	09/21/94		<50	<0.5	<0.5	<0.5	<0.5
	12/20/94		<50	<0.5	<0.5	<0.5	<0.5
	03/15/95		<50	<0.50	<0.50	<0.50	<0.50
	05/30/95		<50	<0.50	<0.50	<0.50	<0.50
17203 VM	11/13/91		<30	<0.3	<0.3	<0.3	<0.3
	10/16/92	a	NS	NS	NS	NS	NS
	12/21/92		<50	<0.5	<0.5	<0.5	1.3
	03/16/93		<50	<0.5	<0.5	<0.5	<0.5
	06/17/93		<50	<0.5	<0.5	<0.5	<0.5
	09/16/93		<50	<0.5	<0.5	<0.5	<0.5
	12/30/93		<50	<0.5	<0.5	<0.5	<0.5
	03/30/94		<50	<0.5	<0.5	<0.5	<0.5
	06/15/94		<50	<0.5	<0.5	<0.5	<0.5
	09/21/94	a	NS	NS	NS	NS	NS
	12/21/94		<50	<0.5	<0.5	<0.5	<0.5
	03/15/95		<50	<0.50	<0.50	<0.50	<0.50
	05/31/95		<50	<0.50	<0.50	<0.50	<0.50
17302 VM	10/21/91		72	0.64	<0.3	0.44	<0.3
	10/14/92	a	NS	NS	NS	NS	NS
	12/21/92		<50	<0.5	<0.5	<0.5	<0.5
	03/16/93		<50	<0.5	<0.5	<0.5	<0.5
	06/17/93	b,d	NS	NS	NS	NS	NS
	09/16/93		66	<0.5	<0.5	<0.5	<0.5
	12/30/93		<50	<0.5	<0.5	<0.5	<0.5
	03/30/94		<50	<0.5	<0.5	<0.5	<0.5
	06/15/94		<50	<0.5	<0.5	<0.5	<0.5
	03/30/94		<50	<0.5	<0.5	<0.5	<0.5
	06/15/94		<50	<0.5	<0.5	<0.5	<0.5
	09/21/94	a	NS	NS	NS	NS	NS
	12/21/94		<50	<0.5	<0.5	<0.5	<0.5
	03/15/95		<50	<0.50	<0.50	<0.50	<0.50
	05/31/95		<50	<0.50	<0.50	<0.50	<0.50
17348 VE	11/13/91	b,d	NS	NS	NS	NS	NS
	10/14/92	a	NS	NS	NS	NS	NS
	12/21/92		<50	<0.5	<0.5	<0.5	<0.5
	03/16/93		<50	<0.5	<0.5	<0.5	<0.5
	06/16/93		<50	<0.5	<0.5	<0.5	<0.5
	09/15/93		<50	<0.5	<0.5	<0.5	<0.5
	12/30/93	b,d	NS	NS	NS	NS	NS
	03/30/94		<50	<0.5	<0.5	<0.5	<0.5
	06/15/94		<50	<0.5	<0.5	<0.5	<0.5
	09/21/94	a	NS	NS	NS	NS	NS
	12/21/94		<50	<0.5	<0.5	<0.5	<0.5

Table 3 (continued)
Groundwater Analytical Data
Domestic Irrigation Wells
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

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

Well Address	Date Sampled		TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
17348 VE	03/15/95		<50	<0.50	<0.50	<0.50	<0.50
(cont.)	05/30/95		<50	<0.50	<0.50	<0.50	<0.50
17349 VM	09/27/91		780	13	<3.0	<3.0	<3.0
	10/14/92		2,200	<50	<50	<50	110
	12/18/92		1,500	14	1.8	7.1	56
	03/16/93		1,100	16	4.2	1.8	1.8
	06/17/93		1,100	1.5	6.7	2.9	7.9
	09/16/93		1,200	13	21	3	10
	12/30/93	a	NS	NS	NS	NS	NS
	03/30/94		420	<1	<1	<1	5.3
	06/15/94		460	<0.5	<0.5	<0.5	1.8
	09/21/94		590	1.8	<0.5	1.1	7.6
	12/21/94		670	<0.5	<0.5	<0.5	1.8
	03/15/95		1,400	19	<5.0	7.9	48
	05/31/95		890	<2.0	<2.0	4.3	22
17371 VM	11/13/91		870	9	1	2.1	4.5
	10/14/92		<50	<0.5	<0.5	<0.5	<0.5
	12/18/92		<50	<0.5	<0.5	<0.5	<0.5
	03/16/93		500	8.7	<0.5	3.9	3.1
	06/17/93	c	NS	NS	NS	NS	NS
	09/16/93	c	NS	NS	NS	NS	NS
	12/30/93	c	NS	NS	NS	NS	NS
	03/30/94	c	NS	NS	NS	NS	NS
	06/15/94	c	NS	NS	NS	NS	NS
	09/21/94	c	NS	NS	NS	NS	NS
	12/21/94	c	NS	NS	NS	NS	NS
	03/15/95	c	NS	NS	NS	NS	NS
	05/31/95	c	NS	NS	NS	NS	NS
17372 VM	09/27/91		300	5.5	<0.60	1.3	0.72
	10/14/92		220	<1.0	<1.0	<1.0	<1.0
	12/18/92		290	3.8	0.88	0.99	1.2
	03/16/93	*	110	<0.5	<0.5	<0.5	<0.5
	06/17/93		140	<0.5	1.3	0.63	1.1
	09/15/93		120	<0.5	1.1	0.62	1.2
	12/30/93		<50	<0.5	<0.5	<0.5	<0.5
	03/30/94		<50	<0.5	<0.5	<0.5	<0.5
	06/15/94		110	<0.5	<0.5	<0.5	<0.5
	09/21/94		55	<0.5	<0.5	<0.5	<0.5
	12/21/94		<50	<0.5	<0.5	<0.5	<0.5
	03/15/95		<50	<0.50	<0.50	<0.50	<0.50
	05/31/95		60	<0.50	<0.50	<0.50	<0.50
17393 VM	11/13/91		31	<0.3	<0.3	<0.3	<0.3
	10/14/92	a	NS	NS	NS	NS	NS

Table 3 (continued)
Groundwater Analytical Data
Domestic Irrigation Wells
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

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

Well Address	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
17393 VM	12/18/92	<50	<0.5	<0.5	<0.5	<0.5
(cont.)	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5
	09/15/93	<50	<0.5	<0.5	<0.5	<0.5
	12/30/93 a	NS	NS	NS	NS	NS
	12/30/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	50	<0.5	<0.5	<0.5	<0.5
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
	09/21/94 a	NS	NS	NS	NS	NS
	12/21/94	<50	<0.5	<0.5	<0.5	<0.5
	03/15/95	<50	<0.50	<0.50	<0.50	<0.50
	05/31/95	<50	<0.50	<0.50	<0.50	<0.50

ppb = Parts per billion
H = Hacienda Avenue
< = Denotes laboratory detection limit
NS = Not sampled
VM = Via Magdalena
* = Non-typical chromatogram pattern; did not sample.
VE = Via Encinas
a. Owner not available to approve sampling access; well not sampled.
b. Pump not functioning; well not sampled.
c. Access denied by owner; well not sampled.
d. Pumping equipment obstructing sampling access; well not sampled.
e. Laboratory analyzed duplicate sample for confirmation. See certified analytical report.
Homeowners are contacted one week prior to sampling event.

Table 4

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)	TPH as Gasoline: Influent Concentration (µg/L)	TPH as Gasoline: Net Removed (pounds)	TPH as Gasoline: Removed To Date (pounds)	Benzene: Influent Concentration (µg/L)	Benzene: Net Removed (pounds)	Benzene: Removed To Date (pounds)	Primary Carbon Loading (%)
09/25/91	0	N/A	0	0	0.0	ND	N/A	0.0	N/A	0.00	0.0	0.0
09/26/91	N/A	N/A	1,144	1,144	N/A	38	0.0	0.0	4.8	0.00	0.0	0.0
10/22/91	26	96	12,844	11,700	7.6	ND	N/A	0.0	ND	0.00	0.0	0.0
11/22/91	77	93	52,532	39,688	13.0	ND	N/A	0.0	0.52	0.00	0.0	0.0
12/19/91	322	62	122,540	70,008	4.8	ND	N/A	0.0	ND	0.00	0.0	0.0
01/16/92	994	0	283,289	160,749	4.0	ND	N/A	0.0	ND	0.00	0.0	0.0
02/19/92	1,809	0	485,200	201,911	4.1	370	0.3	0.3	14	0.01	0.0	0.4
03/17/92	2,462	0	662,847	177,647	4.5	160	0.4	0.7	18	0.02	0.0	0.9
04/15/92	3,150	1	851,100	188,253	4.6	200	0.3	1.0	11	0.02	0.1	1.2
05/14/92	3,849	0	1,030,086	178,986	4.3	45	0.2	1.2	1.4	0.01	0.1	1.5
06/19/92	4,712	0	1,229,960	199,874	3.9	ND	N/A	1.2	ND	0.00	0.1	1.5
07/14/92	5,001	52	1,291,201	61,241	3.5	97	0.0	1.2	25.0	0.01	0.1	1.5
08/18/92	N/A	N/A	1,410,018	118,817	N/A	ND	N/A	1.2	ND	0.01	0.1	1.5
09/15/92	6,298	N/A	1,535,640	125,622	3.1	ND	N/A	1.2	ND	0.00	0.1	1.5
10/16/92	7,012	4	1,651,623	115,983	2.7	ND	N/A	1.2	ND	0.00	0.1	1.5
11/18/92	7,609	0	1,768,076	116,453	2.4	ND	N/A	1.2	ND	0.00	0.1	1.5
12/17/92	8,502	0	1,864,300	96,224	2.3	96	0.0	1.2	7.7	0.00	0.1	1.5
01/18/93	8,798	61	1,915,165	50,865	2.9	100	0.0	1.3	13	0.00	0.1	1.6
02/22/93	9,607	0	2,096,930	181,765	3.7	480	0.4	1.7	36	0.04	0.1	2.1
03/15/93	10,113	0	2,205,833	108,903	3.6	310	0.4	2.1	29	0.03	0.2	2.6
04/09/93	10,517	33	2,298,770	92,937	3.8	140	0.2	2.2	11	0.02	0.2	2.8
05/13/93	11,211	15	2,449,160	150,390	3.6	530	0.4	2.7	27	0.02	0.2	3.3
06/04/93	11,734	1	2,543,500	94,340	3.0	170	0.3	2.9	5.2	0.01	0.2	3.7
07/20/93	12,573	24	2,689,697	146,197	2.9	200	0.2	3.2	12	0.01	0.2	4.0
08/16/93	13,219	0	2,791,366	101,669	2.6	150	0.1	3.3	4.9	0.01	0.2	4.1
09/13/93	13,868	0	2,884,736	93,370	2.3	80	0.1	3.4	2.2	0.00	0.2	4.3
10/08/93	14,485	1	2,951,737	67,001	1.9	ND	0.0	3.4	ND	0.00	0.2	4.3
11/19/93	15,494	0	3,036,032	84,295	1.4	ND	0.0	3.4	ND	0.00	0.2	4.3
12/21/93	16,260	0	3,113,565	77,533	1.7	73	0.0	3.5	3.5	0.00	0.2	4.3
01/18/94	16,939	0	3,190,900	77,335	1.9	60	0.0	3.5	3.1	0.00	0.2	4.4
02/17/94	17,658	0	3,273,720	82,820	1.9	ND	0.0	3.5	2.5	0.00	0.2	4.4
03/15/94	18,235	7	3,344,249	70,529	2.0	ND	0.0	3.5	ND	0.00	0.2	4.4
04/21/94	18,849	31	3,418,537	74,288	2.0	110	0.0	3.5	7.8	0.00	0.2	4.4
05/13/94	19,351	5	3,478,910	60,373	2.0	230	0.1	3.6	8.3	0.00	0.2	4.5
06/14/94	19,680	57	3,518,608 a	39,698	2.0	230	0.1	3.7	12	0.00	0.3	4.6
07/14/94	20,145	35	3,574,408 b	55,800	2.0	270	0.1	3.8	6.9	0.00	0.3	4.8
08/17/94	20,920	5	51,260 c	91,580	2.0	ND	0.1	3.9	1.8	0.00	0.3	4.9
09/12/94	21,549	0	120,910	69,650	1.8	ND	0.0	3.9	ND	0.00	0.3	4.9
10/18/94	22,408	1	211,880	90,970	1.8	ND	0.0	3.9	ND	0.00	0.3	4.9
11/15/94	23,080	0	280,840	68,960	1.7	ND	0.0	3.9	0.66	0.00	0.3	4.9
12/05/94	23,489	15	325,830	44,990	1.8	470	0.1	4.0	32	0.01	0.3	5.0
01/04/95	24,205	1	408,740	82,910	1.9	ND	0.2	4.2	1.1	0.01	0.3	5.2
02/06/95	24,926	9	499,690	90,950	2.1	100	0.0	4.2	2.4	0.00	0.3	5.3
03/02/95	25,465	6	569,180	69,490	2.1	ND	0.0	4.2	ND	0.00	0.3	5.3

Table 4 (continued)
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)	TPH as Gasoline: Influent Concentration (µg/L)	TPH as Gasoline: Net Removed (pounds)	TPH as Gasoline: Removed To Date (pounds)	Benzene: Influent Concentration (µg/L)	Benzene: Net Removed (pounds)	Benzene: Removed To Date (pounds)	Primary Carbon Loading (%)
04/04/95	26,253	1	672,510	103,330	2.2	290	0.1	4.4	6.6	0.00	0.3	5.3
05/02/95	26,924	0	760,350	87,840	2.2	240	0.2	4.6	7.1	0.01	0.3	5.3
06/05/95	27,721	2	848,810	88,460	1.9	ND	0.1	4.6	ND	0.00	0.3	5.3
REPORTING PERIOD: 03/02/95 - 06/05/95												
TOTAL GALLONS EXTRACTED:				**4,463,538**								
PERIOD GALLONS EXTRACTED:				**279,630**								
TOTAL POUNDS REMOVED:								**4.6**			**0.3**	
TOTAL GALLONS REMOVED:								**0.7**			**0.04**	
PERIOD POUNDS REMOVED:							**0.3**			**0.01**		
PERIOD GALLONS REMOVED:							**0.05**			**0.00**		
AVERAGE PERIOD FLOW RATE (gpm):												**2.1**
AVERAGE PERCENT DOWNTIME SINCE START-UP:												**14.4%**
PERIOD PERCENT OPERATIONAL:												**99%**

TPH = Total petroleum hydrocarbons
gpm = Gallons per minute
µg/L = Micrograms per liter
N/A = Not available or not applicable
ND = Not detected above detection limit
Densities: Gasoline = 6.1 lbs/gallon; Benzene = 7.34 lbs/gallon.

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.

Primary carbon loading estimated using isotherm of 8 percent by weight.

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 5
Treatment System Analytical Data
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

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

Date Sampled	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)
INFL (influent to primary carbon)					
09/26/91	38	4.8	0.6	1.6	1.1
10/22/91	<30	<0.3	<0.3	<0.3	<0.3
11/22/91	<30	0.5	<0.3	<0.3	<0.3
12/19/91	<30	<0.3	<0.3	<0.3	<0.3
01/16/91	<30	<0.3	<0.3	<0.3	<0.3
02/19/92	370	14	0.34	14	2.4
03/17/92	160	18	0.32	0.56	1.6
04/15/92	200	11	<0.3	7.3	0.77
05/14/92	45	1.4	<0.3	<0.3	<0.3
06/19/92	<30	<0.3	<0.3	<0.3	<0.3
07/14/92	97	25	<0.5	8.5	<0.5
08/18/92	<50	<0.5	<0.5	<0.5	<0.5
09/15/92	<50	<0.5	<0.5	<0.5	<0.5
10/16/92	<50	<0.5	<0.5	<0.5	<0.5
11/18/92	<50	<0.5	<0.5	<0.5	<0.5
12/17/92	96	7.7	13	0.56	9.7
01/18/93	100	13	6.6	1.1	11
02/22/93	460	36	29	4.9	96
03/15/93	310	29	14	4.9	55
04/09/93	140	11	2.8	2.6	17
05/13/93	530	27	12	18	96
06/04/93	170	5.2	1.6	2.5	23
07/20/93	200	12	0.91	8.2	29
08/16/93	150	4.9	0.63	2.9	15
09/13/93	80	2.2	<0.5	<0.5	4.8
10/08/93	<50	<0.5	<0.5	<0.5	<0.5
11/19/93	<50	<0.5	<0.5	<0.5	<0.5
12/21/93	73	3.5	<0.5	1.9	8.4
01/18/94	60	3.1	<0.5	3.2	4.3
02/17/94	<50	2.5	<0.5	2.1	3.1
03/15/94	<50	<0.5	<0.5	<0.5	<0.5
04/21/94	110	7.8	<1.0	9.6	<1.0
05/13/94	230	8.3	<0.5	14	6.0
06/14/94	230	12	<0.5	16	1.5
07/14/94	270	6.9	<0.5	15	1.9
08/18/94	<50	1.8	<0.5	1.5	<0.5
09/12/94	<50	<0.5	<0.5	<0.5	<0.5
10/18/94	<50	<0.5	<0.5	<0.5	<0.5
11/05/94	<50	0.66	<0.5	2.6	<0.5
12/05/94	470	32	0.59	29	6.2
01/04/95	<50	1.1	<0.50	1.4	<0.50
02/06/95	100	2.4	1.1	1.2	2.8
03/02/95	<50	<0.50	<0.50	<0.50	<0.50
04/04/95	290	6.6	<0.50	10	1.7
05/02/95	240	7.1	<0.50	3.2	1.6
06/05/95	<50	<0.50	<0.50	<0.50	<0.50

Table 5 (continued)
Treatment System Analytical Data
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

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

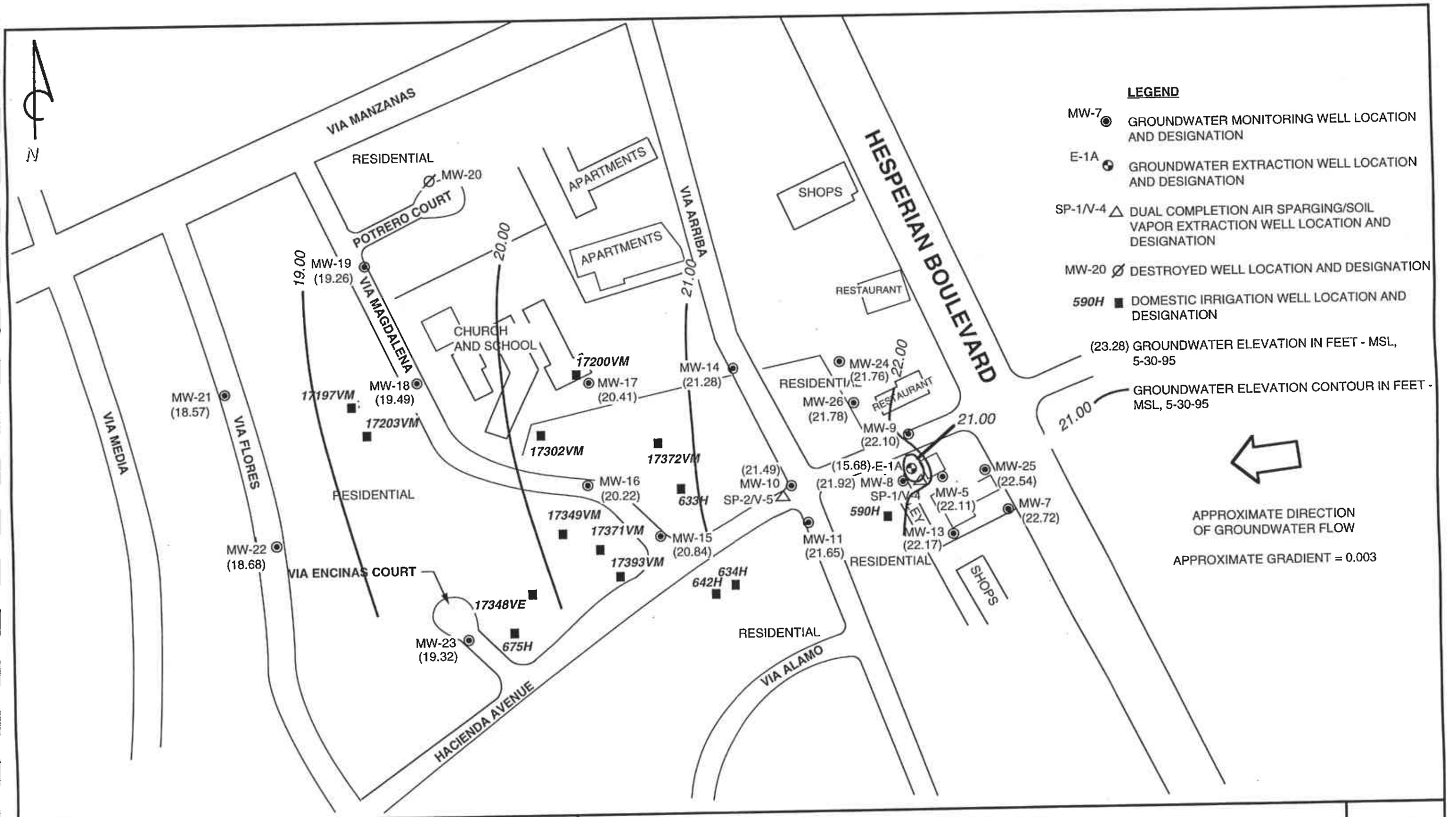
Date Sampled	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)
MID-1 (between carbons)					
09/26/91	<30	<0.3	<0.3	<0.3	<0.3
10/22/91	<30	<0.3	<0.3	<0.3	<0.3
12/19/91	<30	<0.3	<0.3	<0.3	<0.3
01/16/91	<30	<0.3	<0.3	<0.3	<0.3
02/19/92	<30	<0.3	<0.3	<0.3	<0.3
03/17/92	<30	<0.3	<0.3	<0.3	<0.3
04/15/92	<30	<0.3	<0.3	<0.3	<0.3
05/14/92	<30	<0.3	<0.3	<0.3	<0.3
06/19/92	<30	<0.3	<0.3	<0.3	<0.3
07/14/92	NS	NS	NS	NS	NS
08/18/92	NS	NS	NS	NS	NS
09/15/92	NS	NS	NS	NS	NS
10/16/92	NS	NS	NS	NS	NS
11/18/92	NS	NS	NS	NS	NS
12/17/92	NS	NS	NS	NS	NS
01/18/93	NS	NS	NS	NS	NS
02/22/93	NS	NS	NS	NS	NS
03/15/93	NS	NS	NS	NS	NS
04/09/93	NS	NS	NS	NS	NS
05/13/93	NS	NS	NS	NS	NS
06/04/93	NS	NS	NS	NS	NS
07/14/94	ND	ND	ND	ND	ND
08/17/94	NS	NS	NS	NS	NS
09/12/94	NS	NS	NS	NS	NS
10/18/94	NS	NS	NS	NS	NS
11/05/94	NS	NS	NS	NS	NS
12/05/94	NS	NS	NS	NS	NS
01/04/95	NS	NS	NS	NS	NS
02/06/95	NS	NS	NS	NS	NS
03/02/95	NS	NS	NS	NS	NS
EFFL (effluent to sewer)					
09/26/91	<30	<0.3	<0.3	<0.3	<0.3
10/22/91	<30	<0.3	<0.3	<0.3	<0.3
11/22/91	<30	<0.3	<0.3	<0.3	<0.3
12/19/91	<30	<0.3	<0.3	<0.3	<0.3
01/16/91	<30	<0.3	<0.3	<0.3	<0.3
02/19/92	<30	<0.3	<0.3	<0.3	<0.3
03/17/92	<30	<0.3	<0.3	<0.3	<0.3
04/15/92	<30	<0.3	<0.3	<0.3	<0.3
05/14/92	<30	<0.3	<0.3	<0.3	<0.3
06/19/92	<30	<0.3	<0.3	<0.3	<0.3
07/14/92	<50	<0.5	<0.5	<0.5	<0.5
08/18/92	<50	<0.5	<0.5	<0.5	<0.5
09/15/92	<50	<0.5	<0.5	<0.5	<0.5
10/16/92	<50	<0.5	<0.5	<0.5	<0.5
11/18/92	<50	<0.5	<0.5	<0.5	<0.5
12/17/92	<50	<0.5	<0.5	<0.5	<0.5

Table 5 (continued)
Treatment System Analytical Data
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

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

Date Sampled	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)
EFFL (effluent to sewer) (cont.)					
01/18/93	<50	<0.5	<0.5	<0.5	<0.5
02/22/93	<50	<0.5	<0.5	<0.5	<0.5
03/15/93	<50	<0.5	<0.5	<0.5	<0.5
04/09/93	<50	<0.5	<0.5	<0.5	<0.5
05/13/93	<50	<0.5	<0.5	<0.5	<0.5
06/04/93	<50	<0.5	<0.5	<0.5	<0.5
07/20/93	<50	<0.5	<0.5	<0.5	<0.5
08/16/93	<50	<0.5	<0.5	<0.5	<0.5
09/13/93	<50	<0.5	<0.5	<0.5	<0.5
10/08/93	<50	<0.5	<0.5	<0.5	<0.5
11/19/93	<50	<0.5	<0.5	<0.5	<0.5
12/21/93	<50	<0.5	<0.5	<0.5	<0.5
01/18/94	<50	<0.5	<0.5	<0.5	<0.5
02/17/94	<50	<0.5	<0.5	<0.5	<0.5
03/15/94	<50	<0.5	<0.5	<0.5	<0.5
04/21/94	<50	<0.5	<0.5	<0.5	<0.5
05/13/94	<50	<0.5	<0.5	<0.5	<0.5
06/14/94	<50	<0.5	<0.5	<0.5	<0.5
07/14/94	<50	<0.5	<0.5	<0.5	<0.5
08/17/94	<50	<0.5	<0.5	<0.5	<0.5
09/12/94	<50	<0.5	<0.5	<0.5	<0.5
10/18/94	<50	<0.5	<0.5	<0.5	<0.5
11/05/94	<50	<0.5	<0.5	<0.5	<0.5
12/05/94	<50	<0.5	<0.5	<0.5	<0.5
01/04/95	<50	<0.50	<0.50	<0.50	<0.50
02/06/95	<50	<0.50	<0.50	<0.50	<0.50
03/02/95	<50	<0.50	<0.50	<0.50	<0.50
04/04/95	<50	<0.50	<0.50	<0.50	<0.50
05/02/95	<50	<0.50	<0.50	<0.50	<0.50
06/05/95	<50	<0.50	<0.50	<0.50	<0.50

ppb	=	Parts per billion
<	=	Denotes minimum laboratory detection limit.
NS	=	Not sampled
ND	=	Not detected



PACIFIC ENVIRONMENTAL GROUP, INC.

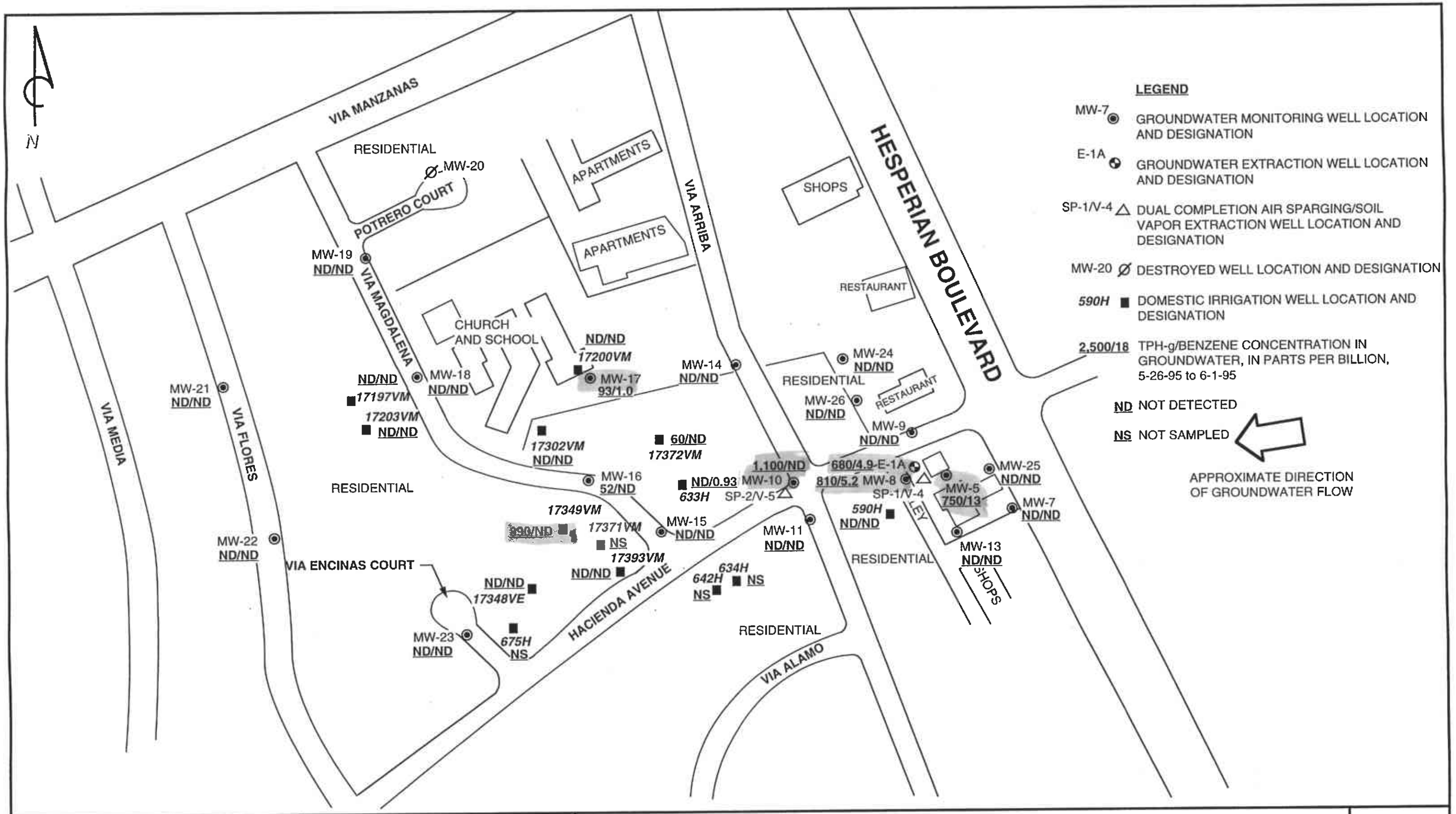
APPROXIMATE SCALE
0 150 300 FEET

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

GROUNDWATER ELEVATION CONTOUR MAP

FIGURE: 1
PROJECT: 330-006.2B

10/09/95



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: 330-006.2B

10/09/95

Figure 3
Mass Removal Trend for the Groundwater Extraction System

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

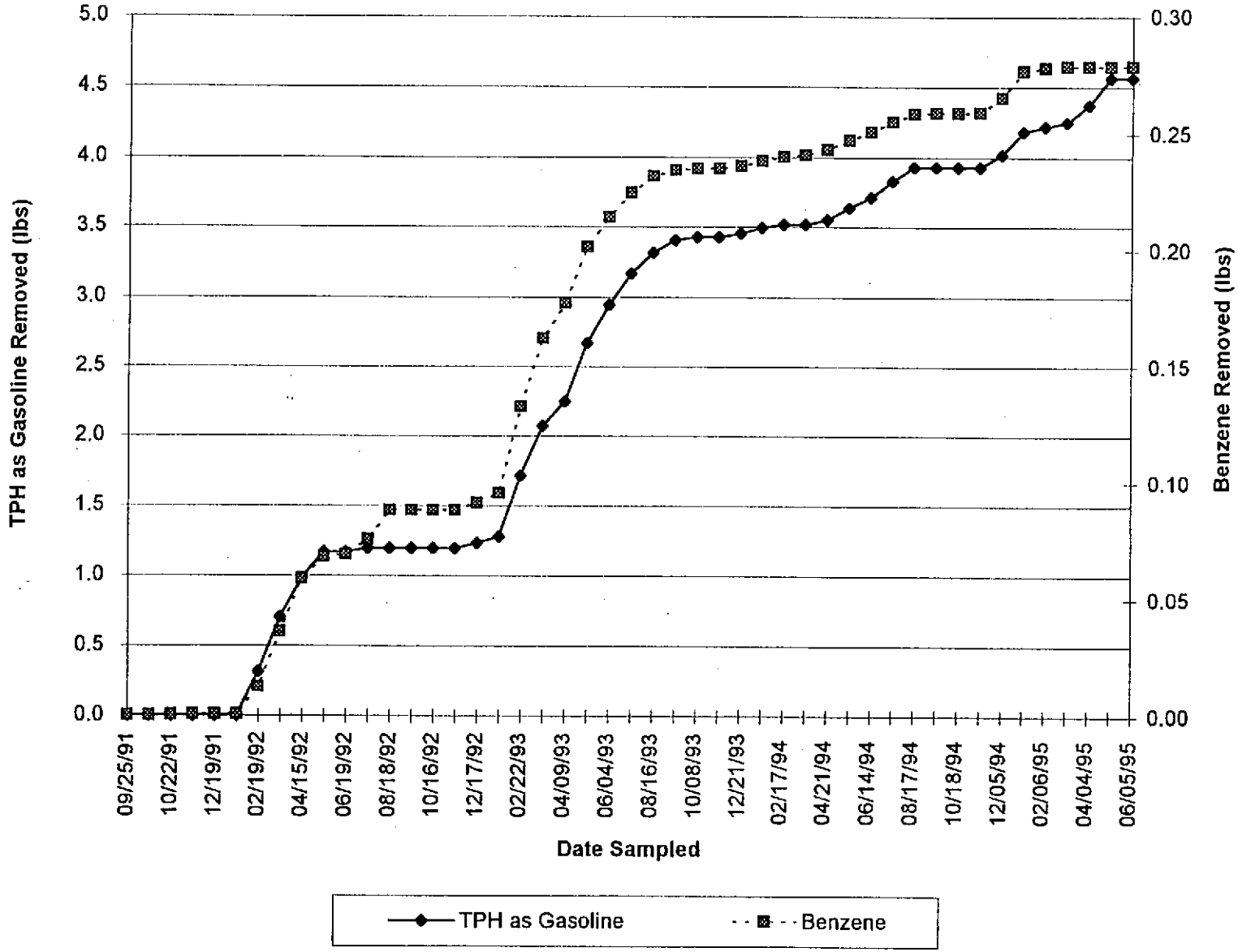
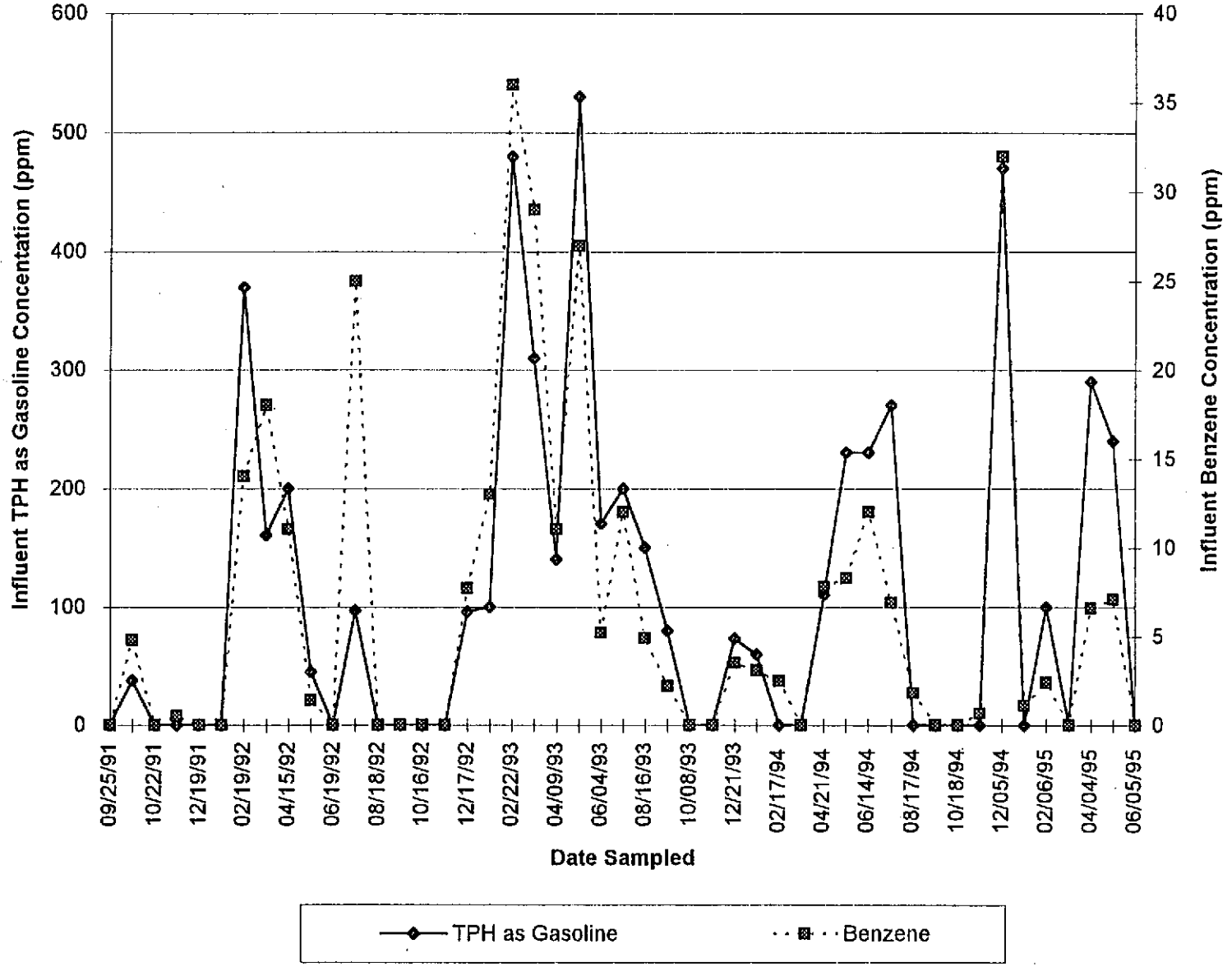


Figure 4
Concentration Trends for the Groundwater Extraction System

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



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.

Laboratory Procedures

The groundwater samples were analyzed for the presence of total petroleum hydrocarbons calculated as gasoline, benzene, toluene, ethylbenzene, and xylenes. The analyses were performed according to EPA Methods 8015 (modified), 8020, and 5030 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 reports. Certified analytical reports, chain-of-custody documentation, and field data sheets are presented as Attachment B.

ATTACHMENT B

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

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

Project: 330-006.2G/0608, San Lorenzo

Enclosed are the results from samples received at Sequoia Analytical on June 2, 1995. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
950607501	LIQUID, MW-5	6/1/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX
950607502	LIQUID, MW-7	6/1/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX
950607503	LIQUID, MW-8	6/1/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX
950607504	LIQUID, MW-9	6/1/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX
950607505	LIQUID, MW-10	6/1/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX
950607506	LIQUID, MW-11	6/1/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX
950607507	LIQUID, MW-13	6/1/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX
950607508	LIQUID, MW-14	6/1/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX
950607509	LIQUID, MW-24	6/1/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX
950607510	LIQUID, MW-25	6/1/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX
950607511	LIQUID, MW-26	6/1/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
950607512	LIQUID, E1-A	6/1/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX
950607513	LIQUID, TB-3	6/1/95	TPHGB Purgeable TPH/BTEX

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Quality Assurance Department

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo

Lab Proj. ID: 9506075

Sampled: 06/01/95
Received: 06/02/95
Analyzed: see below

Reported: 06/13/95

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9506075-01				
Sample Desc : LIQUID,MW-5				
Nitrate as Nitrate	mg/L	06/03/95	0.10	N.D.
Sulfate	mg/L	06/03/95	0.10	19
Lab No: 9506075-02				
Sample Desc : LIQUID,MW-7				
Nitrate as Nitrate	mg/L	06/03/95	0.10	42
Sulfate	mg/L	06/03/95	0.10	68
Lab No: 9506075-03				
Sample Desc : LIQUID,MW-8				
Nitrate as Nitrate	mg/L	06/03/95	0.10	N.D.
Sulfate	mg/L	06/03/95	0.10	33
Lab No: 9506075-04				
Sample Desc : LIQUID,MW-9				
Nitrate as Nitrate	mg/L	06/03/95	0.10	27
Sulfate	mg/L	06/03/95	0.10	67
Lab No: 9506075-05				
Sample Desc : LIQUID,MW-10				
Nitrate as Nitrate	mg/L	06/03/95	0.10	N.D.
Sulfate	mg/L	06/03/95	0.10	8.1
Lab No: 9506075-06				
Sample Desc : LIQUID,MW-11				
Nitrate as Nitrate	mg/L	06/03/95	0.10	43
Sulfate	mg/L	06/03/95	0.10	75

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Lab Proj. ID: 9506075

Sampled: 06/01/95
Received: 06/02/95
Analyzed: see below

Attention: Maree Doden

Reported: 06/13/95

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9506075-07 Sample Desc : LIQUID,MW-13				
Nitrate as Nitrate	mg/L	06/03/95	0.10	43
Sulfate	mg/L	06/03/95	0.10	66
Lab No: 9506075-08 Sample Desc : LIQUID,MW-14				
Nitrate as Nitrate	mg/L	06/03/95	0.10	27
Sulfate	mg/L	06/03/95	0.10	62
Lab No: 9506075-09 Sample Desc : LIQUID,MW-24				
Nitrate as Nitrate	mg/L	06/03/95	0.10	29
Sulfate	mg/L	06/03/95	0.10	58
Lab No: 9506075-10 Sample Desc : LIQUID,MW-25				
Nitrate as Nitrate	mg/L	06/03/95	0.10	31
Sulfate	mg/L	06/03/95	0.10	73
Lab No: 9506075-11 Sample Desc : LIQUID,MW-26				
Nitrate as Nitrate	mg/L	06/03/95	0.10	29
Sulfate	mg/L	06/03/95	0.10	62
Lab No: 9506075-12 Sample Desc : LIQUID,E1-A				
Nitrate as Nitrate	mg/L	06/03/95	0.10	23
Sulfate	mg/L	06/03/95	0.10	54

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Sample Descript: MW-5
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506075-01

Sampled: 06/01/95
Received: 06/02/95

Analyzed: 06/06/95
Reported: 06/13/95

QC Batch Number: GC060695BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**750**
Benzene	**0.50**	**13**
Toluene	0.50	N.D.
Ethyl Benzene	**0.50**	**1.1**
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Weathered Gas		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	108

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Sample Descript: MW-7
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506075-02

Sampled: 06/01/95
Received: 06/02/95

Analyzed: 06/06/95
Reported: 06/13/95

QC Batch Number: GC060695BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	99

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Sample Descript: MW-8
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506075-03

Sampled: 06/01/95
Received: 06/02/95

Analyzed: 06/06/95
Reported: 06/13/95

QC Batch Number: GC060695BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	810
Benzene	0.50	5.2
Toluene	0.50	N.D.
Ethyl Benzene	0.50	0.69
Xylenes (Total)	0.50	0.71
Gas & Unidentified HC		<C8

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	83

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Sample Descript: MW-9
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506075-04

Sampled: 06/01/95
Received: 06/02/95

Analyzed: 06/06/95
Reported: 06/13/95

QC Batch Number: GC060695BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	99

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

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Pacific Environmental Group
2025 Gateway Place, Suite 440
an Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Sample Descript: MW-10
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506075-05

Sampled: 06/01/95
Received: 06/02/95

Analyzed: 06/06/95
Reported: 06/13/95

Batch Number: GC060695BTEX17A
trument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	125	1100
enzene	1.2	N.D.
oluene	1.2	N.D.
Ethyl Benzene	1.2	N.D.
Xylenes (Total)	1.2	N.D.
as & Unidentified HC		>C12

Surrogates	Control Limits %		% Recovery
rifluorotoluene	70	130	91

alytes reported as N.D. were not present above the stated limit of detection.

EQUOIA ANALYTICAL - ELAP #1210

ileen Manning
ject Manager

Sequoia Analytical

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Pacific Environmental Group
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San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Sample Descript: MW-11
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506075-06

Sampled: 06/01/95
Received: 06/02/95

Analyzed: 06/06/95
Reported: 06/13/95

QC Batch Number: GC060695BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	96

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Sample Descript: MW-13
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506075-07

Sampled: 06/01/95
Received: 06/02/95

Analyzed: 06/06/95
Reported: 06/13/95

QC Batch Number: GC060695BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	96

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Sample Descript: MW-14
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506075-08

Sampled: 06/01/95
Received: 06/02/95

Analyzed: 06/06/95
Reported: 06/13/95

Batch Number: GC060695BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	88

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Sample Descript: MW-24
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506075-09

Sampled: 06/01/95
Received: 06/02/95

Analyzed: 06/06/95
Reported: 06/13/95

QC Batch Number: GC060695BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	91

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Sample Descript: MW-25
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506075-10

Sampled: 06/01/95
Received: 06/02/95

Analyzed: 06/06/95
Reported: 06/13/95

QC Batch Number: GC060695BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	90

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Sample Descript: MW-26
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506075-11

Sampled: 06/01/95
Received: 06/02/95

Analyzed: 06/06/95
Reported: 06/13/95

QC Batch Number: GC060695BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	101

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Sample Descript: E1-A
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506075-12

Sampled: 06/01/95
Received: 06/02/95

Analyzed: 06/06/95
Reported: 06/13/95

QC Batch Number: GC060695BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	680
Benzene	0.50	4.9
Toluene	0.50	N.D.
Ethyl Benzene	0.50	18
Xylenes (Total)	0.50	2.4
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	100

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Kathleen Manning
Project Manager

Sequoia Analytical

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Sample Descript: TB-3
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506075-13

Sampled: 06/01/95
Received: 06/02/95

Analyzed: 06/06/95
Reported: 06/13/95

QC Batch Number: GC060695BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	102

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

Client Project ID: 330-006.2G/0608, San Lorenzo
Matrix: LIQUID
Work Order #: 9506075 01-04
Reported: Jun 16, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Nitrate	Sulfate
QC Batch#:	IN0603953000ACB	IN0603953000ACB
Analy. Method:	EPA 300.0	EPA 300.0
Prep. Method:	N.A.	N.A.
Analyst:	S. Flynn	S. Flynn
MS/MSD #:	950607504	950607504
Sample Conc.:	51	99
Prepared Date:	6/3/95	6/3/95
Analyzed Date:	6/3/95	6/3/95
Instrument I.D.#:	INIC1	INIC1
Conc. Spiked:	100 mg/L	100 mg/L
Result:	140	190
MS % Recovery:	89	91
Dup. Result:	140	180
MSD % Recov.:	89	81
RPD:	0.0	5.4
RPD Limit:	0-30	0-30

LCS #:		
Prepared Date:		
Analyzed Date:		
Instrument I.D.#:		
Conc. Spiked:		
LCS Result:		
LCS % Recov.:		

MS/MSD LCS Control Limits	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

Sequoia Analytical

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Pacific Environmental Group	Client Project ID:	330-006.2G/0608, San Lorenzo	
2025 Gateway Place, Suite 440	Matrix:	LIQUID	
San Jose, CA 95110			
Attention: Maree Doden	Work Order #:	9506075 05-12	Reported: Jun 16, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Nitrate	Sulfate
QC Batch#:	In0603953000ACC	IN0603953000ACB
Analy. Method:	EPA 300.0	EPA 300.0
Prep. Method:	N.A.	N.A.
Analyst:	S. Flynn	S. Flynn
MS/MSD #:	950607509	950607509
Sample Conc.:	51	91
Prepared Date:	6/3/95	6/3/95
Analyzed Date:	6/3/95	6/3/95
Instrument I.D.#:	INIC1	INIC1
Conc. Spiked:	100 mg/L	100 mg/L
Result:	140	180
MS % Recovery:	89	89
Dup. Result:	130	180
MSD % Recov.:	79	89
RPD:	7.4	0.0
RPD Limit:	0-30	0-30

LCS #:		
Prepared Date:		
Analyzed Date:		
Instrument I.D.#:		
Conc. Spiked:		
LCS Result:		
LCS % Recov.:		

MS/MSD LCS Control Limits	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

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Pacific Environmental Group	Client Project ID:	330-006.2G/0608, San Lorenzo	
2025 Gateway Place, Suite 440	Matrix:	LIQUID	
San Jose, CA 95110			
Attention: Maree Doden	Work Order #:	9506075 11, 13	Reported: Jun 16, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC060695BTEX02A	GC060695BTEX02A	GC060695BTEX02A	GC060695BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950603102	950603102	950603102	950603102
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/6/95	6/6/95	6/6/95	6/6/95
Analyzed Date:	6/6/95	6/6/95	6/6/95	6/6/95
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.5	9.5	9.5	29
MS % Recovery:	95	95	95	97
Dup. Result:	10	10	10	30
MSD % Recov.:	100	100	100	100
RPD:	5.1	5.1	5.1	3.4
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

Sequoia Analytical

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

Client Project ID: 330-006.2G/0608, San Lorenzo
Matrix: LIQUID
Work Order #: 9506075 01-04, 06-10
Reported: Jun 16, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC060695BTEX03A	GC060695BTEX03A	GC060695BTEX03A	GC060695BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950603103	950603103	950603103	950603103
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/6/95	6/6/95	6/6/95	6/6/95
Analyzed Date:	6/6/95	6/6/95	6/6/95	6/6/95
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.3	8.0	9.3	27
MS % Recovery:	83	80	93	90
Dup. Result:	8.7	8.4	10	29
MSD % Recov.:	87	84	100	97
RPD:	4.7	4.9	7.3	7.1
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group	Client Project ID:	330-006.2G/0608, San Lorenzo	
2025 Gateway Place, Suite 440	Matrix:	LIQUID	
San Jose, CA 95110			
Attention: Maree Doden	Work Order #:	9506075 05	Reported: Jun 16, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC060695BTEX17A	GC060695BTEX17A	GC060695BTEX17A	GC060695BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950603102	950603102	950603102	950603102
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/6/95	6/6/95	6/6/95	6/6/95
Analyzed Date:	6/6/95	6/6/95	6/6/95	6/6/95
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.9	8.5	8.4	25
MS % Recovery:	89	85	84	83
Dup. Result:	7.8	7.9	7.9	24
MSD % Recov.:	78	79	79	80
RPD:	13	7.3	6.1	4.1
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				
MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

CLIENT NAME: PEG/ARCO
REC. BY (PRINT): RF

WORKORDER: 9506075
DATE OF LOG-IN: 6/2/95

CIRCLE THE APPROPRIATE RESPONSE

1. Custody Seal(s): Present / (Absent)
   Intact / Broken*
2. Custody Seal Nos.: Put in Remarks Section
3. Chain-of-Custody Records: (Present) / Absent*
4. Traffic Reports or Packing List: Present / (Absent)
5. Airbill: Airbill / Sticker
   Present / (Absent)
6. Airbill No.:
7. Sample Tags: (Present) / Absent*
   Sample Tag Nos.: (Listed) / Not Listed on Chain-of-Custody
8. Sample Condition: (Intact) / Broken* / Leaking*
9. Does information on custody reports, traffic reports and sample tags agree? (Yes) No*
10. Proper preservatives used: (Yes) No*
11. Date Rec. at Lab: 6/2/95
12. Temp. Rec. at Lab: 14°C
13. Time Rec. at Lab: 1210

LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION(ETC.)
01	A-C	MW-5	3 VOA's	Liq	6/1/95	
	D	↓	1 LP			
02	A-D	MW-7	Same			
03		-8				
04		-9				
05		-10				
06		-11				
07		-13				
08		-14				
09		-24				
10		-25				
11		-26				
12	↓	EB-A	↓			
13	AB	TB-3	2 VOA's	↓	↓	

MA 6/2/95

* if Circled, contact Project manager and attach record of resolution

ARCO Products Company — Division of AtlanticRichfieldCompany

330-006.20 Task Order No. 170100

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer MIKE WHELAN	Telephone no. (ARCO)	Telephone no. (Consultant) 441-7500	Fax no. (Consultant) 441-7539
Consultant name PACIFIC ENVIRONMENTAL GROUP	Address (Consultant) 2025 GATEWAY PLACE #440 SAN JOSE, CA 95110		Contract number 07-073

Method of shipment: COURIER

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 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 ☐	SILICA GEL	NITRATE
MW-5	-	3		X		X	HCL	6-1-95	1305		X											
MW-7	-								1150													
MW-8	-								1235													
MW-9	-								1125													
MW-10	-								1025													
MW-11	-								1040													
MW-13	-								1205													
MW-14	-								1000													
MW-21	-								1105													
MW-25	-								1135													
MW-26	-								1055													
EI-A	-	↓					↓		1325		↓											
MW-5	-	1					NP		1305												X	X
MW-7	-	1					NP		1150												X	X
MW-8	-	1					NP		1235												X	X
MW-9	-	1		↓			NP		1125												X	X

Special detection Limit/reporting

Special QA/QC

Remarks: 1 of 2 — last batch

Lab number: 9506075

Turnaround time

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

Condition of sample:

Temperature received:

	Date	Time	
Relinquished by sampler	6-2-95	800	Received by
Relinquished by	6/2/95	10:40	Received by
Relinquished by	6-2	13:00	Received by laboratory

Date: 6/2/95 Time: 1210

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

APC-3292 (2-91)

ARCO Products Company Division of AtlanticRichfieldCompany — 3300626 — **Task Order No.** 170700 — **Chain of Custody**

ARCO Facility no. 0608	City (Facility) SANLORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer MIKE HOGLAN	Telephone no. (ARCO)	Telephone no. (Consultant) 441-7500	Fax no. (Consultant) 441-7539
Consultant name Pacific Environmental Group	Address (Consultant) 2025 GATEWAY PLACE #440 SAN JOSE, CA 9510		Contract number 07-073

Method of shipment: COURIER

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 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 ☐	SULFATE	NITRATE
MW-10		1		X		X	NP	6-1-95	1025												X	X
MW-11		1							1040												X	X
MW-13		1							1205												X	X
MW-14		1							1000												X	X
MW-24		1							1105												X	X
MW-25		1							1135												X	X
MW-26		1							1055												X	X
E-I-A		1							1325												X	X
TB-3		2					HCL	6-1-95	NA		X											

Condition of sample:

Temperature received:

	Date	Time			
Relinquished by sampler	6-2-95	800	Received by	M Dodson	6/2/95 0850
Relinquished by	6/2/95	10:40	Received by		
Relinquished by	6-2	12:00	Received by laboratory		Date 6/2/95 Time 1210

Special detection Limit/reporting

Special QA/QC

Remarks: 2 of 2 — last batch

Lab number: 9506075

Turnaround time

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

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

APC-3292 (2-91)

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

Project: 330-006.2G/0608, San Lorenzo

Enclosed are the results from samples received at Sequoia Analytical on June 2, 1995. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
950610801	LIQUID, 17348VE	6/2/95	Nitrate Sulfate

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Bruce Fletcher
Quality Assurance Department

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Lab Proj. ID: 9506108

Sampled: 06/02/95
Received: 06/02/95
Analyzed: see below

Attention: Maree Doden

Reported: 06/14/95

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9506108-01				
Sample Desc : LIQUID,17348VE				
Nitrate as Nitrate	mg/L	06/03/95	0.10	22
Sulfate	mg/L	06/03/95	0.10	85

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group	Client Project ID:	330-006.2G/0608, San Lorenzo	
2025 Gateway Place, Suite 440	Matrix:	Liquid	
San Jose, CA 95110			
Attention: Maree Doden	Work Order #:	9506108 01	Reported: Jun 16, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Nitrate	Sulfate
QC Batch#:	IN0603953000ACB	IN0603953000ACB
Analy. Method:	EPA 300.0	EPA 300.0
Prep. Method:	N.A.	N.A.
Analyst:	S. Flynn	S. Flynn
MS/MSD #:	950607504	950607504
Sample Conc.:	51	99
Prepared Date:	6/3/95	6/3/95
Analyzed Date:	6/3/95	6/3/95
Instrument I.D.#:	INIC1	INIC1
Conc. Spiked:	100 mg/L	100 mg/L
Result:	140	190
MS % Recovery:	89	91
Dup. Result:	140	180
MSD % Recov.:	89	81
RPD:	0.0	5.4
RPD Limit:	0-30	0-30

LCS #:		
Prepared Date:		
Analyzed Date:		
Instrument I.D.#:		
Conc. Spiked:		
LCS Result:		
LCS % Recov.:		

MS/MSD LCS Control Limits	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

CLIENT NAME: PEG
REC. BY (PRINT): LKrause

WORKORDER: 95108
DATE OF LOG-IN: 6-3-95

CIRCLE THE APPROPRIATE RESPONSE

1. Custody Seal(s) Present / (Absent)
   Intact / Broken*
2. Custody Seal Nos.: Put in Remarks Section
3. Chain-of-Custody Records: (Present) / Absent*
4. Traffic Reports or Packing List: Present / (Absent)
5. Airbill: Airbill / Sticker (Present) / Absent
6. Airbill No.:
7. Sample Tags: (Present) / Absent*
   Sample Tag Nos.: (Listed) / Not Listed on Chain-of-Custody
8. Sample Condition: (Intact) / Broken* / Leaking*
9. Does information on custody reports, traffic reports and sample tags agree? (Yes) / No*
10. Proper preservatives used: (Yes) / No*
11. Date Rec. at Lab: 6/2/95
12. Temp. Rec. at Lab: 14°C
13. Time Rec. at Lab: 1545

LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION(ETC.)
1	a	17348VE	1L plain	liq	6/2	

6/2

* If Circled, contact Project manager and attach record of resolution

Revision 3/21/95

ARCO Products Company — Division of AtlanticRichfieldCompany — 530006.26 — Task Order No. 170100 — Chain of Custody

ARCO Facility no. 2608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer MIKE HOGAN	Telephone no. (ARCO)	Telephone no. (Consultant) 441-7500	Fax no. (Consultant) 441-7539	Contract number 07-073
Consultant name PACIFIC ENVIRONMENTAL GROUP	Address (Consultant) 2025 GATEWAY PL. #220 SAN JOSE, CA 95110		Method of shipment

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Water	Other	Preservation: Ice	Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA 8602/8020/8015	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 ☐	SULFATE	NITRATE
173488VE		1		X		X	NP	6-2-95	1500												X	X

Special detection Limit/reporting

Special QA/QC

Remarks: 1 of 1

Lab number: 9506108

Turnaround time

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

Condition of sample:

Temperature received:

	Date	Time	
Relinquished by sampler	6-2-95	1545	Received by
Relinquished by			Received by
Relinquished by			Received by laboratory — Date 6/2/95 — Time 1545

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

APC-3292 (2-91)

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo

Lab Proj. ID: 9505L35

Sampled: 05/26/95
Received: 05/31/95
Analyzed: see below

Reported: 06/12/95

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9505L35-01				
Sample Desc : LIQUID,590H				
Nitrate as Nitrate	mg/L	06/01/95	0.10	38
Sulfate	mg/L	06/01/95	0.10	70

RECEIVED
JUN 15 1995
PACIFIC ENVIRONMENTAL GROUP, INC.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo

Lab Proj. ID: 9505L35

Sampled: 05/30/95
Received: 05/31/95
Analyzed: see below

Reported: 06/12/95

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9505L35-02				
Sample Desc : LIQUID,17200 VM				
Nitrate as Nitrate	mg/L	06/01/95	0.10	31
Sulfate	mg/L	06/01/95	0.10	67
Lab No: 9505L35-04				
Sample Desc : LIQUID,MW-17				
Nitrate as Nitrate	mg/L	06/01/95	0.10	18
Sulfate	mg/L	06/01/95	0.10	58
Lab No: 9505L35-05				
Sample Desc : LIQUID,MW-18				
Nitrate as Nitrate	mg/L	06/01/95	0.10	31
Sulfate	mg/L	06/01/95	0.10	57
Lab No: 9505L35-06				
Sample Desc : LIQUID,MW-19				
Nitrate as Nitrate	mg/L	06/01/95	0.10	30
Sulfate	mg/L	06/01/95	0.10	63
Lab No: 9505L35-07				
Sample Desc : LIQUID,MW-21				
Nitrate as Nitrate	mg/L	06/01/95	0.10	42
Sulfate	mg/L	06/01/95	0.10	56
Lab No: 9505L35-08				
Sample Desc : LIQUID,MW-22				
Nitrate as Nitrate	mg/L	06/01/95	0.10	11
Sulfate	mg/L	06/01/95	0.10	80

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo

Lab Proj. ID: 9505L35

Sampled: 05/30/95
Received: 05/31/95
Analyzed: see below

Reported: 06/12/95

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9505L35-09				
Sample Desc : LIQUID,MW-23				
Nitrate as Nitrate	mg/L	06/01/95	0.10	35
Sulfate	mg/L	06/01/95	0.10	74

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group	Client Proj. ID: 330-006.2G/0608,San Lorenzo	Sampled: 05/26/95
2025 Gateway Place, Suite 440	Sample Descript: 590H	Received: 05/31/95
San Jose, CA 95110	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 06/05/95
Attention: Maree Doden	Lab Number: 9505L35-01	Reported: 06/12/95

QC Batch Number: GC060595BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	104

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Sample Descript: 17200 VM
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9505L35-02

Sampled: 05/30/95
Received: 05/31/95

Analyzed: 06/05/95
Reported: 06/12/95

QC Batch Number: GC060595BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	93

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Sample Descript: 17348 VE
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9505L35-03

Sampled: 05/30/95
Received: 05/31/95

Analyzed: 06/05/95
Reported: 06/12/95

QC Batch Number: GC060595BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	93

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

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Pacific Environmental Group	Client Proj. ID: 330-006.2G/0608,San Lorenzo	Sampled: 05/30/95
2025 Gateway Place, Suite 440	Sample Descript: MW-17	Received: 05/31/95
San Jose, CA 95110	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 06/05/95
Attention: Maree Doden	Lab Number: 9505L35-04	Reported: 06/12/95

QC Batch Number: GC060595BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	93
Benzene	**0.50**	**1.0**
Toluene	0.50	N.D.
Ethyl Benzene	**0.50**	**1.2**
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	116

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Sample Descript: MW-18
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9505L35-05

Sampled: 05/30/95
Received: 05/31/95

Analyzed: 06/05/95
Reported: 06/12/95

QC Batch Number: GC060595BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	99

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Sample Descript: MW-19
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9505L35-06

Sampled: 05/30/95
Received: 05/31/95

Analyzed: 06/05/95
Reported: 06/12/95

QC Batch Number: GC060595BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	97

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group	Client Proj. ID: 330-006.2G/0608,San Lorenzo	Sampled: 05/30/95
2025 Gateway Place, Suite 440	Sample Descript: MW-21	Received: 05/31/95
San Jose, CA 95110	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 06/05/95
Attention: Maree Doden	Lab Number: 9505L35-07	Reported: 06/12/95

QC Batch Number: GC060595BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	100

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Sample Descript: MW-22
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9505L35-08

Sampled: 05/30/95
Received: 05/31/95

Analyzed: 06/05/95
Reported: 06/12/95

QC Batch Number: GC060595BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	98

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Sample Descript: MW-23
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9505L35-09

Sampled: 05/30/95
Received: 05/31/95

Analyzed: 06/05/95
Reported: 06/12/95

QC Batch Number: GC060595BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	86

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608,San Lorenzo
Sample Descript: TB
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9505L35-10

Sampled: 05/26/95
Received: 05/31/95

Analyzed: 06/05/95
Reported: 06/12/95

QC Batch Number: GC060595BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	88

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group	Client Project ID:	330-006.2G/0608, San Lorenzo	
2025 Gateway Place, Suite 440	Matrix:	LIQUID	
San Jose, CA 95110			
Attention: Maree Doden	Work Order #:	9505L35 -01-06	Reported: Jun 13, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC060595BTEX20A	GC060595BTEX20A	GC060595BTEX20A	GC060595BTEX20A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950519004	950519004	950519004	950519004
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/5/95	6/5/95	6/5/95	6/5/95
Analyzed Date:	6/5/95	6/5/95	6/5/95	6/5/95
Instrument I.D.#:	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	11	11	11	32
MS % Recovery:	110	110	110	107
Dup. Result:	11	11	10	30
MSD % Recov.:	110	110	100	100
RPD:	0.0	0.0	9.5	6.5
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

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Pacific Environmental Group	Client Project ID:	330-006.2G/0608, San Lorenzo
2025 Gateway Place, Suite 440	Matrix:	LIQUID
San Jose, CA 95110		
Attention: Maree Doden	Work Order #:	9505L35-07- 10

Reported: Jun 13, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC060595BTEX17A	GC060595BTEX17A	GC060595BTEX17A	GC060595BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9505I9002	9505I9002	9505I9002	9505I9002
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/5/95	6/5/95	6/5/95	6/5/95
Analyzed Date:	6/5/95	6/5/95	6/5/95	6/5/95
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	10	10	30
MS % Recovery:	100	100	100	100
Dup. Result:	9.8	9.8	9.8	29
MSD % Recov.:	98	98	98	97
RPD:	2.0	2.0	2.0	3.4
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				
MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group	Client Project ID:	330-006.2G/0608, San Lorenzo	
2025 Gateway Place, Suite 440	Matrix:	LIQUID	
San Jose, CA 95110			
Attention: Maree Doden	Work Order #:	9505L35-02, 04, 05, 06, 07	Reported: Jun 13, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Nitrate	Sulfate
QC Batch#:	IN0601953000ACC	IN0601953000ACC
Analy. Method:	EPA 300.0	EPA 300.0
Prep. Method:	N.A.	N.A.
Analyst:	S. Flynn	S. Flynn
MS/MSD #:	9505L3507	9505L3507
Sample Conc.:	63	92
Prepared Date:	6/1/95	6/1/95
Analyzed Date:	6/1/95	6/1/95
Instrument I.D.#:	INIC1	INIC1
Conc. Spiked:	100 mg/L	100 mg/L
Result:	150	180
MS % Recovery:	87	88
Dup. Result:	150	170
MSD % Recov.:	87	78
RPD:	0.0	5.7
RPD Limit:	0-30	0-30

LCS #:		
Prepared Date:		
Analyzed Date:		
Instrument I.D.#:		
Conc. Spiked:		
LCS Result:		
LCS % Recov.:		

MS/MSD LCS Control Limits	70-130	70-130

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group	Client Project ID:	330-006.2G/0608, San Lorenzo	
2025 Gateway Place, Suite 440	Matrix:	LIQUID	
San Jose, CA 95110			
Attention: Maree Doden	Work Order #:	9505L35-01, 03, 08, 09	Reported: Jun 13, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Nitrate	Sulfate
QC Batch#:	IN0601953000ACD	IN0601953000ACD
Analy. Method:	EPA 300.0	EPA 300.0
Prep. Method:	N.A.	N.A.
Analyst:	S. Flynn	S. Flynn
MS/MSD #:	9505L3503	9505L3503
Sample Conc.:	62	100
Prepared Date:	6/1/95	6/1/95
Analyzed Date:	6/1/95	6/1/95
Instrument I.D.#:	INIC1	INIC1
Conc. Spiked:	100 mg/L	100 mg/L
Result:	150	190
MS % Recovery:	88	90
Dup. Result:	150	190
MSD % Recov.:	88	90
RPD:	0.0	0.0
RPD Limit:	0-30	0-30

LCS #:		
Prepared Date:		
Analyzed Date:		
Instrument I.D.#:		
Conc. Spiked:		
LCS Result:		
LCS % Recov.:		

MS/MSD LCS Control Limits	70-130	70-130

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: PEG
REC. BY (PRINT): LKrause

WORKORDER: 9505L35
DATE OF LOG-IN: 6/1/95

CIRCLE THE APPROPRIATE RESPONSE

1. Custody Seal(s) Present / Absent (circled)
   Intact / Broken*
2. Custody Seal Nos.: Put in Remarks Section
3. Chain-of-Custody Records: Present (circled) / Absent*
4. Traffic Reports or Packing List: Present / Absent (circled)
5. Airbill: Airbill / Sticker
   Present / Absent (circled)
6. Airbill No.:
7. Sample Tags: Present (circled) / Absent*
   Sample Tag Nos.: Listed (circled) / Not Listed on Chain-of-Custody
8. Sample Condition: Intact (circled) / Broken* / Leaking*
9. Does information on custody reports, traffic reports and sample tags agree? Yes (circled) / No*
10. Proper preservatives used: Yes (circled) / No*
11. Date Rec. at Lab: 5/31/95
12. Temp. Rec. at Lab: 14°C
13. Time Rec. at Lab: 1230

LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION(ETC.)
1	a-d	590H	3voa	liq	5/26	
	↓		1L plain	↓	↓	
2	Same	17200 Vm	3voa	↓	5/30	
	↓		1L plain	↓	↓	
3	↓	17348 Vm	3voa	↓	↓	
	↓		1L plain	↓	↓	
4	↓	MW-17	3 voa	↓	↓	
	↓		1L plain	↓	↓	
5	↓	MW-18	3 voa	↓	↓	
	↓		1L plain	↓	↓	
6	↓	MW-19	3voa	↓	↓	
	↓		1L plain	↓	↓	
7	↓	MW-21	3 voa	↓	↓	
	↓		1L plain	↓	↓	
8	↓	MW-22	3voa	↓	↓	CT 6-1-95
	↓		1L plain	↓	↓	
9	↓	MW-23	3voa	↓	↓	+2 TB Vial 5/25/95 Cland
	↓		1L plain	↓	↓	
			[signature]	5/31		

* If Circled, contact Project manager and attach record of resolution

Revision 3/21/95

ARCO Products Company Division of AtlanticRichfieldCompany — 330-006.2G — **Task Order No.** 1707600 — 9505L35 — **Chain of Custody**

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer MIKE WHELAN	Telephone no. (ARCO)	Telephone no. (Consultant) 441-7500	Fax no. (Consultant) (408) 441-7539
Consultant name PACIFIC ENVIRONMENTAL GROUP	Address (Consultant) 2025 GANGWAY PLACE, SAN JOSE, CA 95110		Contract number 07-073

Method of shipment: COURIER

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 GAS 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 ☐ VOA ☐ Semi VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐	SULFATE	NITRATE
590H		3		X		X	HCL	5-26-95	1400		X								1			
17200VM								5-30-95	1510										2			
17348VM									1145										3			
MW-17									1445										4			
MW-18									1550										5			
MW-19									1420										6			
MW-21									1300										7			
MW-22									1240										8			
MW-23									1220										9			
590H		2					NP	5/26/95	1400, 1430		X							EM	1		X	X
17200VM		2						5/30/95	1510										2		X	X
17348VM									1145										3		X	X
MW-17									1445								EM		4		X	X
MW-18									1550										5		X	X
MW-19									1420										6		X	X
MW-21									1300										7		X	X

Special detection Limit/reporting:

Special QA/QC:

Remarks: 1 1st batch

1 of 2 pgs

Lab number: 9505L35

Turnaround time:
- Priority Rush 1 Business Day: X
- Rush 2 Business Days: ☐
- Expedited 5 Business Days: ☐
- Standard 10 Business Days: X

Condition of sample:

Temperature received:

	Date	Time		Date	Time
Relinquished by sampler: J. Miller	5-31-95	730	Received by: M. Doden	5/31/95	0730
Relinquished by: M. Doden	5/31/95	11:45	Received by: [illegible]	5/31/95	11:45
Relinquished by: [illegible]	5/31	12:30	Received by laboratory: [illegible]	5/31/95	1230

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

APC-3292 (2-91)

ARCO Products Company — Chain of Custody

Division of AtlanticRichfieldCompany

330006-26 | Task Order No. 170760 | 9505L35

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer MIKE WHELAN	Telephone no. (ARCO)	Telephone no. (Consultant) 441-7500	Fax no. (Consultant) 441-7539
Consultant name PEAK ENVIRONMENTAL GROUP	Address (Consultant) 2025 GATEWAY PLACE, SAN JOSE, CA 95110		Contract number 07-073

Method of shipment: COURIER

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 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 ☐	SULFATE	NITRATE
MW-22		1		X		X	NP	5/30/95	1240										8		X	X
MW-23		1		X		X	NP	5/30/95	1220										9		X	X
TB-1		2		X		X	HCL	5/26/95	N/A		X								10			

Special detection Limit/reporting

Special QA/QC

Remarks

T 2 of 2 pgs

Lab number 9505L35

Turnaround time

- Priority Rush 1 Business Day ☐ (MB X)
- Rush 2 Business Days ☐
- Expedited 5 Business Days ☐
- Standard 10 Business Days ☒

Condition of sample:

Temperature received:

	Date	Time		Date	Time
Relinquished by sampler	5-31-95	730	Received by	5/31/95	0730
Relinquished by	5/31/95	1:00	Received by	5/31/95	
Relinquished by	5/31/95	12:30	Received by laboratory	5/31/95	1230

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

APC-3292 (2-91)

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

Project: 330-006.2G/0608, San Lorenzo

Enclosed are the results from samples received at Sequoia Analytical on June 1, 1995. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
950603101	LIQUID, 633H	5/31/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX
950603102	LIQUID, 17197VM	5/31/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX
950603103	LIQUID, 17203VM	5/31/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX
950603104	LIQUID, 17302VM	5/31/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX
950603105	LIQUID, 17349VM	5/31/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX
950603106	LIQUID, 17372VM	5/31/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX
950603107	LIQUID, 17393VM	5/31/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX
950603108	LIQUID, MW-15	5/31/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX
950603109	LIQUID, MW-16	5/31/95	Nitrate Sulfate TPHGB Purgeable TPH/BTEX
950603110	LIQUID, TB-2	5/31/95	TPHGB Purgeable TPH/BTEX

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Quality Assurance Department

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Lab Proj. ID: 9506031

Sampled: 05/31/95
Received: 06/01/95
Analyzed: see below

Attention: Maree Doden

Reported: 06/13/95

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9506031-01				
Sample Desc : LIQUID,633H				
Nitrate as Nitrate	mg/L	06/02/95	0.10	38
Sulfate	mg/L	06/02/95	0.10	61
Lab No: 9506031-02				
Sample Desc : LIQUID,17197VM				
Nitrate as Nitrate	mg/L	06/02/95	0.10	22
Sulfate	mg/L	06/02/95	0.10	45
Lab No: 9506031-03				
Sample Desc : LIQUID,17203VM				
Nitrate as Nitrate	mg/L	06/02/95	0.10	26
Sulfate	mg/L	06/02/95	0.10	48
Lab No: 9506031-04				
Sample Desc : LIQUID,17302VM				
Nitrate as Nitrate	mg/L	06/02/95	0.10	9.0
Sulfate	mg/L	06/02/95	0.10	58
Lab No: 9506031-05				
Sample Desc : LIQUID,17349VM				
Nitrate as Nitrate	mg/L	06/02/95	0.10	N.D.
Sulfate	mg/L	06/02/95	0.10	15
Lab No: 9506031-06				
Sample Desc : LIQUID,17372VM				
Nitrate as Nitrate	mg/L	06/02/95	0.10	N.D.
Sulfate	mg/L	06/02/95	0.10	100

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Lab Proj. ID: 9506031

Sampled: 05/31/95
Received: 06/01/95
Analyzed: see below

Attention: Maree Doden

Reported: 06/13/95

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9506031-07				
Sample Desc : **LIQUID,17393VM**				
Nitrate as Nitrate	**mg/L**	**06/02/95**	**0.10**	**33**
Sulfate	**mg/L**	**06/02/95**	**0.10**	**74**
Lab No: 9506031-08				
Sample Desc : **LIQUID,MW-15**				
Nitrate as Nitrate	mg/L	06/02/95	0.10	N.D.
Sulfate	**mg/L**	**06/02/95**	**0.10**	**73**
Lab No: 9506031-09				
Sample Desc : **LIQUID,MW-16**				
Nitrate as Nitrate	**mg/L**	**06/02/95**	**0.10**	**12**
Sulfate	**mg/L**	**06/02/95**	**0.10**	**41**

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: 633H
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506031-01

Sampled: 05/31/95
Received: 06/01/95

Analyzed: 06/05/95
Reported: 06/13/95

QC Batch Number: GC060595BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	**0.50**	**0.93**
Toluene	**0.50**	**2.4**
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	**0.50**	**14**
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	91

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 5-31-95 Well No. 17203VM

Homeowner Well Address: 17203 [illegible]

Sampler: J. [illegible]

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1013	1.5	5.0	BRN	NONE	7.58	1244	-144	18.1	1.0	48.9
1017	1.5	10.0	BRN	NONE	7.05	1236	-172	18.3	1.0	26.8
1022	1.5	15.0	BRN	NONE	6.99	1229	-188	18.4	2.5	29.6
	Total Purge	15 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1020	0.0	1.0	0.10	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: 17203VM

CLIENT/STATION No.: ARCO 0608 FIELD TECHNICIAN: J. Mannina

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 _____ = _____ x Number of Casings _____ = Calculated Purge _____

DATE PURGED: 5-31-95 START: 1010 END (2400 hr): 1023 PURGED BY: DM

DATE SAMPLED: 5-31-95 START: 1024 END (2400 hr): 1027 SAMPLED BY: DM

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

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

Pumped dry Yes / (No)

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
17203VM	5-31-95	1025	3	40ml	VOA	HCl	TPH/BTEX
			1	1L	Plastic	NP	Nitrate, Sulfate

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.26 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: MW-17302VM

CLIENT/STATION No.: ARCO / 0608 FIELD TECHNICIAN: J. Monnier

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 0.38 = _____ x Number of Casings 3 = Calculated Purge _____

DATE PURGED: 5-31-95 START: 1040 END (2400 hr): 1054 PURGED BY: DM

DATE SAMPLED: 5-31-95 START: 1059 END (2400 hr): 1104 SAMPLED BY: DM

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

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

Pumped dry Yes / No

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
MW-17302VM	5-31-95	1100	3	40ml	VOA	HCl	GAS/BTEX
			1	1L	PLASTIC	NP	SULFATE, NITRATE

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 5-31-95 Well No. 17302VM

Homeowner Well Address: 17302VM

Sampler: T. Monroe

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1044	1.5	5.0	CLR	NONE	7.61	1201	-117	18.9	1.5	12.46
1048	1.5	5.0	CLR	NONE	7.22	1188	-132	18.5	1.5	8.04
1051	1.5	5.0	CLR	NONE	7.40	1190	-169	18.6	2.0	6.00
	Total Purge	15.0 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1055	0.0	2.0	0.10	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: 17349VM

CLIENT/STATION No.: VRC01 01608 FIELD TECHNICIAN: D. Monnier

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 _____ = _____ x Number of Casings _____ = Calculated Purge _____

DATE PURGED: 5-31-95 START: 1115 END (2400 hr): 1130 PURGED BY: DM

DATE SAMPLED: 5-31-95 START: 1132 END (2400 hr): 1137 SAMPLED BY: DM

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

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: Pump
- ☐ Other: _____

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
17349VM	5-31-95	1135	3	40mL	VOA	HCL	TPH-g, BTEX
			2	1L	PLASTIC	NP	SULFATE, NITRATE

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 5-31-95 Well No. 17349VIM

Homeowner Well Address: 17349 VIAMAGDALA

Sampler: J. Rhome

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1119	1.5	5.0	CLR	MOD	7.50	1220	-215	70.1(F)	1.5	11.61
1122	1.5	5.0	CLR	MOD	6.78	1179	-232	65.9F	1.0	15.62
1126	1.5	5.0	CLR	MOD	6.79	1170	-230	65.8	1.0	18.11
								-12.7°C		
								-12.5°C		
								72.5°F		
	Total Purge	15.0 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1135	0.0	1.0	0.50	

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FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330026.261 LOCATION: 1701 HESPERIAN BLVD SAN LORENZO WELL ID #: 1757 IVM

CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: J. Monroe

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 _____ = _____ x Number of Casings _____ = Calculated Purge _____

DATE PURGED: _____ START: _____ END (2400 hr): _____ PURGED BY: _____

DATE SAMPLED: _____ START: _____ END (2400 hr): _____ SAMPLED BY: _____

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 2 5°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
		NOT SAMPLED	NOT AUTHORIZED TO ENTER				

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

Pumped dry Yes / No

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
1757 IVM	—	—	—	—	—	—	—

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: 1733-2VM

CLIENT/STATION No.: ARCO 0608 FIELD TECHNICIAN: J. MONNIG

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 _____ = _____ x Number of Casings _____ = Calculated Purge _____

DATE PURGED: 5-31-95 START: 1237 END (2400 hr): 1248 PURGED BY: DM

DATE SAMPLED: 5-31-95 START: 1249 END (2400 hr): 1251 SAMPLED BY: DM

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

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

Pumped dry Yes / No

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
1733-2VM	5-31-95	1250	3	40ml	VOA	HCL	TPHg/BTEX
"	"	"	1	1L	PLASTIC	NP	SULFATE/NITRATE

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 5-31-95 Well No. 17372 V/R

Homeowner Well Address: 17372 Via Mke

Sampler: T. Mann

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1240	1.5	5.0	CLR	NONE	7.47	1373	-215	20.0	1.5	11.62
1243	1.5	10.0	CLR	NONE	6.93	1410	-225	19.5	1.5	12.06
1247	1.5	15.0	CLR	NONE	6.88	1329	-240	19.0	1.5	10.08
	Total Purge	15.0 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1255	0.0	1.0	0.10	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO, CA WELL ID #: 17393VM

CLIENT/STATION No.: ARCO 0408 FIELD TECHNICIAN: J. MONNIER

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 22.65 - DTW 13.42 = ~~60.00~~ 9.23 x Gal/Linear Foot 0.66 = 6.09 x Number of Casings 3 = Calculated Purge 18.28

DATE PURGED: 5-31-95 START: 1325 END (2400 hr): 1337 PURGED BY: DM

DATE SAMPLED: 5-31-95 START: 1338 END (2400 hr): 1342 SAMPLED BY: DM

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☒ Centrifugal Pump: #3
- ☐ Other: _____
- ☐ Airlift Pump: _____
- ☐ Dedicated: _____

SAMPLING EQUIPMENT/I.D. #
- ☒ Bailer: 17-4
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
17393VM	5-31-95	1340	3	40ml	VOA	HCL	TPH-G/BTEX
↓	↓	↓	1	1L	PLASTIC	NP	SULFATE/NITRATE

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 5.7.95 Well No. 17393 VM

Homeowner Well Address: 17393 VIA MAGNOLIA

Sampler: J. MONNIER

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1328	1.5	6.0	BRN	NONE	7.70	1679	-183	20.7	3.5	232
1332	1.5	12.0	BRN	NONE	7.29	1447	-234	19.5	1.5	16.11
1336	1.5	18.0	BRN	NONE	7.20	1398	-266	19.6	1.5	1508
	Total Purge	180 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1345	0.0	1.0	0.1	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.26 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-5

CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: J. MONNIER

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 #3
- ☐ 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 13.75 - DTW 11.50 = 2.25 x Gal/Linear Foot 0.66 = 1.49 x Number of Casings 3 = Calculated Purge 4.46

DATE PURGED: 6-1-95 START: 1210 END (2400 hr): 1214 PURGED BY: DH

DATE SAMPLED: 6-1-95 START: 1303 END (2400 hr): 1307 SAMPLED BY: DH

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☒ Centrifugal Pump: #3
- ☐ Airlift Pump: _____
- ☐ Dedicated: _____
- ☐ Other: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: B-6
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-5	6-1-95	1305	3	40ml	VOA	HCl	GAS/BTEX.
↓	↓	↓	1	1L	PLASTIC	NP	NITRATE/SULFATE

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.
3300626

Date: 6-1-95 Well No. MW-5

Homeowner Well Address: 1760 HESPERIAN

Sampler: J. Manning

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1211	1.5	1.5	BRN	~~FAINT~~	7.09	1410	-117	20.2	3.0	111.4
1213	1.5	3.0	BRN	~~FAINT~~	7.10	1390	-121	20.2	3.0	86.8
		- ORP AT 3.0 GALLONS -								
	Total Purge	3.0 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1305	0.0	2.0		

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.26 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: MW-7

CLIENT/STATION No.: ARCO / 0608 FIELD TECHNICIAN: J. Manning

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 18.35 - DTW 11.12 = 7.23 x Gal/Linear Foot .038 = 2.75 x Number of Casings 3 = Calculated Purge 8.24

DATE PURGED: 6-1-95 START: 1140 END (2400 hr): 1148 PURGED BY: MM

DATE SAMPLED: 6-1-95 START: 1148 END (2400 hr): 1157 SAMPLED BY: MM

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

SEE BAS SHEETS

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: #2
- ☐ Other: _____
- ☐ Airlift Pump: _____
- ☐ Dedicated: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: 17-2
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-7	6-1-95	1150	3	40ml	VOA	HCl	GAS/BTEX
"	"	"	1	1L	PLASTIC	NP	NITRATE/SULFATE

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 6/1-95 Well No. MW-7

Homeowner Well Address: 1761 HESPERIAN

Sampler: T. MANNING

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1142	1.5	3.0	BRN	NONE	7.28	1068	-104	21.6	?	39.6
1144	1.5	6.0	BRN	NONE	7.04	1195	-92	20.6	?	46.1
1147	1.5	9.0	BRN	NONE	7.02	1205	-100	19.9	?	44.1
			(?)	TURBIDITY TOO HIGH FOR READINGS						
	Total Purge	9.0 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1150	0.0	?	?	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.2G LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: MW-8

CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: J. Monnier

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 #3
- ☐ 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 20.73 - DTW 10.04 = 10.69 x Gal/Linear Foot 0.38 = 4.06 x Number of Casings 3 = Calculated Purge 12.19

DATE PURGED: 6-1-95 START: 1218 END (2400 hr): 1230 PURGED BY: JM
DATE SAMPLED: 6-1-95 START: 1232 END (2400 hr): 1236 SAMPLED BY: JM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
		SEE BAS SHEET					
					Cobalt 0-100 Clear Cloudy Yellow Brown	NTU 0-200 Heavy Moderate Light Trace	Strong Moderate Faint None

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: ______ TOB/TOC ______

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: ______
- ☒ Centrifugal Pump: #3
- ☐ Other: ______
- ☐ Airlift Pump: ______
- ☐ Dedicated: ______

SAMPLING EQUIPMENT/I.D. #
- ☒ Bailer: 44
- ☐ Dedicated: ______
- ☐ Other: ______

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-8	6-1-95	1235	3	40ml	VOA	HCl	GAS/BTEX
↓	↓	↓	1	1L	PLASTIC	NP	SULFATE/NITRATE

REMARKS: ______

SIGNATURE: [signature]

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 6-1-95 Well No. MW-8

Homeowner Well Address: 7601 HESPERIAN

Sampler: J. MANNING

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1221	1.5	4.5	BRN	HC	7.60	1107	-183	20.3	1.0	40.1
1224	1.5	9.0	BRN	HC	6.92	1029	-201	20.5	1.0	26.8
1228	1.5	13.5	BRN	HC	6.75	1077	-212	20.5	1.0	20.1
	Total Purge	13.5 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1030	0.0	1.0	0.10	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.2G LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA. WELL ID #: MW-9

CLIENT/STATION No.: ARCO/ 0608 FIELD TECHNICIAN: J. Morrow

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 #3
☐ 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 18.19 - DTW 9.50 = 8.69 x Gal/Linear Foot .038 = 3.30 x Number of Casings 3 = Calculated Purge 9.91

DATE PURGED: 6-1-95 START: 1110 END (2400 hr): 1120 PURGED BY: JM
DATE SAMPLED: 6-1-95 START: 1121 END (2400 hr): 1127 SAMPLED BY: JM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
	SEE BAS SHEETS						
					Cobalt 0-100 Clear Cloudy Yellow Brown	NTU 0-200 Heavy Moderate Light Trace	Strong Moderate Faint None

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: ______ TOB/TOC

PURGING EQUIPMENT/I.D. #
☐ Bailer: ______ ☐ Airlift Pump: ______
☒ Centrifugal Pump: #3 ☐ Dedicated: ______
☐ Other: ______

SAMPLING EQUIPMENT/I.D. #
☒ Bailer: 17-10
☐ Dedicated: ______
☐ Other: ______

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-9	6-1-95	1125	3	40ml	VOA	HCl	GAS/BTEX
↓	↓	↓	1	1L	PLASTIC	NP	NITRATE/SULFATE

REMARKS: ______

SIGNATURE: [signature]

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 6-1-95 Well No. MW-9

Homeowner Well Address: Popeyes Chicken

Sampler: J. Monroe

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1112	1.5	3.5	BRN	NONE	7.60	1179	-126	20.4	?	>200
1115	1.5	7.0	BRN	NONE	7.09	1216	-110	21.1	?	>200
1118	1.5	10.5	BRN	NONE	7.11	1179	-114	20.2	?	>200
			(?)	TOO	MUCH	SILT	TO	TAKE	READINGS	
	Total Purge	10.5 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1125	0.0	?	?	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.2G LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: MW-10

CLIENT/STATION No.: ARCO/ 0608 FIELD TECHNICIAN: J. Monner

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 #3
- ☐ 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 22.05 - DTW 10.18 = 11.87 x Gal/Linear Foot .038 = 4.51 x Number of Casings 3 = Calculated Purge 13.53

DATE PURGED: 6-1-95 START: 1010 END (2400 hr): 1021 PURGED BY: JM
DATE SAMPLED: 6-1-95 START: 1022 END (2400 hr): 1027 SAMPLED BY: JM

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

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: #3
- ☐ Other: ______
- ☐ Airlift Pump: ______
- ☐ Dedicated: ______

SAMPLING EQUIPMENT/I.D. #
- ☒ Bailer: 23-1
- ☐ Dedicated: ______
- ☐ Other: ______

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-10	6-1-95	1025	3	40ml	VOA	HCl	GAS/BTEX
"	"	"	1	1L	PLASTIC	NP	SULFATE/NITRATE

REMARKS: ______

SIGNATURE: [signature]

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 6-1-95 Well No. MW-10

Homeowner Well Address: 7499 VIANARIA

Sampler: J. Mowrer

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1013	1.5	4.5	CLR	MOD ~~GAS~~	7.41	1329	-161	17.7	2.0	11.90
1016	1.5	9.0	CLR	MOD ~~GAS~~	6.96	1315	-203	18.2	1.5	8.31
1020	1.5	13.5	CLR	MOD ~~GAS~~	6.64	1258	-232	18.2	1.5	7.64
	Total Purge	13.5 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1025	0.0	1.0	0.2	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.26 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: MW-11

CLIENT/STATION No.: ARCO / 0608 FIELD TECHNICIAN: J. MONNIER

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 #3
- ☐ 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 18.75 - DTW 10.47 = 8.28 x Gal/Linear Foot .038 = 315 x Number of Casings 3 = Calculated Purge 944

DATE PURGED: 6-1-95 START: 1030 END (2400 hr): 1037 PURGED BY: DM

DATE SAMPLED: 6-1-95 START: 1038 END (2400 hr): 1042 SAMPLED BY: DM

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

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

Pumped dry Yes (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☒ Centrifugal Pump: #3
- ☐ Airlift Pump: _____
- ☐ Dedicated: _____
- ☐ Other: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: 17-2
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-11	6-1-95	1040	3	40ml	VOA	HCl	GAS/BTEX
1	d	d	1	1L	Amber	NP	NITRATE/SULFATE

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 6-1-95 Well No. MW-11

Homeowner Well Address: 17503 VIA HERMOSO

Sampler: D. Moran

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1033	1.5	3.5	BRN	NONE	7.35	1304	-133	17.9	1.0	114.6
1035	1.5	7.0	BRN	NONE	7.09	1244	-154	18.0	1.5	30.5
1037	1.5	10.5	CLR	NONE	7.01	1277	-69	18.0	1.0	24.1
	Total Purge	10.5 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1041	0.0	1.0	0.1	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.26 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: MW-13

CLIENT/STATION No.: ARCO / 0608 FIELD TECHNICIAN: J. MONNIER

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 #3
- ☐ 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 23.00 - DTW 12.95 = 10.05 x Gal/Linear Foot 0.38 = 3.82 x Number of Casings 3 = Calculated Purge 11.46

DATE PURGED: 6-1-95 START: 1153 END (2400 hr): 1202 PURGED BY: MM

DATE SAMPLED: 6-1-95 START: 1202 END (2400 hr): 1207 SAMPLED BY: MM

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

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☒ Centrifugal Pump: #3
- ☐ Airlift Pump: _____
- ☐ Dedicated: _____
- ☐ Other: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: 13-4
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-13	6-1-95	1205	3	40ml	VOA	HCl	GAS / BTEX
↓	↓	↓	1	1L	PLASTIC	NP	TURPH / NITRATE

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 6-1-95 Well No. MW-13

Homeowner Well Address: 17601 HESPERIAN

Sampler: J. Mawson

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1156	1.5	4.0	BRN	NONE	7.78	1232	-056	20.3	?	>200
1158	1.5	8.0	BRN	NONE	6.99	1259	-115	21.9	?	>200
1200	1.5	12.0	BRN	NONE	6.93	1251	-142	21.3	?	>200
			(?)	TURBIDITY - DO HEAVY FOR READINGS						
	Total Purge	120 (gal)								

FIELD ANALYSIS WITH HACH KITS				
Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1205	0.0	?	?	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.26 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: MW-14

CLIENT/STATION No.: ARCO / 0608 FIELD TECHNICIAN: J. MONNIER

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 #3
- ☐ 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 23.20 - DTW 9.18 = 14.02 x Gal/Linear Foot .38 = 5.33 x Number of Casings 3 = Calculated Purge 15.9

DATE PURGED: 6-1-95 START: 945 END (2400 hr): 957 PURGED BY: DM

DATE SAMPLED: 6-1-95 START: 957 END (2400 hr): 1002 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
	5						
		SEE	BAS	SHEET			
					Cobalt 0-100 Clear Cloudy Yellow Brown	NTU 0-200 Heavy Moderate Light Trace	Strong Moderate Faint None

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: ____ TOB/TOC ____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: ____
- ☒ Centrifugal Pump: #3
- ☐ Other: ____
- ☐ Airlift Pump: ____
- ☐ Dedicated: ____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: 13-10
- ☐ Dedicated: ____
- ☐ Other: ____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-14	6-1-95	1000	3	40ml	VOA	HCl	GAS/BTEX
↓	↓	↓	1	1L	PLASTIC	NP	SULFATE/NITRATE

REMARKS: ____

SIGNATURE: ____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 6-1-95 Well No. MW-14

Homeowner Well Address: 17491 VIA ARRIBA

Sampler: J. Monnah

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
948	1.5	5.5	BRN	NONE	706	1247	-162	19.0	1.0	68.6
952	1.5	11.0	BRN	NONE	7.07	1201	-184	18.8	1.5	19.1
956	1.5	16.5	BRN	NONE	713	1222	-209	18.8	~~0.8~~ 1.0	11.1
	Total Purge	16.5 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1005	0.0	1.0	0.0	

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FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.26 LOCATION: 1760 HESPERIAN BLVD SAN LORENZO CA WELL ID #: MW-15

CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: J. MONNIER

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 #3
- ☐ 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 23.60 - DTW 10.57 = 1303 x Gal/Linear Foot .038 = 4.95 x Number of Casings 3 = Calculated Purge 14.85

DATE PURGED: 5-31-95 START: 1300 END (2400 hr): 1312 PURGED BY: DM

DATE SAMPLED: 5-31-95 START: 1313 END (2400 hr): 1317 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 2.5°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
		SEE BAS SHEET					

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☒ Centrifugal Pump: #3
- ☐ Other: _____
- ☐ Airlift Pump: _____
- ☐ Dedicated: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: 12-1
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-15	5-31-95	1315	3	40ml	VOA	HCl	GAS/BTEX.
↓	↓	↓	1	1L	PLASTIC	NP	NITRATE

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 5-31-95 Well No. MW-15

Homeowner Well Address: 633H

Sampler: D Monkman

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1304	1.5	5.0	BRN	NONE	7.10	1369	-197	20.4	1.5	61.4
1308	1.5	10.0	BRN	NONE	6.93	1321	-243	20.1	1.5	28.6
1311	1.5	15.0	BRN	NONE	6.90	1318	-250	20.1	1.5	29.1
	Total Purge	15.0 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes:
1310	0.0	~~1.5~~ 1.0 ~~2.0~~	0.20	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.26 LOCATION: 1760 HESPERIAN BLVD SAN LORENZO CA. WELL ID #: MW-16

CLIENT/STATION No.: ARCO / 0608 FIELD TECHNICIAN: J. MONNIER

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 #3
- ☐ 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 22.60 - DTW 11.17 = 11.43 x Gal/Linear Foot .038 = 4.34 x Number of Casings 3 = Calculated Purge 13.03

DATE PURGED: 5-31-95 START: 1145 END (2400 hr): 1157 PURGED BY: JM

DATE SAMPLED: 5-31-95 START: 1158 END (2400 hr): 1204 SAMPLED BY: JM

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☒ Centrifugal Pump #3
- ☐ Airlift Pump: _____
- ☒ Dedicated: _____
- ☐ Other: _____

SAMPLING EQUIPMENT/I.D. #
- ☒ Bailer: 23-6
- ☒ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-16	5-31-95	1200	3	40ml	VOA	HCl	GAS/BTEX
"	"	"	1	1L	PLASTIC	NP	NITRATE/NITRITE

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 5-31-95 Well No. MW-16

Homeowner Well Address: 17326 Via Magdalena

Sampler: P. Morena

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1149	1.5	4.5	BRN	NONE	7.53	1167	-172	20.2	3.0	110.8
1151	1.5	9.0	BRN	NONE	7.62	1131	-189	20.6	2.5	24.1
1155	1.5	13.5	BRN	NONE	7.15	1106	-202	19.8	2.5	20.1
	Total Purge	13.5 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1200	0.0	2.0	0.12	

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FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.26 LOCATION: 1760 HESPERIAN BLVD SAN LORENZO CA WELL ID #: MW-17

CLIENT/STATION No.: ARCO / 0608 FIELD TECHNICIAN: J. MONNIER

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 #3
- ☐ 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 23.60 - DTW 12.02 = 11.58 x Gal/Linear Foot 0.38 = 4.40 x Number of Casings 3 = Calculated Purge 13.20

DATE PURGED: 5-30-95 START: 1426 END (2400 hr): _____ PURGED BY: DM

DATE SAMPLED: 5-30-95 START: _____ END (2400 hr): _____ SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
	4.5						
			SEE BAS SHEET				

Cobalt 0-100 / Clear / Cloudy / Yellow / Brown

NTU 0-200 / Heavy / Moderate / Light / Trace

Strong / Moderate / Faint / None

Pumped dry Yes (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☐ Airlift Pump: _____
- ☒ Centrifugal Pump: #3
- ☐ Dedicated: _____
- ☐ Other: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: 23-6
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-17	5-30-95	1445	3	40ml	VOA	HCl	GAS/BTEX
d	d	d	1	1L	Plastic	NP	Sulfate/Nitrate

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: 17197VM
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506031-02

Sampled: 05/31/95
Received: 06/01/95

Analyzed: 06/05/95
Reported: 06/13/95

QC Batch Number: GC060595BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	89

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: 17203VM
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506031-03

Sampled: 05/31/95
Received: 06/01/95

Analyzed: 06/05/95
Reported: 06/13/95

QC Batch Number: GC060595BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	88

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group	Client Proj. ID: 330-006.2G/0608, San Lorenzo	Sampled: 05/31/95
2025 Gateway Place, Suite 440	Sample Descript: 17302VM	Received: 06/01/95
San Jose, CA 95110	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 06/05/95
Attention: Maree Doden	Lab Number: 9506031-04	Reported: 06/13/95

QC Batch Number: GC060595BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	87

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
an Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: 17349VM
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506031-05

Sampled: 05/31/95
Received: 06/01/95

Analyzed: 06/06/95
Reported: 06/13/95

C Batch Number: GC060695BTEX17A
trument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	200	890
enzene	2.0	N.D.
oluene	2.0	N.D.
Ethyl Benzene	2.0	4.3
ylenes (Total)	2.0	22
hromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
rifluorotoluene	70	130	110

lytes reported as N.D. were not present above the stated limit of detection.

EQUOIA ANALYTICAL - ELAP #1210

een Manning
ject Manager

Sequoia Analytical

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: 17372VM
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506031-06

Sampled: 05/31/95
Received: 06/01/95

Analyzed: 06/06/95
Reported: 06/13/95

QC Batch Number: GC060595BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	60
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Unidentified HC		<C8

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	91

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: 17393VM
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506031-07

Sampled: 05/31/95
Received: 06/01/95

Analyzed: 06/06/95
Reported: 06/13/95

QC Batch Number: GC060595BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	87

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: MW-15
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506031-08

Sampled: 05/31/95
Received: 06/01/95

Analyzed: 06/06/95
Reported: 06/13/95

QC Batch Number: GC060595BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	88

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: MW-16
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506031-09

Sampled: 05/31/95
Received: 06/01/95

Analyzed: 06/06/95
Reported: 06/13/95

QC Batch Number: GC060595BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	52
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Unidentified HC		< C8

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	85

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
an Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: TB-2
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506031-10

Sampled:
Received: 06/01/95

Analyzed: 06/05/95
Reported: 06/13/95

Batch Number: GC060595BTEX21A
trument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

nalyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
enzene	0.50	N.D.
oluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
hromatogram Pattern:		

urrogates	Control Limits %		% Recovery
ifluorotoluene	70	130	95

nalytes reported as N.D. were not present above the stated limit of detection.

EQUOIA ANALYTICAL - ELAP #1210

ileen Manning
oject Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group	Client Project ID:	330-006.2G/0608, San Lorenzo	
2025 Gateway Place, Suite 440	Matrix:	LIQUID	
San Jose, CA 95110			
Attention: Maree Doden	Work Order #:	9506031 01-09	Reported: Jun 15, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Nitrate	Sulfate
QC Batch#:	IN0602953000ACB	IN0602953000ACB
Analy. Method:	EPA 300.0	EPA 300.0
Prep. Method:	N.A.	N.A.
Analyst:	S. Flynn	S. Flynn
MS/MSD #:	950603109	950603109
Sample Conc.:	N.D.	41
Prepared Date:	6/2/95	6/2/95
Analyzed Date:	6/2/95	6/2/95
Instrument I.D.#:	INIC1	INIC1
Conc. Spiked:	10 mg/L	10 mg/L
Result:	20	50
MS % Recovery:	80	90
Dup. Result:	21	50
MSD % Recov.:	90	90
RPD:	4.9	0.0
RPD Limit:	0-30	0-30

LCS #:		
Prepared Date:		
Analyzed Date:		
Instrument I.D.#:		
Conc. Spiked:		
LCS Result:		
LCS % Recov.:		

MS/MSD LCS Control Limits	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

Client Project ID: 330-006.2G/0608, San Lorenzo
Matrix: LIQUID
Work Order #: 9506031 01-04, 06-09

Reported: Jun 15, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC060595BTEX20A	GC060595BTEX20A	GC060595BTEX20A	GC060595BTEX20A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9505I9004	9505I9004	9505I9004	9505I9004
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/5/95	6/5/95	6/5/95	6/5/95
Analyzed Date:	6/5/95	6/5/95	6/5/95	6/5/95
Instrument I.D.#:	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	110	11	11	32
MS % Recovery:	1100	110	110	107
Dup. Result:	11	11	10	30
MSD % Recov.:	110	110	100	100
RPD:	164	0.0	9.5	6.5
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				
MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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Sequoia Analytical

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

Client Project ID: 330-006.2G/0608, San Lorenzo
Matrix: LIQUID
Work Order #: 9506031 05

Reported: Jun 15, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl. Benzene	Xylenes
QC Batch#:	GC060695BTEX17A	GC060695BTEX17A	GC060695BTEX17A	GC060695BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950603102	950603102	950603102	950603102
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/6/95	6/6/95	6/6/95	6/6/95
Analyzed Date:	6/6/95	6/6/95	6/6/95	6/6/95
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.9	8.5	8.4	25
MS % Recovery:	89	85	84	83
Dup. Result:	7.8	7.9	7.9	24
MSD % Recov.:	78	79	79	80
RPD:	13	7.3	6.1	4.1
RPD Limit:	0-50	0-50	0-50	0-50
LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				
MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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Pacific Environmental Group	Client Project ID:	330-006.2G/0608, San Lorenzo	
2025 Gateway Place, Suite 440	Matrix:	LIQUID	
San Jose, CA 95110			
Attention: Maree Doden	Work Order #:	9506031 10	Reported: Jun 15, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC060595BTEX21A	GC060595BTEX21A	GC060595BTEX21A	GC060595BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950519004	950519004	950519004	950519004
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/5/95	6/5/95	6/5/95	6/5/95
Analyzed Date:	6/5/95	6/5/95	6/5/95	6/5/95
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.4	9.2	9.2	28
MS % Recovery:	94	92	92	93
Dup. Result:	8.7	8.6	8.5	26
MSD % Recov.:	87	86	86	87
RPD:	7.7	6.7	7.9	7.4
RPD Limit:	0-50	0-50	0-50	0-50
LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				
MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

CLIENT NAME: PEG / ARCO (330-006.26)
REC. BY (PRINT): M. YONG

WORKORDER: 9506031
DATE OF LOG-IN: 6/1/95

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION(ETC.)
1. Custody Seal(s) Present / (Absent)	1	AB	633H	VOA (3)	L	5/31/95	
Intact / Broken*		C	"	1LP			
2. Custody Seal Nos.: Put in Remarks Section	2	A-D	17197VM	Same			
3. Chain-of-Custody Records: (Present) / Absent*	3		17203VM	Same			
4. Traffic Reports or Packing List: Present / (Absent)	4		17302VM	Same			
	5		17349VM	Same			
5. Airbill: Airbill / Sticker Present / (Absent)	6		17372VM	Same			
	7		17393VM	Same			
6. Airbill No.:	8		MW-15	Same			
7. Sample Tags: (Present) / Absent*	9		MW-16	Same			
Sample Tag Nos.: (Listed) / Not Listed on Chain-of-Custody	10	AB	TB-2	VOA (2)			
8. Sample Condition: (Intact) / Broken* / Leaking*							
9. Does information on custody reports, traffic reports and sample tags agree? (Yes) / No*							
10. Proper preservatives used: (Yes) / No*							
11. Date Rec. at Lab: 6/1/95							
12. Temp. Rec. at Lab: 10°C							
13. Time Rec. at Lab: 1150							

6/1/95

* if Circled, contact Project manager and attach record of resolution

Revision 3/21/95

[redacted]CO[redacted]du[redacted]Com[redacted]ny [redacted] 5300062[redacted] Task Order No. [redacted]1701600 [redacted] n o[redacted]sto[redacted]

Division of AtlanticRichfieldCompany

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer MIKE WHELAN	Telephone no. (ARCO)	Telephone no. (Consultant) 441-7500 / Fax no. (Consultant) 441-7539	Contract number 07-073
Consultant name PACIFIC ENVIRONMENTAL GROUP		Address (Consultant) 2025 GATEWAY PLACE #440 SAN JOSE, CA	

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 GAS 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 ☐ VOA ☐ Semi VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org/DHS ☐ Lead EPA 7420/7421 ☐	SULFATE	NITRATE
633H	1	3		X		X	HCL	5-31-95	1230		X											
17197VM	2								1005													
17203VM	3								1025													
17302VM	4								1100													
17349VM	5								1135													
17372VM	6								1250													
17393VM	7								1340													
MW-15	8								1315													
MW-16	9	↓							1200													
TB-2	10	2					↓		NA		↓											
633H	1	1					NP		1230												X	X
17197VM	2								1005												X	X
17203VM	3								1025												X	X
17302VM	4								1100												X	X
17349VM	5								1135												X	X
17372VM	6	↓		↓		↓	↓	↓	1250												X	X

Method of shipment: COURIER

Special detection Limit/reporting: 9506031

Special QA/QC

Remarks: 1 of 2

2nd batch

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 [signature]	Date 6-1-95	Time 730	Received by [signature] 6/1/95 0815		
Relinquished by [signature]	Date 6/1/95	Time 11:00	Received by [signature]		
Relinquished by [signature]	Date 6-1	Time 11:50	Received by laboratory [signature]	Date 6/1/95	Time 1156

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

APC-3292 (2-91)

Division of AtlanticRichfieldCompany

Chain of Custody

330-0626 Task Order No. 170160

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer MIKE WHELAN	Telephone no. (ARCO)	Telephone no. (Consultant) 441-7500	Fax no. (Consultant) 441-7539
Consultant name PACIFIC ENVIRONMENTAL GROUP	Address (Consultant) 2025 GATEWAY PLACE #440 SAN JOSE, CA 95110		Contract number 07-073

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 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 ☐	SULFATE	NITRATE
MW-3	7	1		X		X	NP	5-31-95	1340												X	X
MW-15	8	↓		↓		↓	↓	↓	1315												X	X
MW-16	9	↓		↓		↓	↓	↓	1200												X	X

Special detection Limit/reporting: 95060031

Method of shipment: COURIER

Special QA/QC:

Remarks: 2 OF 2

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:

	Date	Time		Date	Time
Relinquished by Sampler	6-1-95	730	Received by	6/1/95	0815
Relinquished by	6/1/95	11:00	Received by		
Relinquished by	6-1	11:50	Received by laboratory	6/1/95	1156

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

APC-3292 (2-91)

ATTACHMENT C

TREATMENT SYSTEM
CERTIFIED ANALYTICAL REPORTS
AND CHAIN-OF-CUSTODY DOCUMENTATION

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

Project: 330-006.5B/608, San Lorenzo

Enclosed are the results from samples received at Sequoia Analytical on April 5, 1995. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
950440701	LIQUID, Infl	4/4/95	TPHGB Purgeable TPH/BTEX
950440702	LIQUID, Effl	4/4/95	TPHGB Purgeable TPH/BTEX

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Quality Assurance Department

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.5B/608, San Lorenzo
Sample Descript: Infl
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9504407-01

Sampled: 04/04/95
Received: 04/05/95

Analyzed: 04/13/95
Reported: 04/18/95

QC Batch Number: GC041295BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	290
Benzene	0.50	6.6
Toluene	0.50	N.D.
Ethyl Benzene	0.50	10
Xylenes (Total)	0.50	1.7
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	97

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group	Client Proj. ID: 330-006.5B/608, San Lorenzo	Sampled: 04/04/95
2025 Gateway Place, Suite 440	Sample Descript: Effl	Received: 04/05/95
San Jose, CA 95110	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 04/13/95
Attention: Maree Doden	Lab Number: 9504407-02	Reported: 04/18/95

QC Batch Number: GC041295BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	76

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group	Client Project ID:	330-006.5B/608, San Lorenzo
2025 Gateway Place, Suite 440	Matrix:	Liquid
San Jose, CA 95110		
Attention: Maree Doden	Work Order #:	9504407 01-02 Reported: Apr 18, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC041295BTEX02A	GC041295BTEX02A	GC041295BTEX02A	GC041295BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950433102	950433102	950433102	950433102
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/12/95	4/12/95	4/12/95	4/12/95
Analyzed Date:	4/12/95	4/12/95	4/12/95	4/12/95
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.4	9.3	9.3	28
MS % Recovery:	94	93	93	93
Dup. Result:	9.0	9.1	8.9	27
MSD % Recov.:	90	91	89	90
RPD:	4.3	2.2	4.4	3.6
RPD Limit:	0-50	0-50	0-50	0-50
LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				
MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

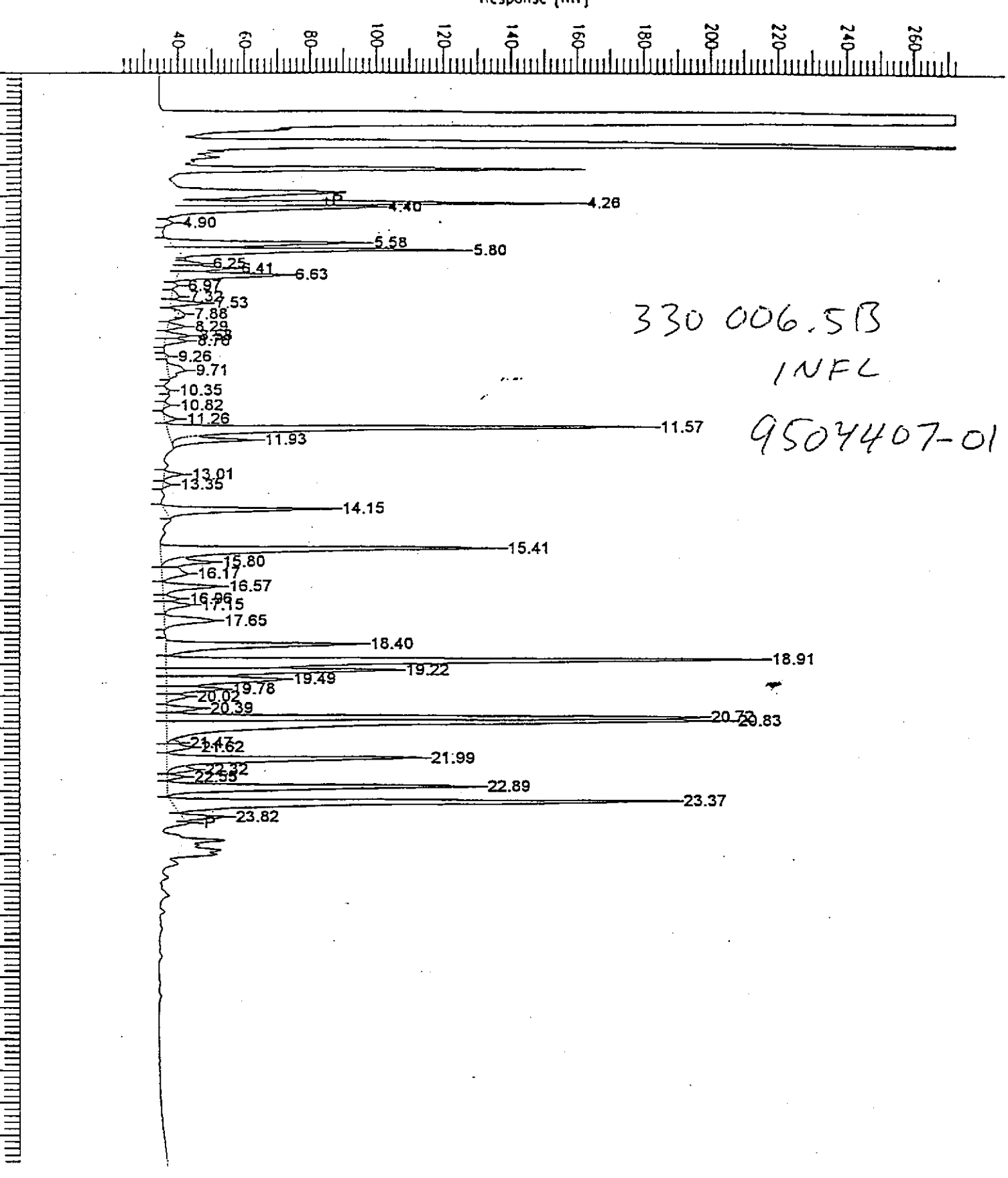
Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Chromatogram

ample Name : G9504407-01C
leName : S:\GHP_02\0416\412A028.raw
thod : TPH
tart Time : 0.00 min End Time : 34.99 min
cale Factor: -1.0 Plot Offset: 22 mV

Sample #: INFL Page 1 of 1
Date : 4/13/95 02:11
Time of Injection: 4/13/95 01:36
Low Point : 22.04 mV High Point : 272.04 mV
Plot Scale: 250.0 mV



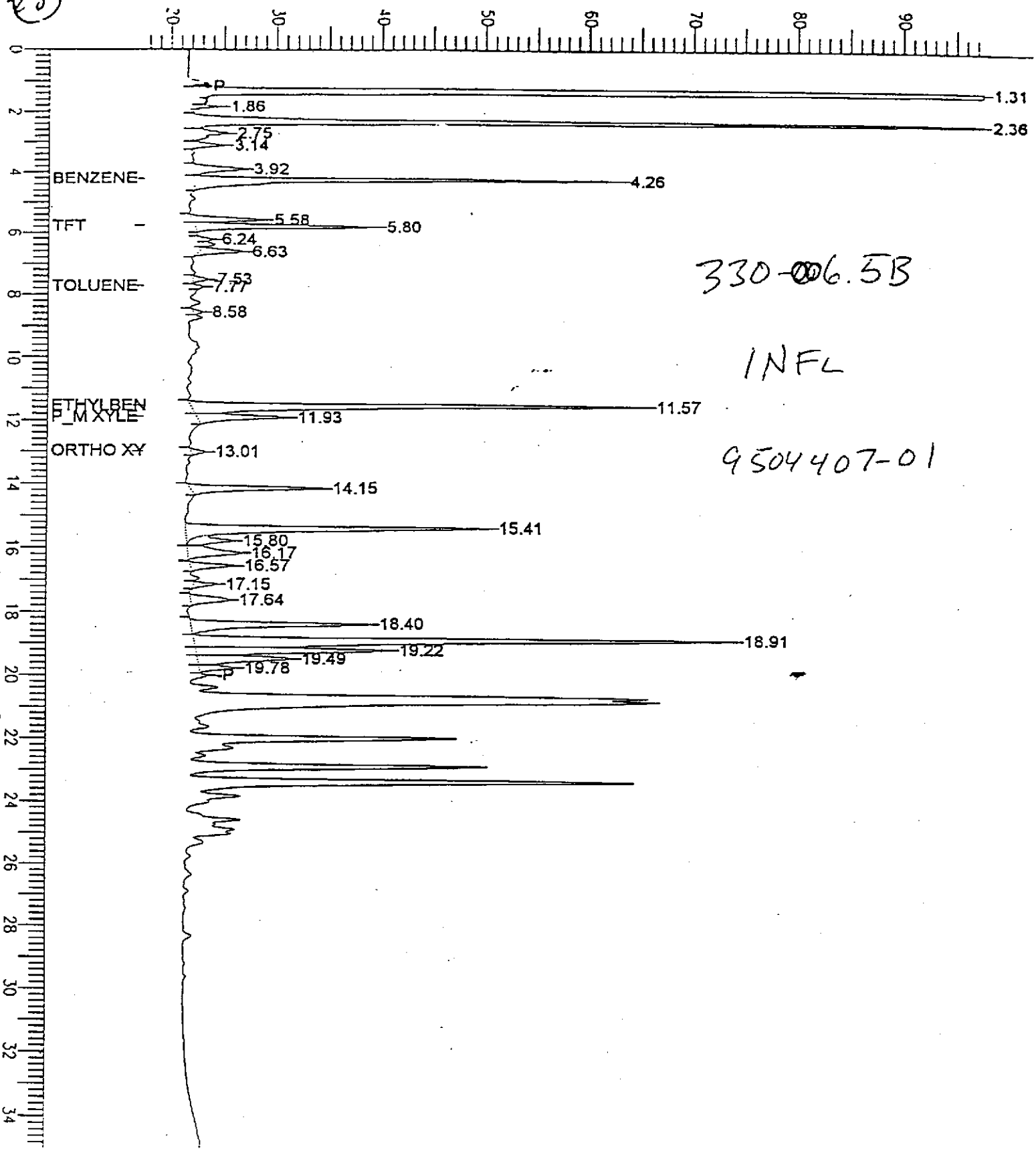
330 006.5B
INFL
9504407-01

Chromatogram

Sample Name : G9504407-01C
FileName : S:\GHP_02\0416\412B028.raw
Method : TPH
Start Time : 0.00 min End Time : 34.99 min
Scale Factor: -1.0 Plot Offset: 18 mV

Sample #: INFL Page 1 of 1
Date : 4/13/95 02:11
Time of Injection: 4/13/95 01:36
Low Point : 17.51 mV High Point : 97.51 mV
Plot Scale: 80.0 mV

Response [mV]



330-006.5B

INFL

9504407-01

ARCO Products Company Division of AtlanticRichfieldCompany — 330-006.5B Task Order No. 170210 — **Chain of Custo**

ARCO Facility no. 608	City (Facility) San Lorenzo	Project manager (Consultant) Shaw Garaton	Laboratory name Sequoia
ARCO engineer Mike Whelan	Telephone no. (ARCO)	Telephone no. (Consultant) (408)441-7500	Fax no. (Consultant) (408)441-7539 — Contract number
Consultant name Pacific Envi Group	Address (Consultant) 2025 Gateway Pl # 440 San Jose		

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 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 ☐		
* INFL	01	3		X		X	HCL	4-4-95			X											
EFFL	02	3		X		X	X	X			X											

Remarks: * Please Includ. chromatogram on all gas / SAMPLES. ↓ INF.

Lab number: 950440

Turnaround time: Priority Rush 1 Business Day; Rush 2 Business Days; Expedited 5 Business Days; Standard 10 Business Days

Special detection Limit/reporting

Special QA/QC

Method of shipment

Condition of sample:

Temperature received:

	Date	Time		Date	Time
Relinquished by sampler	4-5-95	700	Received by	4/5/95	0730
Relinquished by	4/5/95	10:30	Received by	4/5	1830
Relinquished by	4/5	12:00	Received by laboratory	4/5/95	1216

FIELD SERVICES / O&M REQUEST

Work Order # 4193

SITE INFORMATION FORM

Identification

Project # 330-006.2G

Station # ARCO 6008

Site Address: 17601 Hesperian San Lorenzo

County: Alameda

Project Manager: K. Brown

Requestor: K. Brown

Client: ARCO

Project Type

- ☐ 1st Time Visit
- ☒ Quarterly ☑ 1st ☑ 2nd ☑ 3rd ☑ 4th
- ☐ Monthly — Initials — Date
- ☐ Semi-Monthly F/S RH 6/9/95
- ☐ Weekly
- ☐ Copy/Dist RH ↓
- ☐ One-time event
- ☐ Other:

Client P.O.C.: Mike Whelan

Date of Request 5/11/95

Ideal field date(s): MUST BE [redacted] 5/29 – 6/2/95

Check Appropriate Category

JIM

Budget Hrs.

Actual Hrs. 30.5 330 006

Mob de Mob 6.0 2B

KEEP PAUL

Field Tasks: For General Description

SOUTHWEST: 7:00 leave SJ

2:10 – leave Pasadena

circle one:

Priority: 1. (emergency, must be done within 24 hrs); (2) (next visit); 3. (when available)

5/22 [redacted] PAUL WINEGARDT

[redacted] – FLY TO PASADENA – TRAIN ON EI FLOW THRU CELL WITH GARY P.

5/29 [redacted] – CONDUCT 2ND QTR 1995 GW MONITORING & SAMPLING

1 – JIM MONNIER – SAMPLES ALL GW & HOMEOWNER WELL

2 – PAUL WINEGARDT – USE FLOW THROUGH CELL TO ANALYZE FOR 1 – DISSOLVED O_2

2 – FERROUS IRON

3 – H_2S

4 – OX/REDOX POTENTIAL

5 – TEMP, PH, EC

6 – TURBIDITY

* USE OF EI FLOW THRU CELL – CHARGE 330-006.2B TIME & DRAWING

Comments, remarks, etc. from Field Staff (include problems encountered and out-of-scope work)

634H-2 NOT AUTHORIZED TO ENTER BACKYARDS TO SAMPLE

642H-3

675H – UNABLE TO SAMPLE: DEDICATED PUMP INOPERABLE

737VM – NOT AUTHORIZED TO ENTER BACKYARD

738VE – RESAMPLED FOR NITRATE/SULFATE (6-2-95) – LOST AT LAB

☐ Samples taken ☐ Samples not required ☐ Soil Vapor ☐ Groundwater

☐ Weekly ☐ Semi-Monthly ☐ Monthly ☐ Quarterly ☐ Semi-Annual

PACIFIC ENVIRONMENTAL GROUP, INC.

Completed by: J. Monnier Date: 6-5-95

Checked by: C. Lu

White Copy - Originator — Yellow Copy - O & M Tech — Pink Copy - File

Summary of Domestic Wells Sampling Contacts
ARCO Service Station #0608
17601 Hesperian, San Lorenzo

CALL AT LEAST ONE WEEK IN ADVANCE OF EVENT EACH QUARTER
Document with copy of this log in project file
DOCUMENT EVENT WITH A SAMPLING FORM FROM ALL HOMES WHETHER SAMPLED OR NOT!!!!!!!!!!!!!!

Address	Contact Name Phone #	Date Contacted	Pump Assessment	Notes
590 Hacienda	Mr.& Mrs. Silva (510) 276-1534		operational	Need homeowmer there to sample. Well in back yard
633 Hacienda	Mr. Dahmann (510) 276-3860		operational	Well redeveloped with new pump as of 10/7/94
634 Hacienda	Mrs. Albright (510) 278-6094	Don't Call Well Blocked	non-operational	No way to collect a sample
642 Hacienda	Ms. Corregedor (510) 481-1063	Don't Call Not authorized	operational	Won't allow access
675 Hacienda	Mr. & Mrs. Roberts (510) 276-7389		non-operational	Cannot sample because of well seal
17348 Via Encinas	Mr. Luehrs (510)278-9059		non-operational	Ok to enter backyard and grab bailer sample if resident not home; KNOCK FIRST
17197 Via Magdalena	Mr. Scrag (510) 278-1904		operational	Grab sample off hose bib on front porch
17200 Via Magdalena	Cavalry Church (510) 278-2555		non-operational	Grab sample from well inside shed in church yard get keys from church office
17203 Via Magdalena	Mrs. Toles (510)276-6797		operational	OK to enter back yard and sample if not home; KNOCK FIRST!
17302 Via Magdalena	Mr. & Mrs. Johanson (510) 278-5987		operational	Sample from hose bib on lower right of front porch
17349 Via Magdalena	Mr. Kast (510)278-1263		operational	OK to enter back yard and sample if not home; well shed in back yard; KNOCK FIRST!
17371 Via Magdalena	Mr. Manry (510) 317-9724	Don't Call Not autorized	operational	Won't allow access
17372 Via Magdalena	Mr. Pimental (510) 278-6304		operational	Sampled from hose bib in back yard; resident is usually using the hose when you get there
17393 Via Magdalena	Mr. Hull (510) 278-5576		non-operational	Pump disassembed. Try to bail sample from well in back yard. OK to enter if not home; KNOCK FIRST

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 330-006.2G LOCATION: 17601 HESPERIAN DATE: 5-30-95

CLIENT/STATION NO.: ARCO/0608 FIELD TECHNICIAN: J. Monroe DAY OF WEEK: THURS

PROBE TYPE/ID No.
- ☐ Oil/Water IF/ ____
- ☒ H_2O level indicator #3
- ☐ Other: ____

Dtw Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock	Expanding Cap	TOB Total Depth (feet)	First Depth to Water (feet) TOB/TOC	Second Depth to Water (feet) TOB/TOC	SEPARATE-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	1033	✓	✓	✓	✓	✓	14.13	11.88 / 11.80	11.50 / 11.50	—	—								— / —
	MW7	1041	✓	—	✓	✓	✓	18.94	11.68 / 11.68	11.12 / 11.12	—	—								— / —
	MW8	1047	✓	✓	✓	✓	✓	21.56	10.87 / 10.87	10.04 / 10.04	—	—								— / —
	MW9	1019	✓	✓	✓	✓	✓	18.70	10.01 / 10.01	9.50 / 9.50	—	—								— / —
	MW10	1049	✓	✓	✓	✓	✓	22.05 / 22.05	10.18 / 10.18	9.54 / 9.54	—	—								— / —
	MW11	1050	✓	✓	✓	✓	✓	19.17	10.89 / 10.89	10.47 / 10.47	—	—								— / —
	MW13	1044	✓	✓	✓	✓	✓	23.30	13.25 / 13.25	12.95 / 12.85	—									— / —
	MW14	1045	✓	✓	✓	✓	✓	23.20 / 23.20	9.18 / 9.18	8.90 / 8.90	—	—								— / —
	MW15	1042	✓	✓	✓	✓	✓	23.60	10.57 / 10.57	10.15 / 10.15	—	—								— / —

Comments: ____

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 330-006.2G LOCATION: 1760 HESPERIAN BLVD SAN LORENZO DATE: 5-30-95

CLIENT/STATION NO.: ARCO/0608 FIELD TECHNICIAN: T. Moran DAY OF WEEK: TUES

PROBE TYPE/ID No.
- ☐ Oil/Water IF/ ____
- ☒ H_2O level indicator #3
- ☐ Other: ____

Dtw Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock	Expanding Cap	TOB Total Depth (feet)	First Depth to Water (feet) TOB/TOC	Second Depth to Water (feet) TOB/TOC	SEPARATE-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
	MW-16	1079	✓	✓	✓	✓	✓	22.60	11.17 / 11.17	10.77 / 10.77	—	—								— / —
	MW-17	1031	✓	✓	✓	✓	✓	23.60	12.02 / 12.02	11.50 / 11.50	—	—								— / —
	MW-18	1036	✓	✓	✓	✓	✓	21.75	10.21 / 10.21	9.93 / 9.93	—	—								— / —
	MW-19	1027	✓	✓	✓	✓	✓	21.65	9.76 / 9.76	9.60 / 9.60	—	—								— / —
	MW-20	~~1027~~	~~✓~~	~~✓~~	~~✓~~	~~✓~~	~~✓~~	~~21.65~~	~~9.76~~	~~9.60~~	DESTROYED									— / —
	MW-21	1024	✓	✓	✓	✓	✓	22.04	10.15 / 10.15	9.67 / 9.67	—	—								— / —
	MW-22	1021	✓	✓	✓	✓	✓	21.70	10.61 / 10.61	10.39 / 10.39	—	—								— / —
	MW-23	1017	✓	✓	✓	✓	✓	21.95	11.67 / 11.67	11.39 / 11.39	—	—								— / —
	EI-A	1304	✓	✓				—	17.38	—	—	—								— / —

Comments: ____

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 330-006.26 LOCATION: 1760 HESPERIAN BLVD DATE: 5-30-95

CLIENT/STATION NO.: ARCO/1608 FIELD TECHNICIAN: [signature] DAY OF WEEK: TUES

PROBE TYPE/ID No.
- ☐ Oil/Water IF/ _____
- ☒ H_2O level indicator #3
- ☐ Other: _____

Dtw Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock	Expanding Cap	Total Depth (feet) TOB	First Depth to Water (feet) TOB/TOC	Second Depth to Water (feet) TOB/TOC	SEPARATE-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
	MW-24	10:30	✓	✓	✓	✓	✓	19.81	12.35 / 12.35	12.62 / 12.62	—	—								— / —
	MW-25	10:37	✓	✓	✓	✓	✓	21.17	11.12 / 11.12	11.58 / 11.58	—	—								— / —
	MW-26	10:22	✓	✓	✓	✓	✓	19.86	11.48 / 11.48	11.93 / 11.93	—	—								— / —
																				/
																				/
																				/
																				/
																				/
																				/

Comments: _____

ARCO Products Company (A Division of AtlanticRichfieldCompany) 330-006.2G **Task Order No.** 07600 **Chain of Custody**

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer MIKE WHELAN	Telephone no. (ARCO)	Telephone no. (Consultant) 441-7500	Fax no. (Consultant) (408) 441-7539
Consultant name PACIFIC ENVIRONMENTAL GROUP	Address (Consultant) 2025 GANGWAY PLACE, SAN JOSE, CA 95110		Contract number

Method of shipment: COURIER

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 SPAS 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 ☐	SULFATE	NITRATE
590H		3		X		X	HCL	5-26-95	1400		X											
17200VM		↓		↓		↓	↓	5-30-95	1510		↓											
17348VM								↓	1145													
MW-17									1445													
MW-18									1550													
MW-19									1420													
MW-21									1300													
MW-22									1240													
MW-23		↓					↓	↓	1220		↓											
590H		1					NP	5/26/95	1400												X	X
17200VM		↓					↓	5/30/95	1510												X	X
17348VM								↓	1145												X	X
MW-17									1445												X	X
MW-18									1550												X	X
MW-19									1420												X	X
MW-21		↓		↓		↓	↓	↓	1300												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:

	Date	Time	
Relinquished by sampler	5-31-95	730	Received by
Relinquished by			Received by
Relinquished by			Received by laboratory / Date / Time

Distribution: White copy — Laboratory; Canary copy — ARCO Environmental Engineering; Pink copy — Consultant
APC-3292 (2-91)

ARCO Products Company Division of AtlanticRichfieldCompany — 530006-26 — **Task Order No.** 97600 — **Chain of Custody**

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer MIKE WHELAN	Telephone no. (ARCO)	Telephone no. (Consultant) 441-7500	Fax no. (Consultant) 441-7539
Consultant name PEAK ENVIRONMENTAL GROUP	Address (Consultant) 2025 GATEWAY PLACE, SAN JOSE, CA 95110		Contract number

Method of shipment: COURIER

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 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 ☐	SULFATE	NITRATE
MW-22		1		X		X	NP	5-30-95	1240												X	X
MW-23		1		X		X	NP	5-30-95	1220												X	X
TB-1		2		X		X	HCL	5-26-95	N/A		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 5-31-95 Time 730	Received by	
Relinquished by	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

ARCO Products Company Division AtlanticRichfieldCompany — 3300626 — **Task Order No.** 176 00 — **Chain of Custody**

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer MIKE WHELAN	Telephone no. (ARCO)	Telephone no. (Consultant) 441-7500	Fax no. (Consultant) 441-7539
Consultant name PACIFIC ENVIRONMENTAL GROUP	Address (Consultant) 2025 GATEWAY PLACE #440 SAN JOSE, CA		Contract number

Method of shipment: COURIER

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 GAS 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 ☐	SULFATE	NITRATE
6331		3		X		X	HCL	5-31-95	1230		X											
17197VM									1005													
17203VM									1025													
17302VM									1100													
17349VM									1135													
17372VM									1250													
17393VM									1340													
MW-15									1315													
MW-16		↓							1200													
TB-Z		2					↓		NA		↓											
6334		1					NP		1230												X	X
17197VM									1005												X	X
17203VM									1025												X	X
17302VM									1100												X	X
17349VM									1135												X	X
17372VM		↓		↓		↓	↓	↓	1250												X	X

Special detection Limit/reporting

Special QA/QC

Remarks: 1 of 2

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 6-1-95 Time 730	Received by
Relinquished by	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

APC-3292 (2-91)

ARCO Products Company Division of AtlanticRichfieldCompany — 330-0062G — **Task Order No.** 17600 — **Chain of Custody**

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer MIKE WHELAN	Telephone no. (ARCO)	Telephone no. (Consultant) 441-7500	Fax no. (Consultant) 441-7539
Consultant name PACIFIC ENVIRONMENTAL GROUP	Address (Consultant) 2025 GATEWAY PLACE #440 SAN JOSE, CA 95110		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 EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM5030E	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 ☐	SULFATE	NITRATE
17393MW		1		X		X	NP	5/31/95	1340												X	X
MW-15		↓		↓		↓	↓	↓	1315												X	X
MW-16		↓		↓		↓	↓	↓	1200												X	X

Method of shipment: COURIER

Special detection Limit/reporting

Special QA/QC

Remarks: 2 OF 2

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 6-1-95 Time 730	Received by	
Relinquished by	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

APC-3292 (2-91)

ARCO Products Company Division of AtlanticRichfieldCompany — 330-006.26 Task Order No. 107600 — **Chain of Custody**

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer MIKE WHELAN	Telephone no. (ARCO)	Telephone no. (Consultant) 441-7500	Fax no. (Consultant) 441-7539
Consultant name PACIFIC ENVIRONMENTAL GROUP	Address (Consultant) 2025 GATEWAY PLACE #440 SAN JOSE, CA 95110		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 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 ☐	SULFATE	NITRATE
MW-5	-	3		X		X	HCL	6-1-95	1305		X											
MW-7	-								1150													
MW-8	-								1235													
MW-9	-								1125													
MW-10	-								1025													
MW-11	-								1040													
MW-13	-								1205													
MW-14	-								1000													
MW-24	-								1105													
MW-25	-								1135													
MW-26	-								1055													
EI-A	-	↓					↓		1325		↓											
MW-5	-	1					NP		1305												X	X
MW-7	-	1					NP		1150												X	X
MW-8	-	1					NP		1235												X	X
MW-9	-	1		↓		↓	NP		1125												X	X

Method of shipment: COURIER

Special detection Limit/reporting

Special QA/QC

Remarks: 1 of 2

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 6-2-95 Time 900	Received by	
Relinquished by	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

APC-3292 (2-91)

ARCO Products Company Division of AtlanticRichfieldCompany — 3300626 — **Task Order No.** 107600 — **Chain of Custody**

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer MIKE WHELAN	Telephone no. (ARCO)	Telephone no. (Consultant) 441-7500	Fax no. (Consultant) 441-7539
Consultant name PACIFIC ENVIRONMENTAL GROUP	Address (Consultant) 2025 GATEWAY PLACE #440 SAN JOSE, CA 95110		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 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 ☐	SULFATE	NITRATE
MW-10	-	1		X		X	HP	6-1-95	1025												X	X
MW-11	-	1							1040												X	X
MW-13	-	1							1205												X	X
MW-14	-	1							1000												X	X
MW-24	-	1							1105												X	X
MW-25	-	1							1135												X	X
MW-26	-	1							1055												X	X
EI-A	-	1							1325												X	X
TB-3	-	2					HCL	6-1-95	NA		X											

Laboratory name: SEQUOIA
Contract number:
Method of shipment: COURIER
Special detection Limit/reporting:
Special QA/QC:
Remarks: 2 of 2
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 6-2-95	Time 8:00	Received by
Relinquished by	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
APC-3292 (2-91)

ARCO Products Company
Division of AtlanticRichfieldCompany

3301006 26 Task Order No. 170700

Chain of Custody

ARCO Facility no. 0609	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name CERTIFIED
ARCO engineer MIKE WHELAN	Telephone no. (ARCO)	Telephone no. (Consultant) 441-7500	Fax no. (Consultant) 441-7539
Consultant name PACIFIC ENVIRONMENTAL GROUP	Address (Consultant) 2025 GATEWAY PL #440 SAN JOSE CA 95110		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 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 ☐ VOA ☐ Semi VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐	SULFATE	NITRATE
173681E		1		X		X	NP	6-7-95	1500												X	X

Special detection Limit/reporting

Special QA/QC

Remarks

1 of 1

Lab number

Turnaround time

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

Method of shipment

Condition of sample:		Temperature received:	
Relinquished by sampler	Date 6-7-95	Time 1545	Received by
Relinquished by	Date	Time	Received by
Relinquished by	Date	Time	Received by laboratory — Date 6/7/95 — Time 1715

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

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330062G LOCATION: 17601 HESPERIAN SAN LORENZO WELL ID #: 590H

CLIENT/STATION No.: ARCO / 0608 FIELD TECHNICIAN: J Monroe

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 _____ = _____ x Number of Casings _____ = Calculated Purge_____

DATE PURGED: 5-26-95 START: 1417 END (2400 hr): 1425 PURGED BY: DM

DATE SAMPLED: 5/26/95 START: 1427 END (2400 hr): 1434 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
		PUMPED ≈15 GALLONS BEFORE SAMPLE SET			SHEEN		

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

Pumped dry Yes / No

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
590H	5-26-95	1430	3	40ml	VOA	HCl	TPH/BTEX
			1	1L	PLASTIC	NP	SULFATE, NITRATE

REMARKS:

SIGNATURE:

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

330 0062C

Date: 5.26.95 Well No. 590H

Homeowner Well Address: 590 HACIENDA SAN LORENZO

Sampler: J Mannick

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1418	1.5	5.0	CLR	NONE	7.48	3000	-068	20.7	6	10.06
1428	1.5	10 GAL	CLR	NONE	7.32	2080	-071	20.7	6	8.26
1423	1.5	15.0	CLR	NONE	7.30	2000	to -145	20.7 AT END	5	10.26
	Total Purge	15 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1440	00	6	0	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO, CA WELL ID #: 633H

CLIENT/STATION No.: ARCO 0608 FIELD TECHNICIAN: J. MONROE

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 _____ = _____ x Number of Casings _____ = Calculated Purge _____

DATE PURGED: 5-31-95 START: 1215 END (2400 hr): 1227 PURGED BY: DM

DATE SAMPLED: 5-31-95 START: 1227 END (2400 hr): 1232 SAMPLED BY: DM

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

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

Pumped dry Yes / No

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
633H	5-31-95	1230	3	40ml	VOA	HCl	TPH-g / BTEX / SULFATE / NITRATE
↓	↓	↓	1	1L	PLASTIC	NP	

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.
3300062C

Date: 5-31-95 Well No. 633H

Homeowner Well Address: 633 HACIENDA

Sampler: J. Monnier

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1218	15.0	5.0	CLR	WONG	7.35	1340	-197	18.9	0.5	14.83
1221	1.5	10.0	CLR	NONE	7.10	1303	-205	18.9	1.0	20.61
1225	1.5	15.0	CLR	NONE	6.93	1243	-207	19.0	1.0	18.11
	Total Purge	15.0 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1230	0.0	1.0	0.2	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 33006626 LOCATION: 17001 HESPERIAN SAN LORENZO WELL ID #: 634H

CLIENT/STATION No.: ARCO/0603 FIELD TECHNICIAN: J. Monnier

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 _____ = _____ x Number of Casings _____ = Calculated Purge _____

DATE PURGED: _____ START: _____ END (2400 hr): _____ PURGED BY: _____

DATE SAMPLED: _____ START: _____ END (2400 hr): _____ SAMPLED BY: _____

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 2 5°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
		NOT SAMPLED		NOT AUTHORIZED			

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: _____
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
634H	—	—	—	—	—	—	—

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 530006.26 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO WELL ID #: 642H

CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: J. MONNIER

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 _____ = _____ x Number of Casings _____ = Calculated Purge _____

DATE PURGED: _____ START: _____ END (2400 hr): _____ PURGED BY: _____

DATE SAMPLED: _____ START: _____ END (2400 hr): _____ SAMPLED BY: _____

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
			NOT SAMPLED				
			NO AUTHORIZATION				

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: _____
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
642H	—	—	—	—	—	—	—

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 33000626 LOCATION: 17601 HESPERIAN BLVD WELL ID #: 675H

CLIENT/STATION No.: ARCO / 0608 FIELD TECHNICIAN: J. Mowrey

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 _____ = _____ x Number of Casings _____ = Calculated Purge _____

DATE PURGED: _____ START: _____ END (2400 hr): _____ PURGED BY: _____

DATE SAMPLED: _____ START: _____ END (2400 hr): _____ SAMPLED BY: _____

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
	NOT SAMPLED						
		DEDICATED PUMP					
			INOPERABLE				

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: _____
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
675H	—	—	—	—	—	—	—

REMARKS:

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: 17348VE

CLIENT/STATION No.: ARCO 0608 FIELD TECHNICIAN: J. Manning

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 #3
- ☐ 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 15.57 - DTW 13.07 = 2.5 x Gal/Linear Foot 0.66 = 1.65 x Number of Casings 3 = Calculated Purge 4.95

DATE PURGED: 5-30-95 START: 1113 END (2400 hr): 1130 PURGED BY: DM

DATE SAMPLED: 5-30-95 START: 1142 END (2400 hr): 1147 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
		SEE B.A. SHEET					

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: #3
- ☐ Other: _____
- ☐ Airlift Pump: _____
- ☐ Dedicated: _____

SAMPLING EQUIPMENT/I.D. #
- ☒ Bailer: 13-2
- ☐ Dedicated: _____
- ☒ Other: ~~GRUNDFOS~~

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
17348VE	5-30-95	1145	3	40ml	VOA	HCl	TPH-g/BTEX
↓	↓	↓	↓	1L	PLASTIC	NP	SULFATE/NITRATE
17348VE	SAMPLE LOST RESAMPLED 6-2-95	1580	1	1L	PLASTIC	NP	SULFATE/NITRATE

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.
3300062G

Date: 5-30-95 Well No. 17348VE

Homeowner Well Address: 17348 VIA ENCINAS

Sampler: JM

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1121	1.5	2.0	BRN	NONE	7.50	1451	-108	20.7	3.0	>200
1124	1.0	4.0	BRN	NONE	7.09	1361	-121	23.1	3.5	>200
1127	1.5	6.0	BRN	NONE	7.24	1458	-111	23.6	2.5	>200
	Total Purge	6.0 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1135	0.0	2.0	0.60	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIA BLVD SAN LORENZO CA WELL ID #: 17197VM

CLIENT/STATION No.: ARCO 0608 FIELD TECHNICIAN: J. MONNIER

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 _____ = _____ x Number of Casings _____ = Calculated Purge _____

DATE PURGED: 5-31-95 START: 935 END (2400 hr): 948 PURGED BY: DM

DATE SAMPLED: 5-31-95 START: 1002 END (2400 hr): 1007 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
	SEE BAS SHEETS						
					Cobalt 0-100 Clear Cloudy Yellow Brown	NTU 0-200 Heavy Moderate Light Trace	Strong Moderate Faint None

Pumped dry Yes / No

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
17197VM	5-31-95	1005	3	40mL	VOA	HCl	TPH, BTEX
"	"	"	1	1L	PLASTIC	NP	SULFATE/NITRATE

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 5-31-95 Well No. 17197VM

Homeowner Well Address: 17197 VIAMAGDELENA

Sampler: J. Mouvier

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
938	1.5	5.0	CLR	NONE	7.70	1525	-138	19.4	1.5	6.86
942	1.5	10.0	CLR	NONE	7.30	1245	-152	19.1	1.5	8.41
946	1.5	15.0	CLR	NONE	7.11	1229	-157	18.4	1.5	7.06
	Total Purge	15.0 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1000	0.0	~~0.08~~ 2.0	0.08	

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FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: 17200VM

CLIENT/STATION No.: ARCO 0608 FIELD TECHNICIAN: J. MANNING

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 16.00 - DTW 11.85 = 4.15 x Gal/Linear Foot 1.5 = 6.23 x Number of Casings 3 = Calculated Purge 18.69

DATE PURGED: 5-30-95 START: 1450 END (2400 hr): 1505 PURGED BY: DM

DATE SAMPLED: 5-30-95 START: 1507 END (2400 hr): 1512 SAMPLED BY: DM

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

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☐ Airlift Pump: _____
- ☒ Centrifugal Pump: #3
- ☐ Dedicated: _____
- ☐ Other: _____

SAMPLING EQUIPMENT/I.D. #
- ☒ Bailer: 13-1
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
17200VM	5-30-95	1510	3	40mL	VOA	HCL	TPH/BTEX
"	"	"	1	1L	PLASTIC	NP	NITRATE/SULFATE

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 5-30-95 Well No. 17200VN

Homeowner Well Address: 17200 VN MAGDALENA

Sampler: J. Moraru

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1454	1.5	6.5	BRN	None	7.64	1371	-166	19.2	2.5	45.3
1458	1.5	13.0	BRN	NONE	7.47	1330	-186	18.3	2.0	23.7
1502	1.5	19.5	BRN	NONE	7.34	1383	-203	21.8	2.0	22.2
	Total Purge	19.5 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1509	0.0	1.0	0.18	

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FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 5-31-95 Well No. 17D3VM

Homeowner Well Address: 17203 VIA MADRONE

Sampler: J. Monnette

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1013	1.5	5.0	BRN	NONE	7.58	1244	-144	18.1	1.0	48.9
1017	1.5	10.0	BRN	NONE	7.05	1236	-172	18.3	1.0	26.8
1022	1.5	15.0	BRN	NONE	6.99	1229	-188	18.4	2.5	29.6
	Total Purge	15 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1020	0.0	1.0	0.10	

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 5-30-95 Well No. MW-17

Homeowner Well Address:

Sampler: O. Monnika

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1429	1.5	4.5	CLR	NONE	7139	1359	-109	19.1	2.5	16.94
1432	1.5	9.0	CLR	NONE	7.33	1358	-133	18.6	1.5	15.66
1435	1.5	13.5	CLR	NONE	703	1335	-136	18.6	1.5	17.86
	Total Purge	(gal)								

FIELD ANALYSIS WITH HACH KITS				
Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1445	0.0	1.0	0.18	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.26 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: MW-18

CLIENT/STATION No.: ARCO / 0608 FIELD TECHNICIAN: J. Morrison

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 #3
- ☐ 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 21.75 - DTW 10.21 = 11.54 x Gal/Linear Foot 0.38 = 4.39 x Number of Casings 3 = Calculated Purge 13.16

DATE PURGED: 5.30.95 START: 1521 END (2400 hr): 1535 PURGED BY: MM

DATE SAMPLED: 5.30.95 START: 1545 END (2400 hr): 1552 SAMPLED BY: MM

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

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☒ Centrifugal Pump: #3
- ☐ Other: _____
- ☐ Airlift Pump: _____
- ☐ Dedicated: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: 132
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-18	5.30.95	1550	3	40ml	VOA	HCl	BTEX / SULFATE / NITRATE
↓	↓	↓	1	1L	PLASTIC	NP	

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 5-D-95 Well No. MW-15

Homeowner Well Address: 17197 V Manor

Sampler: T. Morrow

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1524	1.5	4.50	CLR	~~CLR~~ NONE	7.04	1448	-123	20.7	1.5	14.26
1527	1.5	9.0	CLR	NONE	7.03	1420	-136	20.3	1.5	13.8
1531	1.5	13.5	CLR	NONE	7.05	1336	-149	20.3	1.5	15.11
	Total Purge	13.5 (gal)								

FIELD ANALYSIS WITH HACH KITS				
Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes:
1540	0.0	1.0	0.15	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.26 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: MW-19

CLIENT/STATION No.: ARCO / 0608 FIELD TECHNICIAN: J. MONNIER

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 #3
- ☐ 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 21.65 - DTW 9.76 = 1205 x Gal/Linear Foot .038 = 4.58 x Number of Casings 3 = Calculated Purge 13.74

DATE PURGED: 5-30-95 START: 1358 END (2400 hr): 1410 PURGED BY: DM

DATE SAMPLED: 5-30-95 START: 1417 END (2400 hr): 1422 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
	4.5						
	9.0	SEE BAS SHEET					
	13.5						

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☒ Centrifugal Pump: #3
- ☐ Airlift Pump: _____
- ☐ Dedicated: _____
- ☐ Other: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: 23-5
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-19	5-30-95	1420	3	40ml	VOA	HCl	GAS/BTEX
"	"	"	1	1L	PLASTIC	NP	SULFATE, NITRATE

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 5-30-95 Well No. MW-19

Homeowner Well Address: 17105 Via Mano

Sampler: J. Martinez

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1401	1.5	4.5	CLR	NONE	7.78	1577	-160	19.4	1.5	28.3
1404	1.5	9.0	CLR	NONE	7.61	1416	-166	19.4	1.5	32.4
1407	1.5	13.5	CLR	NONE	717	1404	-176	19.6	1.5	25.6
	Total Purge	13.5 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes:
1410	0.0	1.0	0.15	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.26 LOCATION: 1760 HESPERIAN BLVD SAN LORENZO CA WELL ID #: MW-21

CLIENT/STATION No.: ARCO / 0608 FIELD TECHNICIAN: J. MONNIER

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 #3
- ☐ 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 22.04 - DTW 10.15 = 11.89 x Gal/Linear Foot 0.38 = 4.52 x Number of Casings 3 = Calculated Purge 13.56

DATE PURGED: 5-30-95 START: 1243 END (2400 hr): 1255 PURGED BY: DM

DATE SAMPLED: 5-30-95 START: 1255 END (2400 hr): 1302 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1247	4.5		BAS				
	9.0						
	13.5	SEE	SHEETS				

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

Pumped dry Yes (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☒ Centrifugal Pump #3
- ☐ Other: _____
- ☐ Airlift Pump: _____
- ☐ Dedicated: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: 236
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-21	5-30-95	1300	3	40ml	VOA	HCl	GAS/BTEX
↓	↓		1	1L	PLASTIC	NP	SULFATE/NITRATE

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: _____ Well No. _____

Homeowner Well Address: 17127 VIA

Sampler: _____

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1247	1.5	4.5	CLR	None	7.54	1395	-135	20.0	1.5	19.70
1250	1.5	9.0	CLR	NONE	7.32	1259	-148	19.7	1.0	16.61
1253	1.5	13.5	CLR	NONE	7.15	1228	-160	20.0	1.0	15.86
	Total Purge	13.5 (gal)								

FIELD ANALYSIS WITH HACH KITS				
Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1257	0.0	1.0	0.1	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.26 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: MW-22

CLIENT/STATION No.: ARCO / 0608 FIELD TECHNICIAN: J. MONNIER

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 #3
- ☐ 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 21.70 - DTW 10.61 = 11.09 x Gal/Linear Foot 0.38 = 4.21 x Number of Casings 3 = Calculated Purge 12.64

DATE PURGED: 5-30-95 START: 1221 END (2400 hr): 1232 PURGED BY: DM

DATE SAMPLED: 5-30-95 START: 1239 END (2400 hr): 1242 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
	4.5		SEE BAS SHEET				

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☐ Airlift Pump: _____
- ☒ Centrifugal Pump: #3
- ☐ Dedicated: _____
- ☐ Other: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: 23-7
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-22	5-30-95	1240	3	40ml	VOA	HCl	GAS/BTEX
↓	↓	↓	1	1L	AMBER	NP	SVOA-25

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.
3300626

Date: 5-30-95 Well No. MW-2Z

Homeowner Well Address: 17238 VIA FLORA

Sampler: J. Monnier

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1225	1.5	4.5	CLR	NONE	7.62	1140	-139	18.2	1.5	13.50
1228	1.5	9.0	CLR	NONE	7.15	1097	-151	18.8	1.5	14.31
1231	1.5	13.5	CLR	NONE	7.08	1110	-161	19.6	1.5	12.08
	Total Purge	13.5 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1235	0.0	1.0	.15	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.26 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: MW-23

CLIENT/STATION No.: ARCO / 0608 FIELD TECHNICIAN: J. McNIVEN

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 21.95 - DTW 11.67 = 10.28 x Gal/Linear Foot 0.38 = 3.91 x Number of Casings 3 = Calculated Purge 11.72

DATE PURGED: 5-30-95 START: 1155 END (2400 hr): 1210 PURGED BY: MM

DATE SAMPLED: 5-30-95 START: 1217 END (2400 hr): 1222 SAMPLED BY: MM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 2.5°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
	4.0						
		SEE BAS SHEET					

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☒ Centrifugal Pump: #3
- ☐ Other: _____
- ☐ Airlift Pump: _____
- ☐ Dedicated: _____

SAMPLING EQUIPMENT/I.D. #
- ☑ Bailer: 17-4
- ☐ Dedicated: _____
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-23	5-30-95	1220	3	40ml	VOA	HCl	GAS/BTEX
↓	↓	↓	1	1L	PLASTIC	NP	SULFATE, NITRATE

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 5-30-95 Well No. MW-23

Homeowner Well Address: 17347 VIA ENCINAS

Sampler: J M

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1203	1.5	4.0	BRN	NONE	7.40	1469	-093	21.6	3.5	~~3.5~~ >200
1204	1.5	8.0	BRN	NONE	7.18	1395	-100	20.4	3.0	31.4
1206	1.5	12.0	BRN	NONE	7.19	1196	-102	18.3	3.0	21.8
	Total Purge	12.0 (gal)								

FIELD ANALYSIS WITH HACH KITS				
Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1215	0.0	2.0	0.20	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.26 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: MW-24

CLIENT/STATION No.: ARCO / 0608 FIELD TECHNICIAN: J. MONNIER

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 19.60 - DTW 12.35 = 7.25 x Gal/Linear Foot 0.17 / 0.38 = 1.23 x Number of Casings 3 = Calculated Purge 3.70

DATE PURGED: 6-1-95 START: 1100 END (2400 hr): 1104 PURGED BY: DM

DATE SAMPLED: 6-1-95 START: 1104 END (2400 hr): 1107 SAMPLED BY: DM

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☒ Centrifugal Pump: #3
- ☐ 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-24	6-1-95	1105	3	40ml	VOA	HCl	GAS/BTEX
"	"	"	1	1L	PLASTIC	NP	NITRATE/SULFATE

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 6-1-95 Well No. MW-7Y

Homeowner Well Address: [illegible] CHICKEN

Sampler: J. [illegible]

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1101	1.5	1.5	BRN	None	6.31	1220	-065	20.6	?	>200
1102	1.5	3.0	BRN	None	6.80	1295	-093	21.6	?	>200
1103	1.5	4.5	BRN	None	6.86	1326	-115	22.1	?	>200
		(?) - UNABLE TO READ BECAUSE OF HIGH TURBIDITY								
	Total Purge	4.5 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1105	0.0	?	?	

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FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.2G LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: MW-2S

CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: J. Mbnnk

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 #3
- ☐ 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 20.80 - DTW 11.12 = 9.68 x Gal/Linear Foot ~~0.38~~ 0.17 = 1.65 x Number of Casings 3 = Calculated Purge 4.94

DATE PURGED: 6-1-95 START: 1128 END (2400 hr): 1132 PURGED BY: M

DATE SAMPLED: 6-1-95 START: 1132 END (2400 hr): 1137 SAMPLED BY: M

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

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: ______ TOB/TOC

PURGING EQUIPMENT/I.D. #
- ☐ Bailer:
- ☒ Centrifugal Pump: #3
- ☐ 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-2S	6-1-95	1135	3	40ml	VOA	HCl	GAS/BTEX
↓	↓	↓	1	1L	PLASTIC	NP	SULFATE/NITRATE

REMARKS:

SIGNATURE: [signature]

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 6/1/95 Well No. MW-25

Homeowner Well Address: 17601 HESPERIAN

Sampler: J. Mueller

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1130	1.5	2.0	BRN	NONE	7.52	1277	-058	19.0	?	>200
1131	1.5	4.0	BRN	NONE	7.16	1167	-079	19.7	?	>200
1132	1.5	6.0	BRN	NONE	7.02	1222	-091	19.9	?	>200
			?	TURBIDITY	TOO HEAVY FOR READING					
	Total Purge	6.0 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1135	0.0	?	?	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.26 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: MW-26

CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: J. Miller

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 #3
- ☐ 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 19.29 - DTW 11.48 = 7.81 x Gal/Linear Foot ~~0.17~~ 0.38 = 1.33 x Number of Casings 3 = Calculated Purge 3.4

DATE PURGED: 6-1-05 START: 1045 END (2400 hr): 1051 PURGED BY: MM

DATE SAMPLED: 6-1-05 START: 1052 END (2400 hr): 1057 SAMPLED BY: MM

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

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☒ Centrifugal Pump: #3
- ☐ 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-26	6-1-05	1055	3	40ml	VOA	HCl	GAS/BTEX
↓	↓	↓	1	1L	PLAIN	NP	SULFATE/NITRATE

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 6-1-95 Well No. MW 26

Homeowner Well Address: Popeyes Chicken

Sampler: JMixon

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1046	1.5	1.5	BRN	FAINT	7.58	1216	-066	22.2	6.0	>200
1047	1.5	3.0	BRN	FAINT	6.86	1297	-096	22.7	6.0	>200
1049	1.5	4.5	BRN	FAINT	6.96	1271	-115	22.9	6.0	>200
								*		
		* D.O. READINGS NOT ACCURATE DUE TO HEAVY BRN WATER								
		AS WELL AS FERROUS IRON.								
	Total Purge	4.5 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1055	0.0	?	?	

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FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.26 LOCATION: 17601 HESPERIAN BLVD. WELL ID #: EI-A

CLIENT/STATION No.: ARCO/ 0608 FIELD TECHNICIAN: J. MONNIER

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 #3
- ☐ 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 _____ = _____ x Number of Casings _____ = Calculated Purge _____

DATE PURGED: 6-1-95 START: 1315 END (2400 hr): 1322 PURGED BY: DM

DATE SAMPLED: 6-1-95 START: 1323 END (2400 hr): 1327 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
		SEE BAS SHEET					
					Cobalt 0-100 Clear Cloudy Yellow Brown	NTU 0-200 Heavy Moderate Light Trace	Strong Moderate Faint None

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

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

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
EI-A	6-1-95	1325	3	40ml	VOA	HCl	GAS/BTEX
↓	↓	↓	1	1L	PLASTIC	NP	SULFATE/NITRATE

REMARKS: HOURS: 27628.7
TOTALIZER: 08376655
GPM: 2.0

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET
BIO-ATTENUATION STUDY
ARCO SERVICE STATION 0608
SAN LORENZO, CALIFORNIA

Pacific Project No.

Date: 6-1-95 Well No. E1-A

Homeowner Well Address: 17611 HESPERIAN

Sampler: J. HANNAH

Comments:

Time (PST)	Flow Rate (gpm)	Purge Volume (gal)	Color	Odor	pH	Cond. (mmhos)	ORP (mvolts)	Temp. deg. C	Dissolved Oxygen (mg/l)	Turbidity (ntu)
1317	1.5	5.0	CLR	NONE	7.99	1366	-143	20.6	1.5	6.82
1318	1.5	10.0	CLR	NONE	7.40	1321	-155	20.4	3.5	8.61
1320	1.5	15.0	CLR	NONE	7.51	1333	-166	20.3	2.0	10.08
	Total Purge	15.0 (gal)								

FIELD ANALYSIS WITH HACH KITS

Time (PST)	H_2S (mg/l)	Dissolved Oxygen (mg/l)	Ferrous Iron (mg/l)	Notes
1330	0.0	2.0	0.1	

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: TB-1

CLIENT/STATION No.: ARCO 0608 FIELD TECHNICIAN: J. Hawkins

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 _____ = _____ x Number of Casings _____ = Calculated Purge _____

DATE PURGED: _____ START: _____ END (2400 hr): _____ PURGED BY: _____

DATE SAMPLED: _____ START: _____ END (2400 hr): _____ SAMPLED BY: _____

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: _____ 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
TB-1	5-26-98	NA	2	40ml	VOA	HCL	TPH/BTEX

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No. : 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: TB-2

CLIENT/STATION No. : ARCO / 0608 FIELD TECHNICIAN: [illegible]

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 ______ = ______ x Number of Casings ______ = Calculated Purge ______

DATE PURGED: ______ START: ______ END (2400 hr): ______ PURGED BY: ______

DATE SAMPLED: ______ START: ______ END (2400 hr): ______ SAMPLED BY: ______

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
					Cobalt 0-100 Clear Cloudy Yellow Brown	NTU 0-200 Heavy Moderate Light Trace	Strong Moderate Faint None

Pumped dry Yes / No

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
TB-2	5-31-95	NA	2	40ml	VOA	HCL	TPHg/BTEX

REMARKS: ______

SIGNATURE: [signature]

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO, CA WELL ID #: TB-3

CLIENT/STATION No.: ARCO 0608 FIELD TECHNICIAN: J. Manzanas

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	=	x Number of Casings	= Calculated Purge
_____	_____	_____	_____	_____	_____	_____

DATE PURGED: _____ START: _____ END (2400 hr): _____ PURGED BY: _____

DATE SAMPLED: _____ START: _____ END (2400 hr): _____ SAMPLED BY: _____

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

Pumped dry Yes / No

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
TB-3	6-1-95	NA	2	40ml	VOA	HCl	TPHg/BTEX

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

Project: 330-006.5B/608, San Lorenzo

Enclosed are the results from samples received at Sequoia Analytical on May 3, 1995. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
950523401	LIQUID, INFL	5/2/95	TPHGB Purgeable TPH/BTEX
950523402	LIQUID, EFFL	5/2/95	TPHGB Purgeable TPH/BTEX

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Quality Assurance Department

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.5B/608, San Lorenzo
Sample Descript: INFL
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9505234-01

Sampled: 05/02/95
Received: 05/03/95

Analyzed: 05/08/95
Reported: 05/15/95

QC Batch Number: GC050895BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	240
Benzene	0.50	7.1
Toluene	0.50	N.D.
Ethyl Benzene	0.50	3.2
Xylenes (Total)	0.50	1.6
Chromatogram Pattern:		
Weathered Gas		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	92

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.5B/608, San Lorenzo
Sample Descript: EFFL
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9505234-02

Sampled: 05/02/95
Received: 05/03/95

Analyzed: 05/08/95
Reported: 05/15/95

QC Batch Number: GC050895BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	104

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group	Client Project ID:	330-006.5B/608, San Lorenzo	
2025 Gateway Place, Suite 440	Matrix:	LIQUID	
San Jose, CA 95110			
Attention: Maree Doden	Work Order #:	9505234 01	Reported: May 15, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC050895BTEX17A	GC050895BTEX17A	GC050895BTEX17A	GC050895BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9504l6117	9504l6117	9504l6117	9504l6117
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/8/95	5/8/95	5/8/95	5/8/95
Analyzed Date:	5/8/95	5/8/95	5/8/95	5/8/95
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.1	9.3	9.2	27
MS % Recovery:	91	93	92	90
Dup. Result:	9.4	9.4	9.4	28
MSD % Recov.:	94	94	94	93
RPD:	3.2	1.1	2.2	3.6
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

Client Project ID: 330-006.5B/608, San Lorenzo
Matrix: LIQUID
Work Order #: 9505234 02

Reported: May 15, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC050895BTEX02A	GC050895BTEX02A	GC050895BTEX02A	GC050895BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9504I6217	9504I6217	9504I6217	9504I6217
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/8/95	5/8/95	5/8/95	5/8/95
Analyzed Date:	5/8/95	5/8/95	5/8/95	5/8/95
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.6	9.4	10	30
MS % Recovery:	96	94	100	100
Dup. Result:	9.3	8.9	10	30
MSD % Recov.:	93	89	100	100
RPD:	3.2	5.5	0.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50
LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				
MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

ARCO Products Company Division of AtlanticRichfieldCompany

330-006.5B Task Order No. 1702100

Chain of Custody

ARCO Facility no. 608	City (Facility) San Lorenzo	Project manager (Consultant) Shaw Garakani	Laboratory name Sequoia
ARCO engineer Mike Whelan	Telephone no. (ARCO)	Telephone no. (Consultant) (408) 441 7500	Fax no. (Consultant) (408) 441 7539
Consultant name Pacific Env Group	Address (Consultant) 2025 Gate Way pl # 440 San Jose		Contract number 07-073

Method of shipment: 9505234

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 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 ☐	
Inf	1	3		X		X	HCL	5-2-95	10:00		X										
Eff	2	3		X		X	X	X	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:

	Date	Time		Date	Time
Relinquished by sampler	5-3-95	700	Received by	5/3/95	0715
Relinquished by	5/3/95	10.30	Received by		
Relinquished by	5/3	12:0	Received by laboratory	5/3/95	1217

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

APC-3292 (2-91)

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

Project: 330-006.5B/608, San Lorenzo

Enclosed are the results from samples received at Sequoia Analytical on June 6, 1995. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
950638401	LIQUID, Infl	6/5/95	TPHGB Purgeable TPH/BTEX
950638402	LIQUID, Effl	6/5/95	TPHGB Purgeable TPH/BTEX

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Bruce Fletcher
Quality Assurance Department

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.5B/608,San Lorenzo
Sample Descript: Infl
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9506384-01

Sampled: 06/05/95
Received: 06/06/95

Analyzed: 06/09/95
Reported: 06/15/95

QC Batch Number: GC060995BTEX22A
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	106

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group	Client Proj. ID: 330-006.5B/608,San Lorenzo	Sampled: 06/05/95
2025 Gateway Place, Suite 440	Sample Descript: Effl	Received: 06/06/95
San Jose, CA 95110	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 06/09/95
Attention: Maree Doden	Lab Number: 9506384-02	Reported: 06/15/95

QC Batch Number: GC060995BTEX22A
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	103

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Pacific Environmental Group	Client Project ID:	330-006.5B/608, San Lorenzo	
2025 Gateway Place, Suite 440	Matrix:	LIQUID	
San Jose, CA 95110			
Attention: Maree Doden	Work Order #:	9506384 01, 02	Reported: Jun 19, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC060995BTEX22A	GC060995BTEX22A	GC060995BTEX22A	GC060995BTEX22A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler
MS/MSD #:	950628304	950628304	950628304	950628304
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/9/95	6/9/95	6/9/95	6/9/95
Analyzed Date:	6/9/95	6/9/95	6/9/95	6/9/95
Instrument I.D.#:	GCHP22	GCHP22	GCHP22	GCHP22
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.5	9.5	9.6	28
MS % Recovery:	95	95	96	93
Dup. Result:	9.9	10	10	30
MSD % Recov.:	99	100	100	100
RPD:	4.1	5.1	4.1	6.9
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				
MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Bruce Fletcher for
Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

ARCO Products Company — Division of AtlanticRichfieldCompany — 330-006.5D — Task Order No. 1702100 — **Chain of Custody**

ARCO Facility no. 6.08	City (Facility) SAN Lorenzo	Project manager (Consultant) Shaw Gaialani	Laboratory name Sequoia
ARCO engineer Mike Whelan	Telephone no. (ARCO)	Telephone no. (Consultant) 408 441 7500	Fax no. (Consultant) 408 441 7589
Consultant name PACIFIC ENV Group	Address (Consultant) 2025 Gateway pl #440 San Jose		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 gas 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 ☐		
INFL		3		X		X	HCL	6-5-95			X											
EFFL		3		X		X	X	X			X											

Special detection Limit/reporting

Special QA/QC

Remarks

Lab number 9506384

Turnaround time

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

Condition of sample:

Temperature received:

Relinquished by sampler	Date 6-6-95	Time 700	Received by
Relinquished by	Date 6/6/95	Time 1155	Received by 6/6
Relinquished by	Date 6/6	Time 1515	Received by laboratory — Date 6/6/95 — Time 1315

Received by: 6/6/95 0715

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

APC-3292 (2-91)

Work Auth # 17021.00 **FIELD SERVICES / O&M REQUEST** Work Order # 953083

SITE INFORMATION FORM

Identification

Project # 330-006-5B

Station # 0608

Site Address: 17601 Hesperian Blvd @ Hacienda San Lorenzo

County: Alameda

Project Manager: Shaw G.

Requestor: Eric W.

Client: ARCO

Client P.O.C.: Mike Whelan

Date of request: 2/2/95

Project Type

- ☐ 1st Time visit
- ☐ Quarterly ☐ 1st ☐ 2nd ☐ 3rd ☐ 4th
- ☒ Monthly
- ☒ Semi-Monthly
- ☐ Weekly
- ☐ One time event
- ☐ Other:

Ideal field date(s):

Prefield Contacts/Permits

	Initials	Date
☐ Cal Trans		
☐ County	F/S	2/6/95
☐ City		
☐ Private	Copy/Dist.	RH

☐ Multi-Consultant Scheduling date(s):

Check Appropriate Category

Budget Hrs.

Actual Hrs. 2

Mob de Mob 1

Field Tasks: For General Description

1) Sample System

	Infl	Effl
Gas/BTEX	M	M
COD		Q
TSS		Q
pH		Q

2) Fill out Data Sheet

3) Ntw in E-1A

4) Change Filter

M = Monthly

Q = Quarterly (3, 6, 9, 12)

Comments, remarks, etc. from Field Staff (include problems encountered and out-of-scope work)

Monthly Completed
Samples Taken

Completed by: JV Date: 2-4-95

Checked by:

PACIFIC ENVIRONMENTAL GROUP, INC.

White Copy - Originator Yellow Copy - O & M Tech

Groundwater Extraction System

ARCO Service Station 0608
17601 Hesperian Boulevard
San Lorenzo, California

Name: JV Date/Time: 4-4-95

Treatment System Readings			
System On Upon Arrival?	YES	Electric Meter (kw-hrs)	15235
Effluent Totalizer (gallons)	0672510	Bag Filter INFL Pressure (psi)	12
E-1A Flowrate (gpm)	2 gpm	Bag Filter EFFL Pressure (psi)	10
E-1A Hourmeter (hours)	26253	MID-1 Pressure (psi)	6
E-1A Throttle Valve Position	100 % OPEN	MID-2 Pressure (psi)	0
E-1A DTW (TOB feet)	CAT parked ON TOP OF well	EFFL Pressure (psi)	20
Enclosure Swept	Yes	Does Sump Pump Work	N/A
Does the Autodialer Work? Batteries Replaced	Yes	Number of Spare Filters On-Site	22

Comments

Distrubute a copy of this form to the project supervisor.
33000626/O&MDOC

January 21, 1994

ARCO Products Company
Division of AtlanticRichfieldCompany

330 006 5B Task Order No. 170210

Chain of Custody

ARCO Facility no. 608	City (Facility)	Project manager (Consultant) Shaw Garaham	Laboratory name Sequoia
ARCO engineer Mike Whelan	Telephone no. (ARCO)	Telephone no. (Consultant) 408 441 7500	Fax no. (Consultant) 408 441 7539
Consultant name Pacific Env Group		Address (Consultant) 2025 Gate Way Pl # 440 San Jose	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 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 ☐		
INFL		3		X		X	HCL	4-4-95			X											
EFFL		3		X		X	X	X			X											

Special detection Limit/reporting

Special QA/QC

Remarks
Please include chromatograms on all gas/BTEX samples

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:

	Date	Time			
Relinquished by sampler	4-5-95	700	Received by		
Relinquished by			Received by		
Relinquished by			Received by laboratory	Date	Time

Distribution: White copy — Laboratory; Canary copy — ARCO Environmental Engineering; Pink copy — Consultant
APC-3292 (2-91)

FIELD SERVICES / O&M REQUEST

Work Order # 953156

SITE INFORMATION FORM

Identification

Project # 330-006.5B

Station # 0608

Site Address: 17001 HESPERIAN (@ A CIENEGA SAN LORENZO

County: ALAMEDA

Project Manager: SHAW G.

Requestor: ERIC W.

Client: ARCO

Client P.O.C.: MILES WHELAN

Date of request: 2/7/95

Project Type

- ☐ 1st Time visit
- ☐ Quarterly
  - ☐ 1st ☐ 2nd ☐ 3rd ☐ 4th
- ☐ Monthly
- ☒ Semi-Monthly
- ☐ Weekly
- ☐ One time event
- ☐ Other: _____

Ideal field date(s): SEMI-MONTHLY

Prefield Contacts/Permits

	Initials	Date
☐ Cal Trans		
☐ County	F/S	RJ 4/21/95
☐ City		
☐ Private	Copy/Dist.	RJ ↓
☐ Multi-Consultant Scheduling date(s):		

Check Appropriate Category

Budget Hrs. _____

Actual Hrs. .5

Mob de Mob 1.5

Field Tasks: For General Description

CHANGE BAG FILTER

Comments, remarks, etc. from Field Staff (include problems encountered and out-of-scope work)

Change bag Filter

Completed by: JV Date: 4-18-95

Checked by: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

White Copy - Originator Yellow Copy - O & M Tech Pink Copy - File

Eu

Work Order # 953198

FIELD SERVICES / ROUTINE O&M REQUEST

Identification

Request Frequency: Monthly

Project #	330-006.5B
Station #	0608
Site Address:	17601 Hesperian Blvd @ Hacienda Avenue
County:	Alameda
Project Manager:	Shaw Garakani
Requestor:	Eric Wingfield
Client:	ARCO
Client P.O.C.:	Mike Whelan
Revision Date:	April 24, 1995
Laboratory:	Sequoia Analytical

	Initials	Date
F/S	RH	5/4/95
Copy/Dist.	RH	↓

Site Remedial Technologies:

Groundwater Extration (GWE) [X]

Complete attached Data Sheets as prescribed in the following table:

Scheduling Table

Data Sheet Section(s) / Part(s)	To be Completed	Budgeted Hrs	Actual Hrs	Mob-de Mob	Completed
GWE(A, B, C, D, F)	monthly†		2	1	yes
GWE(E)	quarterly †				

† = sampling to be performed

Definition of frequencies:

weekly = N/A
semi-monthly = once every other week on weeks 1 & 3
monthly = N/A
quarterly = once every quarter in months 3, 6, 9 ,12 on week 1
semi-annually = N/A

Field Technician Response:

Completed by: JV
Date: 5-2-95
Arrival time: 8:40
Departure time: 10:40
Sample this visit?: yes
Engineer contacted? yes

Date: 5-2-95

Groundwater Extraction & Treatment System
ARCO Service Station 0608
17601 Hesperian Boulevard
330-006.5B
April 24, 1995

System Description:

Groundwater Pumps

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

Carbon Vessels: ~~Two~~ THREE ASC-1,200
Filter:

PART A: SYSTEM DATA

System on upon arrival? Yes (if no, specify reason in comments)
Hours 26924 Elect meter 15668

MEASUREMENT	ON ARRIVAL	ON DEPARTURE
TOTALIZER (gallons)	0760350	0760380
FILTER INLET PRESSURE (psig)	10	(ideal range: 8 to 12 psig) 10
CARBON #1 INLET PRESSURE (psig)	9	(ideal range: 5 to 9 psig) 9
CARBON #2 INLET PRESSURE (psig)	5	(ideal range: 1 to 4 psig) 5
DISCHARGE PRESSURE (psig)	0	(ideal range: 0 to 2 psig) 0

PART B: COMMENTS

PART C: WELL DATA

WELL	DTW/DTL (TOB)	TOTALIZER (gallons)	FLOWRATE (gpm)	COMMENTS/ ADJUSTMENTS
E-1A		Same as system Totalizer 0760350	2 gpm	

PART D: SAMPLING & READINGS I

SAMPLE	ANALYSIS	COMPLETED
INFLUENT	TPH-gasoline, TPH-diesel, BTEX compounds	Yes
EFFLUENT	TPH-gasoline, TPH-diesel, BTEX compounds	Yes

PART E: SAMPLING & READINGS II

EFFLUENT	TEMPERATURE (°F)	CONDUCTIVITY (umhos)	pH (units)	DISSOLVED OXYGEN (ppm)

PART F: SYSTEM MAINTENANCE I

NUMBER OF SPARE FILTERS ON SITE?	18	CHANGE FILTERS? (if necessary)	Yes
TEST ALARM SWITCHES	Yes		

[redacted] Division of Atlantic Richfield Company — 330-006.5 Task Order No. 170100 — Chain of Custody

ARCO Facility no. 608	City (Facility) San Lorenzo	Project manager (Consultant) Shaw Garakani	Laboratory name Sequoia
ARCO engineer Mike Whelan	Telephone no. (ARCO)	Telephone no. (Consultant) 408 441 7500	Fax no. (Consultant) 408 441 7539
Consultant name Pacific Env Group	Address (Consultant) 2025 Gateway Pl #440 San Jose		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 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 ☐		
Infl		3		X		X	HCl	5-2-95	10:00		X											
Effl		3		X		X	X	X	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:

	Date	Time	
Relinquished by sampler	5-3-95	700	Received by
Relinquished by			Received by
Relinquished by			Received by laboratory

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

APC-3292 (2-91)

Work Order # 953324

FIELD SERVICES / ROUTINE O&M REQUEST

Identification

Request Frequency:Monthly

Project #	330-006.5B
Station #	0608
Site Address:	17601 Hesperian Blvd @ Hacienda Avenue
County:	Alameda
Project Manager:	Shaw Garakani
Requestor:	Steve Johnston
Client:	ARCO
Client P.O.C.:	Mike Whelan
Revision Date:	June 1, 1995
Laboratory:	Sequoia Analytical

	Initials	Date
F/S	RY	6/6/95
Copy/Dist.	RY	↓

Site Remedial Technologies:

Groundwater Extration (GWE) [X]

Complete attached Data Sheets as prescribed in the following table:

Scheduling Table

Data Sheet Section(s) / Part(s)	To be Completed	Budgeted Hrs	Actual Hrs	Mob-de Mob	Completed
GWE(A, B, C, D, F)	monthly†		2	2	yes
GWE(E,G)	quarterly				yes

† = sampling to be performed

Definition of frequencies:

weekly = N/A
monthly = N/A
quarterly = once every quarter in months 3, 6, 9 ,12 on week 1
semi-annually = N/A

Field Technician Response:

Completed by: JV
Date: 6-5-95
Arrival time: 10:20
Departure time: 1150
Sample this visit?: Yes
Engineer contacted? yes SJ

Date: 6-5-95

Groundwater Extraction & Treatment System
ARCO Service Station 0608
17601 Hesperian Boulevard
330-006.5B
May 24, 1995

System Description:

Groundwater Pumps

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

Carbon Vessels: Three ASC-1,200
Filter: _____

PART A: SYSTEM DATA

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

MEASUREMENT	ON ARRIVAL	ON DEPARTURE
TOTALIZER (gallons)	0848670	0848810
FILTER INLET PRESSURE (psig)	10	(ideal range: 8 to 12 psig) 10
CARBON #1 INLET PRESSURE (psig)	8	(ideal range: 5 to 9 psig) 8
CARBON #2 INLET PRESSURE (psig)	5	(ideal range: 1 to 4 psig) 5
DISCHARGE PRESSURE (psig)	2	(ideal range: 0 to 2 psig) 2

Filtrate

PART B: COMMENTS

PART C: WELL DATA

WELL	DTW/DTL (TOB)	TOTALIZER (gallons)	FLOWRATE (gpm)	COMMENTS/ ADJUSTMENTS
E-1A	20.70 / 20.70	0848670	2gpm	

Date: 5-2-95

Groundwater Extraction & Treatment System
ARCO Service Station 0608
17601 Hesperian Boulevard
330-006.5B
April 24, 1995

System Description:

Groundwater Pumps

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

~~Change~~ TAREK

Carbon Vessels: Two ASC-1,200
Filter:

PART A: SYSTEM DATA

System on upon arrival? Yes (if no, specify reason in comments)
Hours 26924 Elect meter 15668

MEASUREMENT	ON ARRIVAL	ON DEPARTURE
TOTALIZER (gallons)	0760350	0760380
FILTER INLET PRESSURE (psig)	10	(ideal range: 8 to 12 psig) 10
CARBON #1 INLET PRESSURE (psig)	9	(ideal range: 5 to 9 psig) 9
CARBON #2 INLET PRESSURE (psig)	5	(ideal range: 1 to 4 psig) 5
DISCHARGE PRESSURE (psig)	0	(ideal range: 0 to 2 psig) 0

PART B: COMMENTS

PART C: WELL DATA

WELL	DTW/DTL (TOB)	TOTALIZER (gallons)	FLOWRATE (gpm)	COMMENTS/ ADJUSTMENTS
E-1A		Same as system Totalizer 0760350	2.9gpm	

PART D: SAMPLING & READINGS I

SAMPLE	ANALYSIS	COMPLETED
INFLUENT	TPH-gasoline, TPH-diesel, BTEX compounds	Yes
EFFLUENT	TPH-gasoline, TPH-diesel, BTEX compounds	Yes

PART E: SAMPLING & READINGS II

EFFLUENT	TEMPERATURE (°F)	CONDUCTIVITY (umhos)	pH (units)	DISSOLVED OXYGEN (ppm)

PART F: SYSTEM MAINTENANCE I

NUMBER OF SPARE FILTERS ON SITE?	18	CHANGE FILTERS? (if necessary)	Yes
TEST ALARM SWITCHES	Yes		

[redacted] of AtlanticRichfieldCompany [redacted] 330[redacted]006. [redacted] Task Order No. [redacted] 1-40-1[redacted] [redacted] Chain [redacted] Custody

ARCO Facility no.	608
City (Facility)	San Lorenzo
Project manager (Consultant)	Shaw Garakani
Laboratory name	Sequoia
ARCO engineer	Mike Whelan
Telephone no. (ARCO)	
Telephone no. (Consultant)	408 441 7000
Fax no. (Consultant)	408 441 7539
Consultant name	Pacific Env Group
Address (Consultant)	2025 Gate Way pl # 440 San Jose
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 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 ☐ VOA ☐ Semi VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org/DHS ☐ Lead EPA 7420/7421 ☐		
InFL		3		X		X	HCL	5-2-95	10:00		X											
EFFL		3		X		X	X	X	X		X											

Method of shipment

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 [signature]	Date 5-3-95	Time 700	Received by	
Relinquished by	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
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PART D: SAMPLING & READINGS I

SAMPLE	ANALYSIS	COMPLETED
INFLUENT	TPH-gasoline, BTEX compounds	Yes
EFFLUENT	TPH-gasoline, BTEX compounds	Yes

PART E: SAMPLING & READINGS II

EFFLUENT	TEMPERATURE (°F) 67.5	CONDUCTIVITY (umhos) 1008	pH (units) 7.59	DISSOLVED OXYGEN (ppm) 1

PART F: SYSTEM MAINTENANCE I

ELECTRIC METER READING (kw hrs)	16156	HOUR METER READING (hrs)	27720
NUMBER OF SPARE FILTERS ON SITE?	13	CHANGE FILTERS? (if necessary)	Yes
TEST ALARM SWITCHES	Yes		

[redacted]CO [redacted]rdu[redacted] Company [redacted] 330 [redacted] 06. [redacted] Task Order No. -02100 [redacted] Chain [redacted] Custody

D[redacted] of AtlanticRichfieldCompany

ARCO Facility no. 608	City (Facility) San Lorenzo	Project manager (Consultant) Shaw Garakani	Laboratory name Sequoia
ARCO engineer Mike Whelan	Telephone no. (ARCO)	Telephone no. (Consultant) 408 4417500	Fax no. (Consultant) 408 441 7539
Consultant name Pacific Env Group	Address (Consultant) 2025 Gateway pl #440 San Jose		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 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 ☐ VOA ☐ Semi VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐		
INFL		3		X		X	HCL	6-5-95			X											
EFFL		3		X		X	X	X			X											

Method of shipment

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 6-6-95 Time 700	Received by	
Relinquished by	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

APC-3292 (2-91)