



PACIFIC ENVIRONMENTAL GROUP INC.

#779

Reviewed on 1/13/95
Gheech

ALDO HAZMAT

94 DEC 19 PM 12:09

December 5, 1994
Project 330-006.25

Mr. Michael Whelan
ARCO Products Company
P.O. Box 5811
San Mateo, California 94402

Re: Quarterly Report - Third Quarter 1994
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 third quarter 1994 groundwater monitoring and remedial system performance evaluation at the site referenced above. In addition, a summary of work completed and anticipated at the site is included.

QUARTERLY GROUNDWATER MONITORING RESULTS

Groundwater samples were collected from site groundwater monitoring and domestic irrigation wells between September 19 and 22, 1994, and analyzed for the presence of total petroleum hydrocarbons calculated as gasoline (TPH-g), benzene, toluene, ethylbenzene, and xylenes (BTEX compounds). Field and laboratory procedures are presented as Attachment A.

Depth to water data collected on September 19, 1994 indicate that groundwater elevations have decreased in site groundwater monitoring wells an average of approximately 1.33 feet since June 13, 1994. 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 September 19, 1994 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 500 to 2,600 parts per billion (ppb). Benzene was detected at concentrations ranging

Comments:

→ Figure 2 should be corrected in regard to 633H domestic well.
→ Are residents pumping at 17372 VM, 17371 VM + ~~642H~~ 642H.

↳ Note 4/19/94 Pacific called stated these residents refused to discontinue pumping + 642H + 17371 VM refuse testing.
On 5/9/94 ACDEH indicated ARCO should take further efforts to convince these residents to discontinue pumping.

from 18 to 79 ppb. Wells MW-7, MW-9, MW-11, MW-13 through MW-19, and MW-21 through MW-26 had non-detectable levels of TPH-g and BTEX compounds. Separate-phase hydrocarbons (SPH) were not observed in any site well this quarter. SPH have not been observed in any site well since March 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 within historical levels. This quarter Wells 633 H, 634 H, 642 H, 17371 VM, 17197 VM, 17203 VM, 17302 VM, 17348 VM, and 17393 VM were not sampled. Wells ~~633 H~~, 634 H, and 642 H were not sampled due to inoperable pumps and/or obstructions in the wells. Wells 17197 VM, 17203 VM, 17302 VM, 17348 VM, and 17393 VM were not sampled as the owners were not available to approve sampling. 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 590 and 55 ppb, respectively. TPH-g was not detected in Wells 590 H, 675 H, and 17200 VM. Benzene was detected in only one domestic well (17349 VM) at 1.8 ppb. 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.

Data shows this well was not sampled but the concentration map dated 12/6/94 indicates ND for TPH-g benzene. This must be an error!

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 June 14 to September 12, 1994 are presented below.

Groundwater Extraction System 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. A sanitary sewer discharge permit was obtained from the Oro Loma Sanitary District on April 4, 1991. The updated permit is effective through April 4, 1995.

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 a groundwater depression extending approximately 20 feet radially from the GWE well.

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 0.2 pound (0.04 gallon) of TPH-g and less than 0.01 pound of benzene from the impacted groundwater beneath the site. To date, GWE has removed approximately 3.9 pounds (0.6 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 B. Progress toward site remediation is presented in the table below.

Analyte	Mass Removed			
	06/14/94 to 09/14/94		Cumulative	
	(lbs)	(gal)	(lbs)	(gal)
TPH-g	0.2	0.04	3.9	0.6
Benzene	<0.01	<0.01	0.3	0.04

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

Groundwater Extraction System Operational Data

The GWE system was approximately 87 percent operational during the reporting period. The down period was associated with automatic high pressure shut down at the bag filter.

During the reporting period, the GWE system discharged treated groundwater at an average operational flow rate of approximately 2.0 gallons per minute (gpm) for a period discharge of 217,030 gallons. The instantaneous groundwater system flow rate was 1.8 to 2.0 gpm. Calculations based on 8 percent loading isotherm by weight indicate the primary carbon vessel is approximately 4.9 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. Operation and maintenance field data sheets are presented as Attachment B.

Conclusions

Based on the performance of the GWE system during the third quarter 1994, operation through the fourth quarter 1994 will continue.

SUMMARY OF WORK

Work Completed Third Quarter 1994

- o Continued monitoring GWE system performance.
- o Prepared and submitted second quarter 1994 groundwater monitoring and remedial system performance evaluation report.
- o Continued domestic irrigation well owner reimbursement program with owners who have discontinued well use.
- o Sampled site groundwater monitoring and domestic irrigation wells for third quarter 1994 groundwater monitoring program.
- o Attended meeting between Alameda County Health Care Services (ACHCS), Regional Water Quality Control Board, ARCO, and PACIFIC regarding remedial investigation/feasibility study (RI/FS) schedule.
- o Prepared RI/FS.
- o Replaced faulty GWE system effluent totalizer.

Work Anticipated Fourth Quarter 1994

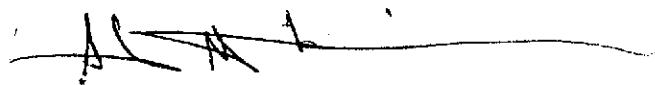
- o Continue monitoring GWE system performance.
- o Preparation and submittal of third quarter 1994 groundwater monitoring and remedial system performance evaluation report.
- o Sample site groundwater monitoring and domestic irrigation wells for fourth quarter 1994 groundwater monitoring program.

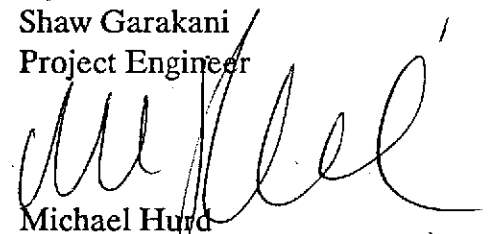
- o Preparation of fourth quarter 1994 groundwater monitoring and remedial system performance evaluation report.
- o Continue domestic irrigation well owner reimbursement program with owners who have discontinued well use.
- o Replace well pump, develop, and sample domestic irrigation Well 633 H.
- o Preparation and submittal of RI/FS to ACHCS.

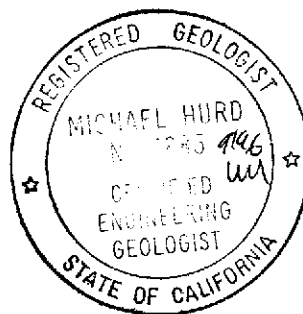
If there are any questions regarding the contents of this letter, please call.

Sincerely,

Pacific Environmental Group, Inc.


Shaw Garakani
Project Engineer


Michael Hurd
Senior Geologist
CEG 1885



- 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 Mass Removal Data - Total Petroleum Hydrocarbons (TPH as Gasoline and Benzene)
 - 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
 - Attachment A - Field and Laboratory Procedures
 - Attachment B - Certified Analytical Reports, Chain-of-Custody Documentation, and Field Data Sheets

cc: Ms. Susan Hugo, Alameda County Health Care Services
~~Ms. Julie Shin, Alameda County Health Care Services~~
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)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-1	01/11/88	NA	NA	--	NA
	06/14/88	----- Well Destroyed -----			
MW-2	07/05/85	NA	NA	--	NA
	01/11/88	NA	NA	--	NA
	06/14/88	----- Well Destroyed -----			
MW-3	01/11/88	33.27	NA	--	NA
	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		NA	--	NA
	07/18/90	----- Well Destroyed -----			
MW-4	01/11/88	32.43	NA	--	NA
	09/12/88		NA	--	NA
	03/07/89		10.76	--	21.67
	06/21/89		11.96	--	20.47
	12/12/89		NA	--	NA
	03/29/90		11.72	0.01	20.71
	05/08/90		12.19	--	20.24
	06/22/90		NA	--	NA
	07/18/90	----- Well Destroyed -----			
MW-5	01/16/92	33.99	Dry	--	NA
	02/19/92		13.5	--	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	

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)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-5 (cont.)	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
	09/19/94		13.55	--	20.44
MW-6 (E-1)	06/21/89	32.95	12.48	--	20.47
	12/12/89		13.16	--	13.16
	03/29/90		12.39	--	12.39
	05/08/90		12.93	--	12.93
	06/22/90		12.94	--	12.94
	07/18/90		----- Well Destroyed -----		
MW-7	01/16/92	34.40	13.33	--	21.83
	02/19/92		12.16	--	NA
	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	--	23.03
	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	
MW-8	01/16/92	32.79	13.40	--	19.39
	02/19/92		11.26	--	21.53

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)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-8 (cont.)	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
	10/16/92		14.51	--	18.28
	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
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

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)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-9 (cont.)	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
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	
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	

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)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-11 (cont.)	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
	03/28/94		11.23	--	21.31
	06/13/94		11.62	--	20.92
	09/19/94		13.05	--	19.49
E-1A (MW-12)	01/16/92	33.06	23.68	--	9.38
	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
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

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)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-13 (cont.)	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
	03/15/93		12.69	--	22.73
	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	
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	
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	

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)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-19 (cont.)	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
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
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
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

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)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-23 (cont.)	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
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
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
	09/15/94		13.82	--	20.30
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
<p>MSL = Mean sea level TOB = Top of box NA = 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.</p>					

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)	Ethylbenzene (ppb)	Xylenes (ppb)	
MW-1	01/11/88	300	20	10	50	80	
	06/14/88	----- Well Destroyed -----					
MW-2	07/05/85	32,000	1,000	690	NA ^a	1,500 ^a	
	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	1,100,000 ^b	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	2.0	410	150	
	06/15/92	----- Well Dry -----					
	09/16/92	----- Well Dry -----					
	12/22/92	960	220	6.5	4.0	2.0	
03/17/93	2,600	180	1.4	28	1.2		
06/17/93	2,500	450	7.5	55	<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)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-5 (cont.)	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
MW-6 (E-1)	06/21/89	1,700	170	170	85	290
	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	
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	4.8
	03/17/92	9,200	370	3.0	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	

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)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-8 (cont.)	03/18/93	3,800	61	<0.5	11	1.2
	06/17/93	2,400	430	<5	11	<5
	09/14/93	1,900	36	1.4	32	8.6
	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
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	75 ^c	<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	
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	3.0	3.3	5.5
	12/22/92	2,700 ^c	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
12/28/93	5,000	1,200 ^d	12	46	31	

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)	Ethylbenzene (ppb)	Xylenes (ppb)	
MW-10 (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	
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		
E-1A (MW-12)	09/19/90	<50	7	0.9	1	2	
	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		
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	
	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	

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)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-13 (cont.)	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
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
MW-15	07/03/91	570	1.8	1.0	1.0	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	<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
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	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

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)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-16 (cont.)	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
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	1.0
	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	
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
	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
09/20/94	<50	<0.5	<0.5	<0.5	<0.5	
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

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)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-19 (cont.)	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
MW-20 (cont.)	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
	09/19/94	<50	<0.5	<0.5	<0.5	<0.5
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
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

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)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-23 (cont.)	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
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
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
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

ppb = Parts per billion

NA = Not available

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 limits. See attached certified analytical reports.

* = Value taken from system influent sampling.

MW-1 and MW-2 destroyed prior to March 7, 1989 sampling event.

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)

Hacienda Avenue and Via Magdalena
San Lorenzo, California

Well Address	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (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
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
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
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
	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
	03/30/94	<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

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

Hacienda Avenue and Via Magdalena
 San Lorenzo, California

Well Address	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
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
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
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
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
	09/21/94	<50	<0.5	<0.5	<0.5	<0.5
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

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

Hacienda Avenue and
 Via Magdalena
 San Lorenzo, California

Well Address	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
17203 VM (cont.)	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
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
17348 VM	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	
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	3.0	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
17371 VM	11/13/91	870	9.0	1.0	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

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

Hacienda Avenue and
 Via Magdalena
 San Lorenzo, California

Well Address	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
17371 VM (cont.)	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
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
17393 VM	11/13/91	31	<0.3	<0.3	<0.3	<0.3
	10/14/92 ^a	NS	NS	NS	NS	NS
	12/18/92	<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	<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	

ppb = Parts per billion

H = Hacienda Avenue

VM = Via Magdalena

< = Denotes laboratory detection limit

NS = Not sampled

* = Non-typical chromatogram pattern, did not sample.

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.

Homeowners are contacted 1 week prior to sampling event.

Table 4
Groundwater Extraction System Mass Removal Data
Total Petroleum Hydrocarbons
(TPH as Gasoline)

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			Benzene			Primary Carbon Loading (%)
						Influent Concentration (µg/L)	Net Removed (pounds)	Removed To Date (pounds)	Influent Concentration (µg/L)	Net Removed (pounds)	Removed To Date (pounds)	
09/25/91	0.0	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	25.6	95.9	12,844	11,700	7.6	ND	N/A	0.0	ND	0.00	0.0	0.0
11/22/91	76.6	93.1	52,532	39,688	13.0	ND	N/A	0.0	0.52	0.00	0.0	0.0
12/19/91	322.0	62.1	122,540	70,008	4.8	ND	N/A	0.0	ND	0.00	0.0	0.0
01/16/92	994.2	0.0	283,289	160,749	4.0	ND	N/A	0.0	ND	0.00	0.0	0.0
02/19/92	1,808.6	0.2	485,200	201,911	4.1	370	0.3	0.3	14	0.01	0.0	0.4
03/17/92	2,461.7	0.0	662,847	177,647	4.5	160	0.4	0.7	18	0.02	0.0	0.9
04/15/92	3,150.3	1.1	851,100	188,253	4.6	200	0.3	1.0	11	0.02	0.1	1.2
05/14/92	3,849.1	0.0	1,030,086	178,986	4.3	45	0.2	1.2	1.4	0.01	0.1	1.5
06/19/92	4,712.1	0.1	1,229,960	199,874	3.9	ND	N/A	1.2	ND	0.00	0.1	1.5
07/14/92	5,001.4	51.8	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	6,298.2	N/A	1,535,640	125,622	3.1	ND	N/A	1.2	ND	0.00	0.1	1.5
10/16/92	7,011.7	4.1	1,651,623	115,983	2.7	ND	N/A	1.2	ND	0.00	0.1	1.5
11/16/92	7,808.5	0.0	1,768,076	116,453	2.4	ND	N/A	1.2	ND	0.00	0.1	1.5
12/17/92	8,501.7	0.4	1,864,300	96,224	2.3	96	0.0	1.2	7.7	0.00	0.1	1.5
01/16/93	8,797.5	61.5	1,915,165	50,865	2.9	100	0.0	1.3	13	0.00	0.1	1.6
02/22/93	9,606.6	0.0	2,096,930	181,765	3.7	480	0.4	1.7	36	0.04	0.1	2.1
03/15/93	10,113.4	0.0	2,205,833	108,903	3.6	310	0.4	2.1	29	0.03	0.2	2.6
04/09/93	10,516.8	32.8	2,298,770	92,937	3.8	140	0.2	2.2	11	0.02	0.2	2.8
05/13/93	11,211.2	14.9	2,449,160	150,390	3.6	530	0.4	2.7	27	0.02	0.2	3.3
06/04/93	11,733.7	1.0	2,543,500	94,340	3.0	170	0.3	2.9	5.2	0.01	0.2	3.7
07/20/93	12,572.9	24.0	2,689,697	146,197	2.9	200	0.2	3.2	12	0.01	0.2	4.0
08/16/93	13,218.8	0.3	2,791,366	101,669	2.6	150	0.1	3.3	4.9	0.01	0.2	4.1
09/13/93	13,887.9	0.4	2,884,736	93,370	2.3	80	0.1	3.4	2.2	0.00	0.2	4.3
10/08/93	14,484.8	0.5	2,951,737	67,001	1.9	ND	0.0	3.4	ND	0.00	0.2	4.3
11/19/93	15,493.6	0.0	3,036,032	84,295	1.4	ND	0.0	3.4	ND	0.00	0.2	4.3
12/21/93	16,259.6	0.3	3,113,565	77,533	1.7	73	0.0	3.5	3.5	0.00	0.2	4.3
01/16/94	16,938.7	0.0	3,190,900	77,335	1.9	60	0.0	3.5	3.1	0.00	0.2	4.4
02/17/94	17,657.8	0.0	3,273,720	82,820	1.9	ND	0.0	3.5	2.5	0.00	0.2	4.4
03/15/94	18,235.0	7.5	3,344,249	70,529	2.0	ND	0.0	3.5	ND	0.00	0.2	4.4
04/21/94	18,849.4	30.8	3,418,537	74,288	2.0	110	0.0	3.5	7.8	0.00	0.2	4.4
05/13/94	19,350.5	5.1	3,478,910	60,373	2.0	230	0.1	3.6	8.3	0.00	0.2	4.5
06/14/94	19,680.0	57.1	3,518,608 a	39,698	2.0	230	0.1	3.7	12	0.00	0.3	4.6
07/14/94	20,145.0	35.4	3,574,408 b	55,800	2.0	270	0.1	3.8	6.9	0.00	0.3	4.8
08/17/94	20,920.0	5.0	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	0.0	120,910	69,650	1.8	ND	0.0	3.9	ND	0.00	0.3	4.9

REPORTING PERIOD: 6/14/94 - 9/12/94												
TOTAL GALLONS EXTRACTED:						3,735,638						
PERIOD GALLONS EXTRACTED:						217,030						
TOTAL POUNDS REMOVED:									3.9			0.9
TOTAL GALLONS REMOVED:									0.6			0.04
PERIOD POUNDS REMOVED:									0.2			0.0
PERIOD GALLONS REMOVED:									0.04			0.0
AVERAGE PERIOD FLOW RATE (gpm):												2.0
AVERAGE PERCENT DOWNTIME SINCE START-UP:												17.1%
PERIOD PERCENT OPERATIONAL:												87%

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

Equations:
 Net Dissolved TPH - g Removed [pounds] = TPH - g concentration, [µg/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 (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
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	0.52	<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	480	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

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

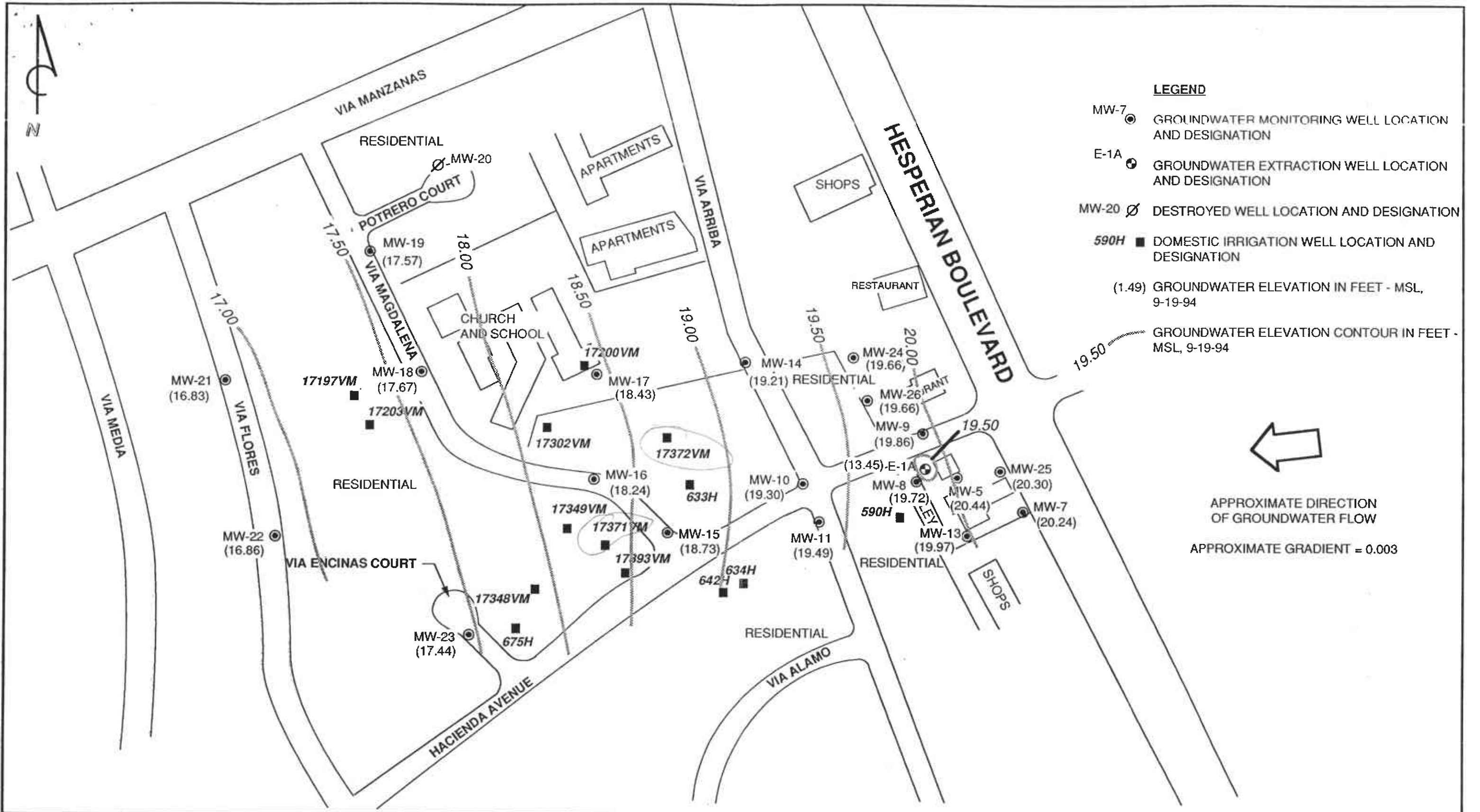
ARCO Service Station 0608
 17601 Hesperian Boulevard at Hacienda Avenue
 San Lorenzo, California

Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
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
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 (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
EFFL (effluent to sewer) (continued)					
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
ppb = Parts per billion < = Denotes minimum laboratory detection limit. NS = Not sampled					



PACIFIC ENVIRONMENTAL GROUP, INC.

APPROXIMATE SCALE

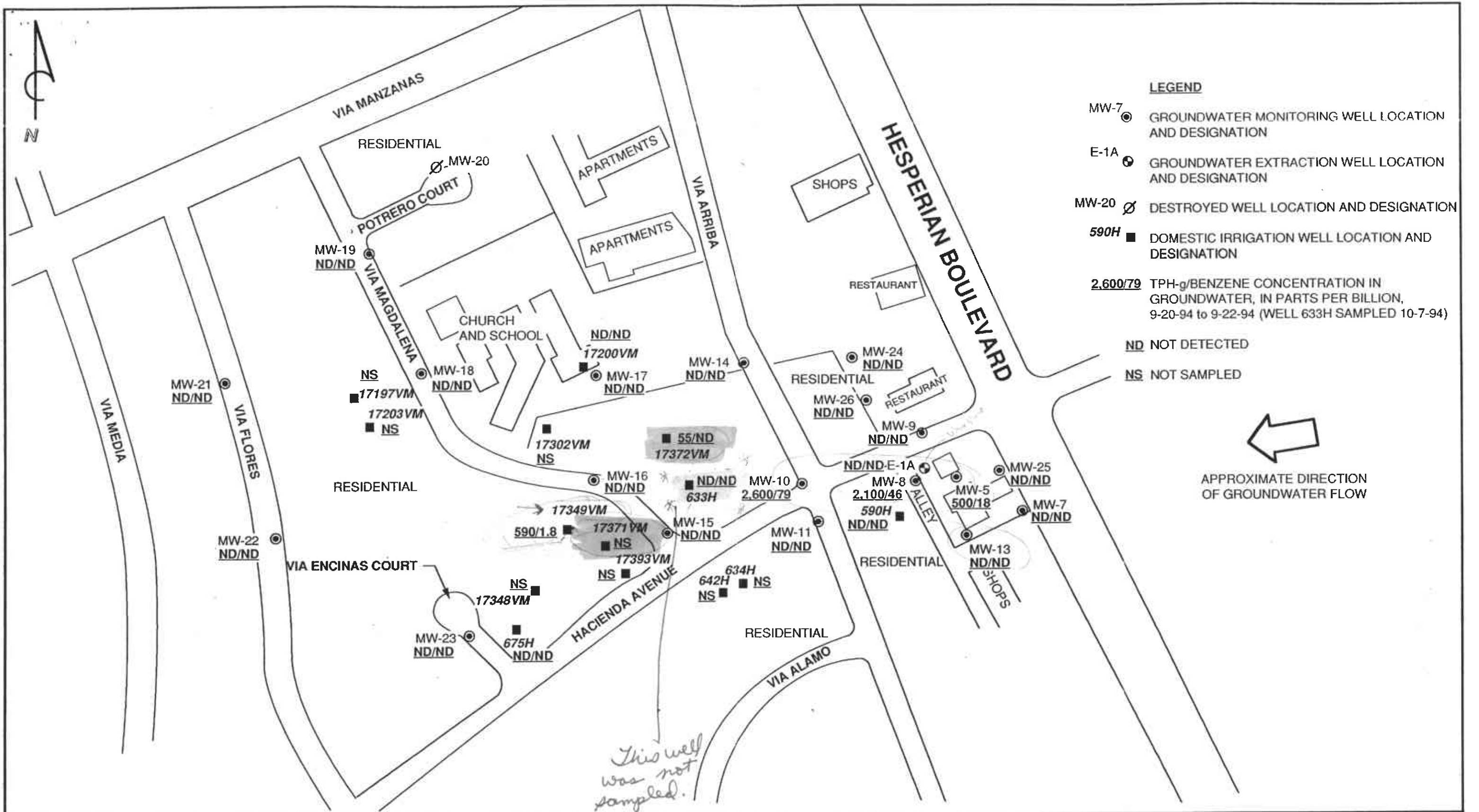


ARCO SERVICE STATION 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

GROUNDWATER ELEVATION CONTOUR MAP

FIGURE:
1
PROJECT:
330-006.25

02/01/94



LEGEND

- MW-7 ● GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- E-1A ● GROUNDWATER EXTRACTION WELL LOCATION AND DESIGNATION
- MW-20 ∅ DESTROYED WELL LOCATION AND DESIGNATION
- 590H ■ DOMESTIC IRRIGATION WELL LOCATION AND DESIGNATION
- 2,600/79 TPH-g/BENZENE CONCENTRATION IN GROUNDWATER, IN PARTS PER BILLION, 9-20-94 to 9-22-94 (WELL 633H SAMPLED 10-7-94)
- ND NOT DETECTED
- NS NOT SAMPLED



APPROXIMATE DIRECTION OF GROUNDWATER FLOW

This well was not sampled.



PACIFIC ENVIRONMENTAL GROUP, INC.



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

TPH-g/BENZENE CONCENTRATION MAP

FIGURE: 2
PROJECT: 330-006.25

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 four 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 report. The certified analytical report, 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**

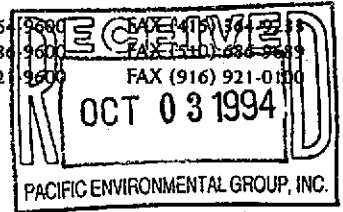


Sequoia Analytical

680 Chesapeake Drive
1900 Bates Avenue, Suite L
819 Striker Avenue, Suite 8

Redwood City, CA 94063
Concord, CA 94520
Sacramento, CA 95834

(415) 364-9600
(510) 684-9600
(916) 921-0100



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

Project: 330-006.25/0608, San Lorenzo

Enclosed are the results from 2 liquid samples received at Sequoia Analytical on September 26, 1994. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
9409E85-01	LIQUID, 675-H	9/22/94	EPA 8015 Mod/8020
9409E85-02	LIQUID, TB-3	9/22/94	EPA 8015 Mod/8020

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



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: 675-H Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409E85-01	Sampled: 09/22/94 Received: 09/26/94 Analyzed: 09/28/94 Reported: 09/30/94
Attention: Maree Doden		

Instrument ID: GCHP-17

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	82

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

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: TB-3 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409E85-02	Sampled: 09/22/94 Received: 09/26/94 Analyzed: 09/28/94 Reported: 09/30/94
Attention: Maree Doden		

Instrument ID: GCHP-17

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	95

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

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

330-006-25

Task Order No.

0608-94-5

ARCO Facility no. 0608 City (Facility) SAN LORENZO Project manager (Consultant) KELLY BROWN
ARCO engineer C.C. Telephone no. (ARCO) Telephone no. (Consultant) 415-441-7300 Fax no. (Consultant) (408)441-7539

Consultant name PACIFIC ENVIRONMENTAL GROUP Address (Consultant) 2025 GARDWAY PLACE #140 SHERBOURNE, CA 95110

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA 8622/6020/8015	TPH Modified 8015 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/SMS03E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/>	Semi Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/>	CAMP Metals EPA 601/07000 TTL <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org./DHS Lead EPA 7420/7421 <input type="checkbox"/>					
			Soil	Water	Other	Ice	Acid																			
675H	3		X			X	HCL	9-22-94	1045		X															
TB-3	2		X			X	HCL	9-22-94	NA		X															

Laboratory name SEQUOIA
Contract number 07-073
Method of shipment

Special detection Limit/reporting

Special QA/QC

Remarks

Lab number 9409E85

Turnaround time
Priority Rush 1 Business Day

Rush 2 Business Days

Expedited 5 Business Days

Standard 10 Business Days

Condition of sample: good
Relinquished by [Signature] Date 9-26-94 Time 730
Received by [Signature] Date 9/26/94 Time 1000
Quished by [Signature] Date 9/26/94 Time 1000
Received by [Signature] Date 9/26/94 Time 10:00
Received by [Signature] Date 9/26/94 Time 11:43
Temperature received: cool
Received by [Signature] Date 9/26/94 Time 0800
Received by [Signature] Date 9/26/94 Time 10:00
Received by [Signature] Date 9/26/94 Time 1143



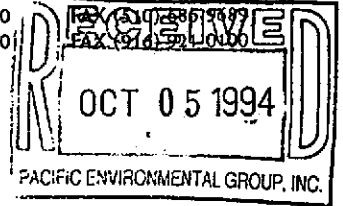
Sequoia Analytical

680 Chesapeake Drive
1900 Bates Avenue, Suite L
819 Striker Avenue, Suite 8

Redwood City, CA 94063
Concord, CA 94520
Sacramento, CA 95834

(415) 364-9600
(510) 686-9600
(916) 921-9600

FAX (415) 364-9233



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

Project: 330-006.25/0608, San Lorenzo

Enclosed are the results from samples received at Sequoia Analytical on September 22, 1994.
The requested analyses are listed below:

<u>SAMPLE #</u>	<u>SAMPLE DESCRIPTION</u>	<u>DATE COLLECTED</u>	<u>TEST METHOD</u>
9409C91 -01	LIQUID, 17349 VM	09/21/94	TPHGB Purgeable TPH / BTEX
9409C91 -02	LIQUID, 17372 VM	09/21/94	TPHGB Purgeable TPH / BTEX
9409C91 -03	LIQUID, 590 H	09/21/94	TPHGB Purgeable TPH / BTEX
9409C91 -04	LIQUID, 17200 VM	09/21/94	TPHGB Purgeable TPH / BTEX
9409C91 -05	LIQUID, TB-2	09/21/94	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 Manning
Project Manager

Quality Assurance Department



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: 17349 VM Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409C91-01	Sampled: 09/21/94 Received: 09/22/94 Analyzed: 09/27/94 Reported: 10/04/94
Attention: Maree Doden		


Instrument ID: gchp-17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	590
Benzene	0.50	1.8
Toluene	0.50	N.D.
Ethyl Benzene	0.50	1.1
Xylenes (Total)	0.50	7.6
Chromatogram Pattern: Weathered Gas		C6-C12
Gas & Non Gas Mix		< C8
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



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: 17372 VM Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409C91-02	Sampled: 09/21/94 Received: 09/22/94 Analyzed: 09/27/94 Reported: 10/04/94
Attention: Maree Doden		

Instrument ID: gchp-17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	55
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern: Weathered Gas		C7-C12

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



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: 590 H Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409C91-03	Sampled: 09/21/94 Received: 09/22/94 Analyzed: 09/27/94 Reported: 10/04/94
Attention: Maree Doden		

Instrument ID: gchp-20

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



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: 17200 VM Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409C91-04	Sampled: 09/21/94 Received: 09/22/94 Analyzed: 09/27/94 Reported: 10/04/94
--	---	---

Instrument ID: gchp-20


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



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

Client Project ID: 330-006.25/0608, San Lorenzo
Matrix: Liquid

QC Sample Group: 9409C91 01-02

Reported: Oct 4, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel

MS/MSD

Batch#: 9409A06-02 9409A06-02 9409A06-02 9409A06-02

Date Prepared: N.A. N.A. N.A. N.A.
Date Analyzed: 9/26/94 9/26/94 9/26/94 9/26/94
Instrument I.D.#: GCHP-17 GCHP-17 GCHP-17 GCHP-17
Conc. Spiked: 10 µg/L 10 µg/L 10 µg/L 30 µg/L

Matrix Spike % Recovery: 98 97 93 93

Matrix Spike Duplicate % Recovery: 98 100 94 93

Relative % Difference: 0.0 3.0 1.1 0.0

LCS Batch#:

Date Prepared:
Date Analyzed:
Instrument I.D.#:

LCS % Recovery:

% Recovery Control Limits:	71-133	72-128	72-130	71-120
----------------------------	--------	--------	--------	--------

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

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.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager



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

Client Project ID: 330-006.25/0608, San Lorenzo
Matrix: Liquid

QC Sample Group: 9409C91 03-05

Reported: Oct 4, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel

MS/MSD

Batch#:	9409A06-01	9409A06-01	9409A06-01	9409A06-01
Date Prepared:	N.A.	N.A.	N.A.	N.A.
Date Analyzed:	9/26/94	9/26/94	9/26/94	9/26/94
Instrument I.D.#:	GCHP-20	GCHP-20	GCHP-20	GCHP-20
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	88	88	89	87
Matrix Spike Duplicate % Recovery:	100	100	100	100
Relative % Difference:	13	13	12	14

LCS Batch#:

Date Prepared:
Date Analyzed:
Instrument I.D.#:

LCS %
Recovery:

% Recovery Control Limits:	71-133	72-128	72-130	71-120
----------------------------	--------	--------	--------	--------

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

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.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME:
REC. BY (PRINT):

DEG (ARCO 330-006.25)
CB

MASTER LOG NO. / PAGE:
DATE OF LOG-IN:

9409C91
09/23/94

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
1. Custody Seal(s):	Present <input checked="" type="radio"/> Absent <input type="radio"/> Intact / Broken	01		17349 VM	3V022	L	9/21/94	
2. Custody Seal Nos.:	—	02		17372 VM	↓	↓	↓	
3. Chain-of-Custody Records:	Present <input checked="" type="radio"/> / Absent* <input type="radio"/>	03		590H	↓	↓	↓	
		04		17372 17200 VM	↓	↓	↓	
		05		TB-2	2V022	↓	↓	
4. Traffic Reports or Packing List:	Present <input checked="" type="radio"/> / Absent <input type="radio"/>							
5. Airbill:	Airbill / Sticker Present <input checked="" type="radio"/> / Absent <input type="radio"/>							
6. Airbill No.:	—							
7. Sample Tags:	Present <input checked="" type="radio"/> / Absent* <input type="radio"/>							
8. Sample Condition:	Listed <input checked="" type="radio"/> / Not Listed <input type="radio"/> on Chain-of-Custody							
9. Does information on custody reports, traffic reports and sample tags agree?	Intact <input checked="" type="radio"/> / Broken* <input type="radio"/> / Leaking* <input type="radio"/>							
10. Proper Preservatives Used:	Yes <input checked="" type="radio"/> / No* <input type="radio"/>							
11. Date Rec. at Lab:	9/22/94							
12. Time Rec. at Lab:	1134							

CB 9/22/94

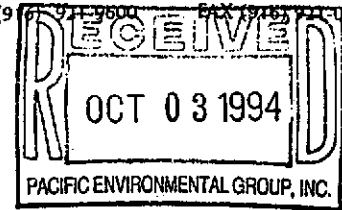
If needed, contact Project Manager and attach record of resolution



Sequoia Analytical

680 Chesapeake Drive Redwood City, CA 94063
1900 Bates Avenue, Suite L Concord, CA 94520
819 Striker Avenue, Suite 8 Sacramento, CA 95834

(415) 364-9600 FAX (415) 364-9233
(510) 686-9600 FAX (510) 686-9689
(916) 911-9600 FAX (916) 922-0100



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

Project: 330-006.25/0608, San Lorenzo

Enclosed are the results from 21 water samples received at Sequoia Analytical on September 21, 1994. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
9409C58-01	LIQUID, MW-13	9/20/94	EPA 8015 Mod/8020
9409C58-02	LIQUID, MW-8	9/20/94	EPA 8015 Mod/8020
9409C58-03	LIQUID, MW-26	9/20/94	EPA 8015 Mod/8020
9409C58-04	LIQUID, MW-25	9/20/94	EPA 8015 Mod/8020
9409C58-05	LIQUID, MW-24	9/20/94	EPA 8015 Mod/8020
9409C58-06	LIQUID, MW-14	9/20/94	EPA 8015 Mod/8020
9409C58-07	LIQUID, MW-16	9/20/94	EPA 8015 Mod/8020
9409C58-08	LIQUID, MW-17	9/19/94	EPA 8015 Mod/8020
9409C58-09	LIQUID, MW-10	9/20/94	EPA 8015 Mod/8020
9409C58-10	LIQUID, MW-9	9/20/94	EPA 8015 Mod/8020
9409C58-11	LIQUID, MW-5	9/20/94	EPA 8015 Mod/8020
9409C58-12	LIQUID, MW-15	9/20/94	EPA 8015 Mod/8020
9409C58-13	LIQUID, MW-19	9/19/94	EPA 8015 Mod/8020
9409C58-14	LIQUID, MW-21	9/19/94	EPA 8015 Mod/8020
9409C58-15	LIQUID, MW-23	9/19/94	EPA 8015 Mod/8020
9409C58-16	LIQUID, MW-22	9/19/94	EPA 8015 Mod/8020
9409C58-17	LIQUID, MW-7	9/20/94	EPA 8015 Mod/8020
9409C58-18	LIQUID, MW-11	9/20/94	EPA 8015 Mod/8020
9409C58-19	LIQUID, MW-18	9/20/94	EPA 8015 Mod/8020



Sequoia Analytical

680 Chesapeake Drive
1900 Bates Avenue, Suite L
819 Striker Avenue, Suite 8

Redwood City, CA 94063
Concord, CA 94520
Sacramento, CA 95834

(415) 364-9600
(510) 686-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 686-9689
FAX (916) 921-0100

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
9409C58-20	LIQUID, E1-A	9/20/94	EPA 8015 Mod/8020
9409C58-21	LIQUID, TB-1	9/19/94	EPA 8015 Mod/8020

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



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: MW-8 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409C58-02	Sampled: 09/20/94 Received: 09/21/94 Analyzed: 09/27/94 Reported: 09/29/94
Attention: Maree Doden		

Instrument ID: gchp-17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	100	2100
Benzene	1.0	46
Toluene	1.0	N.D.
Ethyl Benzene	1.0	N.D.
Xylenes (Total)	1.0	N.D.
Chromatogram Pattern: Non Gas Mix		>C8
Weathered Gas		C6-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	123

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

SEQUOIA ANALYTICAL - ELAP #1210

MTC Clark

Eileen Manning
Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: MW-24 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409C58-05	Sampled: 09/20/94 Received: 09/21/94 Analyzed: 09/26/94 Reported: 09/29/94
Attention: Maree Doden		

Instrument ID: gchp-2

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

Eileen Manning
Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: MW-14 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409C58-06	Sampled: 09/20/94 Received: 09/21/94 Analyzed: 09/26/94 Reported: 09/29/94
Attention: Maree Doden		

Instrument ID: gchp-2

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

MTC Clark / gm
 Eileen Manning
 Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: MW-16 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409C58-07	Sampled: 09/20/94 Received: 09/21/94 Analyzed: 09/26/94 Reported: 09/29/94
Attention: Maree Doden		

Instrument ID: gchp-2

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

MTC Clark/for

Eileen Manning
Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: MW-17 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409C58-08	Sampled: 09/19/94 Received: 09/21/94 Analyzed: 09/26/94 Reported: 09/29/94
Attention: Maree Doden		

Instrument ID: gchp-2

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

MTC Clark for

Eileen Manning
Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: MW-10 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409C58-09	Sampled: 09/20/94 Received: 09/21/94 Analyzed: 09/27/94 Reported: 09/29/94
Attention: Maree Doden		

Instrument ID: gchp-20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	250	2600
Benzene	2.5	79
Toluene	2.5	N.D.
Ethyl Benzene	2.5	7.4
Xylenes (Total)	2.5	2.7
Chromatogram Pattern: Gas & Non Gas Mix		+ > C8

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	119

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

SEQUOIA ANALYTICAL - ELAP #1210

MTC Clark/for

Eileen Manning
Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: MW-9 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409C58-10	Sampled: 09/20/94 Received: 09/21/94 Analyzed: 09/26/94 Reported: 09/29/94
Attention: Maree Doden		

Instrument ID: gchp-2

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	78

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

SEQUOIA ANALYTICAL - ELAP #1210

WMT Clark for

Eileen Manning
Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: MW-5 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409C58-11	Sampled: 09/20/94 Received: 09/21/94 Analyzed: 09/26/94 Reported: 09/29/94
Attention: Maree Doden		

Instrument ID: gchp-2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	500
Benzene	0.50	18
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	0.52
Chromatogram Pattern: Weathered Gas		C6-C12

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	94

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

SEQUOIA ANALYTICAL - ELAP #1210

WMT Clark for

 Eileen Manning
 Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: MW-19 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409C58-13	Sampled: 09/19/94 Received: 09/21/94 Analyzed: 09/27/94 Reported: 09/29/94
Attention: Maree Doden		

Instrument ID: gchp-2

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

MT Clark / fm

Eileen Manning
Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: MW-21 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409C58-14	Sampled: 09/19/94 Received: 09/21/94 Analyzed: 09/27/94 Reported: 09/29/94
Attention: Maree Doden		

Instrument ID: gchp-2

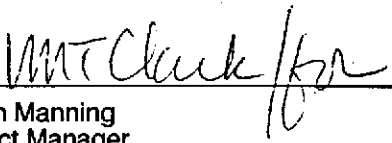
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: MW-23 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409C58-15	Sampled: 09/19/94 Received: 09/21/94 Analyzed: 09/27/94 Reported: 09/29/94
Attention: Maree Doden		

Instrument ID: gchp-2

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



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: MW-22 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409C58-16	Sampled: 09/19/94 Received: 09/21/94 Analyzed: 09/27/94 Reported: 09/29/94
Attention: Maree Doden		

Instrument ID: gchp-03

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

WMT Clark for

Eileen Manning
Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: MW-7 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409C58-17	Sampled: 09/20/94 Received: 09/21/94 Analyzed: 09/26/94 Reported: 09/29/94
Attention: Maree Doden		

Instrument ID: gchp-17

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





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

Attention: Maree Doden

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: MW-18
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9409C58-19

Sampled: 09/20/94
Received: 09/21/94
Analyzed: 09/26/94
Reported: 09/29/94

Instrument ID: gchp-17

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

MMT Clark

Eileen Manning
Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: E1-A Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409C59-20	Sampled: 09/20/94 Received: 09/21/94 Analyzed: 09/27/94 Reported: 09/29/94
Attention: Maree Doden		

Instrument ID: gchp-03

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	94

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
1900 Bates Avenue, Suite L
819 Striker Avenue, Suite 8

Redwood City, CA 94063
Concord, CA 94520
Sacramento, CA 95834

(415) 364-9600
(510) 686-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 686-9689
FAX (916) 921-0100

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

Attention: Maree Doden

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: TB-1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9409C59-21

Sampled: 09/19/94
Received: 09/21/94

Analyzed: 09/27/94
Reported: 09/29/94

Instrument ID: gchp-17

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:		
	Control Limits %	% Recovery
Surrogates	70	130
Trifluorotoluene		91

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

SEQUOIA ANALYTICAL - ELAP #1210

MT Clark

Eileen Manning
Project Manager



Pacific Environmental Group Client Project ID: 330-006.25/0608, San Lorenzo
 2025 Gateway Place, Suite 440 Matrix: Liquid
 San Jose, CA 95110
 Attention: Maree Doden QC Sample Group: 9409C58 -01, 03, 09 Reported: Sep 30, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel

MS/MSD	Benzene	Toluene	Ethyl Benzene	Xylenes
Batch#:	9409A0601	9409A0601	9409A0601	9409A0601
Date Prepared:	-	-	-	-
Date Analyzed:	9/27/94	9/27/94	9/27/94	9/27/94
Instrument I.D.#:	GCHP-20	GCHP-20	GCHP-20	GCHP-20
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	94	95	95	93
Matrix Spike Duplicate % Recovery:	95	96	96	97
Relative % Difference:	1.1	1.1	1.1	4.2

LCS Batch#:

Date Prepared:
 Date Analyzed:
 Instrument I.D.#:

LCS %
 Recovery:

% Recovery	Benzene	Toluene	Ethyl Benzene	Xylenes
Control Limits:	71-133	72-128	72-130	71-120

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.

SEQUOIA ANALYTICAL

MT Clark
 Eileen A. Manning
 Project Manager



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

Client Project ID: 330-006.25/0608, San Lorenzo
Matrix: Liquid

QC Sample Group: 9409C58-02; 9409C59-21

Reported: Sep 30, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD Batch#:	9409A0602	9409A0602	9409A0602	9409A0602
Date Prepared:	-	-	-	-
Date Analyzed:	9/27/94	9/27/94	9/27/94	9/27/94
Instrument I.D.#:	GCHP-17	GCHP-17	GCHP-17	GCHP-17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	100	99	96	97
Matrix Spike Duplicate % Recovery:	110	100	100	103
Relative % Difference:	9.5	1.0	4.1	6.0

LCS Batch#:

Date Prepared:
Date Analyzed:
Instrument I.D.#:

LCS %
Recovery:

% Recovery Control Limits:	71-133	72-128	72-130	71-120
----------------------------	--------	--------	--------	--------

SEQUOIA ANALYTICAL

Eileen A. Manning
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.



Pacific Environmental Group Client Project ID: 330-006.25/0608, San Lorenzo
 2025 Gateway Place, Suite 440 Matrix: Liquid
 San Jose, CA 95110
 Attention: Maree Doden QC Sample Group: 9409C58-16; 9409C59-20 Reported: Sep 30, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel

MS/MSD				
Batch#:	9409A0601	9409A0601	9409A0601	9409A0601
Date Prepared:	-	-	-	-
Date Analyzed:	9/27/94	9/27/94	9/27/94	9/27/94
Instrument I.D.#:	GCHP-3	GCHP-3	GCHP-3	GCHP-3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	100	100	100	103
Matrix Spike Duplicate % Recovery:	100	110	110	107
Relative % Difference:	0.0	9.5	9.5	3.8

LCS Batch#:

Date Prepared:
 Date Analyzed:
 Instrument I.D.#:

LCS %
 Recovery:

% Recovery				
Control Limits:	71-133	72-128	72-130	71-120

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.

SEQUOIA ANALYTICAL

WTC Clark/fo

Eileen A. Manning
 Project Manager



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

Client Project ID: 330-006.25/0608, San Lorenzo
Matrix: Liquid

Attention: Maree Doden

QC Sample Group: 9409C58-17, 18, 19

Reported: Sep 30, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel

MS/MSD				
Batch#:	9409A0602	9409A0602	9409A0602	9409A0602
Date Prepared:	-	-	-	-
Date Analyzed:	9/26/94	9/26/94	9/26/94	9/26/94
Instrument I.D.#:	GCHP-17	GCHP-17	GCHP-17	GCHP-17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	98	97	93	93
Matrix Spike Duplicate % Recovery:	98	100	94	93
Relative % Difference:	0.0	3.0	1.1	0.0

LCS Batch#:

Date Prepared:
Date Analyzed:
Instrument I.D.#:

LCS %
Recovery:

% Recovery Control Limits:	71-133	72-128	72-130	71-120
----------------------------	--------	--------	--------	--------

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.

SEQUOIA ANALYTICAL

M. A. Manning
Eileen A. Manning
Project Manager

ARCO Products Company
Division of AtlanticRichfieldCompany

330-006.25 Task Order No. 0608-94-5

Chain of Custody

ARCO Facility no. 0608 City (Facility) SAN LORENZO Project manager (Consultant) KELLY BROWN
 ARCO engineer C.C. Telephone no. (ARCO) _____ Telephone no. (Consultant) (415) 441-7500 Fax no. (Consultant) (415) 441-7539
 Consultant name PACIFIC ENVIRONMENTAL GROUP Address (Consultant) 2025 GATEWAY PLACE #440 SAN JOSE CA 95110

Laboratory name SEQUOIA
 Contract number 074073
 Method of shipment COURIER

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX 602/EPA 6020	BTEX/TPH 9195 EPA 802/8020/8015	TPH Modified 8015 Gas Diesel	Oil and Grease 413.1 413.2	TPH EPA 418.1/SM50GE	EPA 801/8010	EPA 824/8240	EPA 825/8270	TCMP Metals VOA	Sem Metals VOA	CAL Metals EPA 801/7000 TTLC STL	Lead Org./DHS Lead EPA 7420/7421					
			Soil	Water	Other	Ice	Acid																			
✓ MW-7		3		X		X	HCL	9-20-94	1355		X														-17	
✓ MW-11								9-20-94	1036																	-18
✓ MW-18								9-20-94	915																	-14
✓ EI-A								9-20-94	1455																	-20
✓ TB-1		2						9-19-94	NA																	-21

Special detection Limit/reporting

Special QA/QC

Remarks

Page 2 of 2
 9409658
 94 940965

Lab number 0608-94-5

Turnaround time

Priority Rush
 1 Business Day

Rush
 2 Business Days

Expedited
 5 Business Days

Standard
 10 Business Days

Condition of sample: good Temperature received: cool

Relinquished by [Signature] Date 9-21-94 Time 8:00 Received by Denise Alarcon Date 9/21/94

Relinquished by Denise Alarcon Date 9/21/94 Time 11:00 Received by [Signature]

Relinquished by [Signature] Date 9/21/94 Time 12:50 Received by laborator CBW Date 9/21/94 Time 12:50

ARCO Facility no. <u>0608</u>	City (Facility) <u>SAN LORENZO</u>	Project manager (Consultant) <u>KELLY BROWN</u>	Laboratory name <u>SEQUOIA</u>
ARCO engineer <u>C.C.</u>	Telephone no. (ARCO)	Telephone no. (Consultant) <u>(408) 441-7500</u>	Contract number <u>87-073</u>
Consultant name <u>PACIFIC ENVIRONMENTAL GROUP</u>		Fax no. (Consultant) <u>(408) 441-7539</u>	
Address (Consultant) <u>2025 GATEWAY PLACE #440 SAN JOSE, CA 95131</u>			

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX EPA 802	BTEX/TPH EPA 802/8015	TPH Modified 8015 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/SM803E	EPA 801/8010	EPA 824/8240	EPA 825/8270	TCLP Metals <input type="checkbox"/> VOA <input type="checkbox"/>	Semi Metals <input type="checkbox"/> VOA <input type="checkbox"/>	CAM Metals EPA 8010/7000 TTLC <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org./DHS Lead EPA 7420/7421 <input type="checkbox"/>				
			Soil	Water	Other	Ice	Acid																		
<u>MW-13</u>		<u>3</u>		<u>X</u>		<u>X</u>	<u>HCL</u>	<u>4-20-94</u>	<u>1415</u>		<u>X</u>														
<u>MW-8</u>								<u>9-20-94</u>	<u>1445</u>																
<u>MW-26</u>								<u>9-20-94</u>	<u>1128</u>																
<u>MW-25</u>								<u>9-20-94</u>	<u>1339</u>																
<u>MW-24</u>								<u>9-20-94</u>	<u>1200</u>																
<u>MW-14</u>								<u>9-20-94</u>	<u>1055</u>																
<u>MW-16</u>								<u>9-20-94</u>	<u>940</u>																
<u>MW-17</u>								<u>9-19-94</u>	<u>1610</u>																
<u>MW-10</u>								<u>9-20-94</u>	<u>1110</u>																
<u>MW-9</u>								<u>9-20-94</u>	<u>1220</u>																
<u>MW-5</u>								<u>9-20-94</u>	<u>1430</u>																
<u>MW-15</u>								<u>9-20-94</u>	<u>958</u>																
<u>MW-19</u>								<u>9-19-94</u>	<u>1550</u>																
<u>MW-21</u>								<u>9-19-94</u>	<u>1455</u>																
<u>MW-23</u>								<u>9-19-94</u>	<u>1530</u>																
<u>MW-22</u>								<u>9-19-94</u>	<u>1570</u>																

Method of shipment
COURIER

Special detection Limit/reporting
-01
-02
-03

Special QA/QC
-04
-05
-06
-07

Remarks
-08
-09
-10
-11

Lab number
9409158
9407159
0608-94-5

Turnaround time
-12
-13
-14
-15
-16

Priority Rush 1 Business Day

Rush 2 Business Days

Expedited 5 Business Days

Standard 10 Business Days

Condition of sample: <u>good</u>				Temperature received: <u>cool</u>			
Relinquished by sampler <u>C. C. [Signature]</u>	Date <u>9-20-94</u>	Time <u>8:00</u>	Received by <u>Verice Alarcon</u>	Date <u>9/21/94</u>	Time		
Relinquished by <u>Verice Alarcon</u>	Date <u>9/21/94</u>	Time <u>4:40</u>	Received by <u>[Signature]</u>	Date	Time		
Relinquished by <u>[Signature]</u>	Date <u>9/21/94</u>	Time <u>12:50</u>	Received by laboratory <u>[Signature]</u>	Date <u>9/21/94</u>	Time <u>12:51</u>		

WELL SAMPLING REQUEST

SAMPLING PROTOCOL

Project No. 330-006.15	Project Name HESPERIAN BLVD.	Project Manager K.B.	Approval	Date/s Q3	Prepared by: C.L.
----------------------------------	--	--------------------------------	----------	---------------------	-----------------------------

Well No.	Ideal Sampling Order	Sample I.D.		Analyses	Approximate Gallons to be Evacuated	Screened Interval (ft.) (DEPTH)	Casing Diameter (in.)	Does Well Go Dry?	Comments
		Lab	Duplicate I.D. Lab						Health & Safety Concerns
MW-17				GAS/BTEX	12	24	3		
MW-18					12	21½	3		
MW-19					14	21½	3		
MW-20					14	21½	3		
MW-21					14	22	3		
MW-22					13	21½	3		
MW-23					12	22	3		
E1-A						25	6		INFL. w/03m MONTHLY
					✓				

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 330-006:25 LOCATION: 17601 HESPERIAN DATE: 9-19-94
 CLIENT/STATION NO.: ARCO/0608 FIELD TECHNICIAN: J. MONDRIEN DAY OF WEEK: MONDAY

PROBE TYPE/ID No.
 Oil/Water IF/ _____
 H₂O level indicator # 3
 Other: _____

Dtw Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock	Expanding Cap	Total Depth (feet)	First Depth to Water (feet) TOB/TOC	Second Depth to Water (feet) TOB/TOC	SEPARATE-PHASE HYDROCARBONS (SPH)																
											SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	Fresh	Weathered	Gas	Oil	VISCOSITY			LIQUID REMOVED (gallons)							
																	Lite	Medium	Heavy	SPH	H ₂ O						
	MW5	1414	✓	✓		✓	✓	13.95	13.55	13.55	Ø	-															
	MW7	1409	✓	✓		✓	✓	18.20	14.16	14.16	Ø	-															
	MW8	1415						26.70	13.07	13.07	Ø	-															
	MW9	1405	✓	✓		✓	✓	18.70	12.25	12.25	Ø	-															
	MW10	1349	✓	✓		✓	✓	23.00	12.37	12.37	Ø	-															
	MW11	1386	✓	✓		✓	✓	19.20	13.05	13.05	Ø	-															
	MW13	1407	✓	✓		✓	✓	23.40	15.45	15.45	Ø	-															
	MW14	1351	✓	✓		✓	✓	23.00	11.25	11.25	Ø	-															
	MW15	1329	✓	✓		✓	✓	23.70	12.68	12.68	Ø	-															

Comments: _____

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 330-006.25 LOCATION: 1760 HESPERIAN BLVD. DATE: 9-19-94

CLIENT/STATION NO.: ARCO 10608 FIELD TECHNICIAN: J. M. [unclear] DAY OF WEEK: Monday

PROBE TYPE/ID No.

- Oil/Water IF/ _____
 H₂O level indicator #3
 Other: _____

Dtw Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock	Expanding Cap	Total Depth (feet)	First Depth to Water (feet) TOB/TOC	Second Depth to Water (feet) TOB/TOC	SEPARATE-PHASE HYDROCARBONS (SPH)						Liqud REMOVED (gallons)				
											SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	Fresh	Weathered	Gas	Oil		VISCOSITY			SPH / H ₂ O
																		Light	Medium	Heavy	
	MW-16	1327	✓	✓		✓	-	22.60	13.15	13.15	Ø	-									
	MW-17	1341	✓	-		-	-	23.60	14.00	14.00	Ø	-									
	MW-18	1326	✓	✓		✓	✓	21.70	12.03	12.03	Ø	-									
	MW-19	1323	✓	✓		✓	✓	21.60	11.45	11.45	Ø	-									
	MW-20							ABANDONED			Ø	-									
	MW-21	1320	✓	✓		✓	✓	21.90	11.89	11.89	Ø	-									
	MW-22	1318	✓	✓		✓	✓	21.75	12.43	12.43	Ø	-									
	MW-23	1334	✓	-		-	-	21.90	13.55	13.55	Ø	-									
	E1-A	1421	✓	✓				~	1961	1961	Ø	-									

Comments: _____

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 330-00625 LOCATION: 17601 HESPERIAN BLVD DATE: 9-19-94

CLIENT/STATION NO.: ARCO/0608 FIELD TECHNICIAN: J. M. ... DAY OF WEEK: Monday

PROBE TYPE/ID No.
 Oil/Water IF/ _____
 H₂O level indicator #3
 Other: _____

Dtw Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock	Expanding Cap	Total Depth (feet)	First Depth to Water (feet) TOB/TOC	Second Depth to Water (feet) TOB/TOC	SEPARATE-PHASE HYDROCARBONS (SPH)												
											SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	Fresh	Weathered	Gas	Oil	VISCOSITY			Liquid Removed (gallons)			
												COLOR						SPH H ₂ O					
	MW2135B		✓	✓		✓		19.95	14.72	14.72	∅	-											✓
	MW25411		✓	✓		✓		26.40	13.82	13.82	∅	-											✓
	MW261326		✓	✓		✓		19.70	14.05	14.05	∅	-											✓
	WELLATCHUR		✓	✓					13.64 (TOC)	13.64 (TOC)	∅	-											✓

Comments: _____

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-5

CLIENT/STATION No.: ARCO 10608 FIELD TECHNICIAN: [Signature]

WELL INFORMATION

Depth to Liquid: TOB - TOC
 Depth to water: 13.55 TOB - TOC
 Total depth: 13.95 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 13.95 - DTW 13.55 = 0.4 Gal/Linear x Foot 0.66 = 0.264 x Casings 5 = Purge 1.32

DATE PURGED: 9-20-94 START: 1420 END (2400 hr): 1423 PURGED BY: MA
 DATE SAMPLED: 9-20-94 START: 1425 END (2400 hr): 1435 SAMPLED BY: MA

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1422</u>	<u>44.50</u>	<u>8.6</u>	<u>1548</u>	<u>80.8</u>	<u>CR</u>	<u>LT</u>	<u>Mild</u>
<u>1430</u>	<u>1.50</u>						

DRY AT .50 GALLONS
VIRTUALLY DRY WELL

Pumped dry (Yes/No) (Yes) No
 FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:
 DTW: 13.68 TOB/TOC 6.90 1556 80.1 0 0 0

PURGING EQUIPMENT/I.D. #
 Bailer: 3-1 Airlift Pump:
 Centrifugal Pump: Dedicated:
 Other:

SAMPLING EQUIPMENT/I.D. #
 Bailer: 3-1
 Dedicated:
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW5</u>	<u>9-20-94</u>	<u>1430</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS: VIRTUALLY DRY WELL

SIGNATURE: [Signature]



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006:25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-7

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

WELL INFORMATION

CASING

GAL/

Depth to Liquid: _____ TOB _____ TOC _____
 Depth to water: 14.16 TOB _____ TOC _____
 Total depth: 18.70 TOB _____ TOC _____
 Date: _____ Time (2400): _____

DIAMETER **LINEAR FT.**

<input type="checkbox"/>	2	_____	0.17
<input checked="" type="checkbox"/>	3	_____	0.38
<input checked="" type="checkbox"/>	4	_____	0.66
<input type="checkbox"/>	4.5	_____	0.83
<input type="checkbox"/>	5	_____	1.02
<input type="checkbox"/>	6	_____	1.5
<input type="checkbox"/>	8	_____	2.6

SAMPLE TYPE

Groundwater
 Duplicate
 Extraction well
 Trip blank
 Field blank
 Equipment blank
 Other: _____

Probe Type and I.D. #

Oil/Water interface _____
 Electronic indicator #3
 Other: _____

TD 18.70 - DTW 14.16 = 4.54 Gal/Linear 0.38 x Foot 266 = 1.125 x Casings 5 = Purge 5.625

DATE PURGED: 9-20-94 START: 1344 END (2400 hr): 1352 PURGED BY: DM
 DATE SAMPLED: 9-20-94 START: 1353 END (2400 hr): 1358 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1346</u>	<u>2.8</u>	<u>7.12</u>	<u>1309</u>	<u>75.7</u>	<u>BRN</u>	<u>MOD</u>	<u>None</u>
<u>1349</u>	<u>9.6</u>	<u>7.20</u>	<u>1346</u>	<u>77.7</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>1351</u>	<u>9.4</u>	<u>7.22</u>	<u>1346</u>	<u>78.0</u>	<u>"</u>	<u>LT</u>	<u>None</u>

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: 15-1
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-7</u>	<u>9-20-94</u>	<u>1358</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS: _____

SIGNATURE: J. Miller



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-9
SAN LORENZO CA
 CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: J. M...

WELL INFORMATION

Depth to Liquid: _____ TOB _____ TOC _____
 Depth to water: 13.07 TOB _____ TOC _____
 Total depth: 26.70 TOB _____ TOC _____
 Date: _____ Time (2400): _____

CASING

<u>DIAMETER</u>	<u>GAL</u>
<u>LINEAR FT.</u>	
<input type="checkbox"/> 2 _____	0.17
<input checked="" type="checkbox"/> 3 _____	0.38
<input type="checkbox"/> 4 _____	0.66
<input type="checkbox"/> 4.5 _____	0.83
<input type="checkbox"/> 5 _____	1.02
<input type="checkbox"/> 6 _____	1.5
<input type="checkbox"/> 8 _____	2.6

SAMPLE TYPE

Groundwater
 Duplicate
 Extraction well
 Trip blank
 Field blank
 Equipment blank
 Other; _____

Probe Type Oil/Water interface
 and Electronic indicator # 3
 I.D. # Other; _____

TD 26.70 - DTW 13.07 = 13.63 Gal/Linear x Foot 0.38 = 3.28 x Casings 5 = Purge 16.40

DATE PURGED: 9-20-94 START: 1431 END (2400 hr): 1443 PURGED BY: M
 DATE SAMPLED: 9-20-94 START: 1444 END (2400 hr): 1447 SAMPLED BY: M

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1435</u>	<u>5.50</u>	<u>6.92</u>	<u>1292</u>	<u>81.7</u>	<u>Cloudy</u>	<u>LIGHT</u>	<u>Moderate</u>
<u>1439</u>	<u>11.0</u>	<u>6.64</u>	<u>1294</u>	<u>81.8</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>1442</u>	<u>16.50</u>	<u>6.55</u>	<u>1281</u>	<u>80.3</u>	<u>"</u>	<u>"</u>	<u>"</u>

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: DISP
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-9</u>	<u>9-20-94</u>	<u>1445</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS: _____

SIGNATURE: _____

J. M...



PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD, WELL ID #: MW-9
SAN LORENZO CA.

CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: J. M. [Signature]

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 12.25 TOB TOC
 Total depth: 18.70 TOB TOC
 Date: Time (2400):

Probe Type and I.D. #
 Oil/Water interface
 Electronic Indicator #3
 Other:

CASING
DIAMETER
 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 18.70 DTW 12.25 = 6.45 Gal/Linear Foot 0.38 = 2.451 x Number of Casings 5 = Purge 12.25

DATE PURGED: 9-20-94 START: 1205 END (2400 hr): 1217 PURGED BY: [Signature]
 DATE SAMPLED: 9-20-94 START: 1218 END (2400 hr): 1221 SAMPLED BY: [Signature]

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1208</u>	<u>4.0</u>	<u>7.9</u>	<u>1351</u>	<u>74.3</u>	<u>BRN</u>	<u>HVLT</u>	<u>NONE</u>
<u>1212</u>	<u>8.0</u>	<u>7.6</u>	<u>1371</u>	<u>77.2</u>	<u>"</u>	<u>MND</u>	<u>"</u>
<u>1215</u>	<u>12.0</u>	<u>7.53</u>	<u>1394</u>	<u>79.8</u>	<u>"</u>	<u>LT</u>	<u>"</u>

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: 17.6
 Dedicated:
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-9</u>	<u>9-20-94</u>	<u>1220</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS:

SIGNATURE: [Signature]



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD, WELL ID #: MW-10
SAN LORENZO CA.
 CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: J. Monnier

WELL INFORMATION

Depth to Liquid: - TOB - TOC
 Depth to water: 12.37 TOB - TOC
 Total depth: 2300 TOB - TOC
 Date: _____ Time (2400): _____

Probe Type and I.D. #
 Oil/Water interface
 Electronic indicator # 3
 Other: _____

CASING

DIAMETER	GAL/ LINEAR FT.
<input type="checkbox"/> 2 _____	0.17
<input checked="" type="checkbox"/> 3 _____	0.38
<input type="checkbox"/> 4 _____	0.66
<input type="checkbox"/> 4.5 _____	0.83
<input type="checkbox"/> 5 _____	1.02
<input type="checkbox"/> 6 _____	1.5
<input type="checkbox"/> 8 _____	2.6

SAMPLETYPE

Groundwater
 Duplicate
 Extraction well
 Trip blank
 Field blank
 Equipment blank
 Other: _____

TD 2300 - DTW 12.37 = 10.63 Gal/Linear Foot 0.38 = 4.03 x Number of Casings 5 = Calculated = Purge 20.19

DATE PURGED: 9-20-94 START: 11:02 END (2400 hr): 1109 PURGED BY: OM
 DATE SAMPLED: 9-20-94 START: 1109 END (2400 hr): 1112 SAMPLED BY: OM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>11:04</u>	<u>6.7</u>	<u>7.06</u>	<u>1556</u>	<u>72.1</u>	<u>BEN</u>	<u>LIGHT</u>	<u>FAINT</u>
<u>11:06</u>	<u>13.4</u>	<u>6.57</u>	<u>1572</u>	<u>78.5</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>11:08</u>	<u>20.1</u>	<u>6.58</u>	<u>1575</u>	<u>78.3</u>	<u>"</u>	<u>"</u>	<u>"</u>

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: 3-5
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-10</u>	<u>9-20-94</u>	<u>1110</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS: _____

SIGNATURE: J. Monnier



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD, SAN LORENZO CA. WELL ID #: MW-11
 CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: J. Munnich

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 13.05 TOB TOC
 Total depth: 19.20 TOB TOC
 Date: 9/20/94 Time (2400): 1846

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 19.20 - DTW 13.05 = 6.15 Gal/Linear Foot 0.38 x Number of Casings 5 = Calculated Purge 28.85

DATE PURGED: 9/20/94 START: 10:15 END (2400 hr): 1127 PURGED BY: JM
 DATE SAMPLED: 9-20-94 START: 1130 END (2400 hr): 1136 SAMPLED BY: JM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 2.5°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1020</u>	<u>9.6</u>	<u>6.68</u>	<u>1307</u>	<u>71.5</u>	<u>CLOUDY</u>	<u>LIGHT</u>	<u>FAINT</u>
<u>1023</u>	<u>19.2</u>	<u>6.75</u>	<u>1322</u>	<u>72.2</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>1025</u>	<u>28.8</u>	<u>6.75</u>	<u>1325</u>	<u>72.6</u>	<u>"</u>	<u>"</u>	<u>"</u>

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: 172
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-11</u>	<u>9/20/94</u>	<u>10:30</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS: _____

SIGNATURE: _____

J. Munnich



PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-13

CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: J.P. Moore

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 15.45 TOB TOC
 Total depth: 23.40 TOB TOC
 Date: Time (2400):

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: _____

Probe Type Oil/Water interface
 and Electronic indicator # 3
 I.D. # Other: _____

TD 23.40 - DTW 15.45 = 7.95 Gal/Linear 0.38 x Foot DM = 302 x Number of Casings 5 = Calculated Purge 1510

DATE PURGED: 9-20-94 START: 1402 END (2400 hr): 1413 PURGED BY: DM
 DATE SAMPLED: 9-20-94 START: 1414 END (2400 hr): 1416 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1405</u>	<u>5.25</u>	<u>7.33</u>	<u>1383</u>	<u>76.5</u>	<u>BRN</u>	<u>LT</u>	<u>NONE</u>
<u>1409</u>	<u>10.50</u>	<u>7.05</u>	<u>1361</u>	<u>77.2</u>	<u>BRN</u>	<u>LT</u>	<u>"</u>
<u>1412</u>	<u>15.75</u>	<u>6.99</u>	<u>1373</u>	<u>76.8</u>	<u>"</u>	<u>TRC</u>	<u>"</u>

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: D/SP
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-13</u>	<u>9/20/94</u>	<u>1415</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS: _____

SIGNATURE: J.P. Moore



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-14
SAN LORENZO CA.

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

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 11.25' TOB TOC
 Total depth: 23.0' TOB TOC
 Date: 9 Time (2400):

CASING

DIAMETER 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: _____

Probe Type and I.D. #

Oil/Water interface
 Electronic indicator #3
 Other: _____

TD 23.0' - DTW 11.25' = 11.75' Gal/Linear Foot 0.38 = 4.46 x Number of Casings 5 = Calculated Purge 22.3

DATE PURGED: 9-20-94 START: 10:45 END (2400 hr): 1054 PURGED BY: MM
 DATE SAMPLED: 9-20-94 START: 1054 END (2400 hr): 1056 SAMPLED BY: MM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>10:47</u>	<u>7.5</u>	<u>6.58</u>	<u>1257</u>	<u>72.0</u>	<u>BRN</u>	<u>LIGHT</u>	<u>None</u>
<u>10:50</u>	<u>15.0</u>	<u>6.62</u>	<u>1292</u>	<u>73.5</u>	<u>U</u>	<u>U</u>	<u>U</u>
<u>10:53</u>	<u>22.5</u>	<u>6.63</u>	<u>1295</u>	<u>74.3</u>	<u>U</u>	<u>U</u>	<u>U</u>

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. #

SAMPLING EQUIPMENT/I.D. #

Bailer: 3 Airlift Pump: _____
 Centrifugal Pump: _____ Dedicated: _____
 Other: _____

Bailer: 3-7
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-14</u>	<u>9-20-94</u>	<u>10:55</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS: _____

SIGNATURE: J. Monnier

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-15
SAN LORENZO CA.
 CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: J. Manville

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 13.55/12.68 TOB TOC
 Total depth: 23.70 TOB TOC
 Date: 9/20/94 Time (2400):

CASING
DIAMETER
 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: _____

Probe Type and I.D. #
 Oil/Water interface
 Electronic indicator #3
 Other: _____

TD 23.70 - DTW 12.68 = 11.02 Gal/Linear x Foot 0.38 = 4.18 Number of Casings 5 Calculated = Purge 20.9

DATE PURGED: 9/20/94 START: 9:45 END (2400 hr): 9:54 PURGED BY: [Signature]
 DATE SAMPLED: 9-20-94 START: 9:55 END (2400 hr): 10:00 SAMPLED BY: [Signature]

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 2.5°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>9:47</u>	<u>7.0</u>	<u>7.20</u>	<u>1281</u>	<u>70.01</u>	<u>BRN</u>	<u>LIGHT</u>	<u>NONE</u>
<u>9:50</u>	<u>14.0</u>	<u>7.07</u>	<u>1320</u>	<u>71.2</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>9:54</u>	<u>20.0</u>	<u>7.06</u>	<u>1291</u>	<u>71.4</u>	<u>"</u>	<u>"</u>	<u>"</u>

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: 3-6
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-15</u>	<u>9-20-94</u>	<u>958</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS: _____

SIGNATURE: _____

[Signature]



PACRC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD, WELL ID #: MW-16
SAN LORENZO CA.
 CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: J. Monnier

WELL INFORMATION
 Depth to Liquid: 13.16 TOB - TOC
 Depth to water: 13.15 TOB - TOC
 Total depth: 27.60 TOB - TOC
 Date: 9/20/94 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 27.60 - DTW 13.15 = 9.45 x Gal/Linear Foot 0.38 = 3.59 x Number of Casings 5 = Calculated = Purge 18.0

DATE PURGED: 9/20/94 START: 9:26 END (2400 hr): 9:34 PURGED BY: MM
 DATE SAMPLED: 9/20/94 START: 9:38 END (2400 hr): 9:42 SAMPLED BY: MM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>9:29</u>	<u>0.0</u>	<u>7.30</u>	<u>1192</u>	<u>69.3</u>	<u>BRN</u>	<u>MUD</u>	<u>NONE</u>
<u>9:32</u>	<u>12.0</u>	<u>7.37</u>	<u>12.73</u>	<u>70.3</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>18.0-15.0</u> <u>- DRY AT 15.0 GALLONS -</u>							

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: 14.55 TOB/TOC 7.06 12.58 69.5 BRN MUD NONE

PURGING EQUIPMENT/I.D. #

Bailer: _____
 Centrifugal Pump #3
 Other: _____
 Airlift Pump: _____
 Dedicated: _____

SAMPLING EQUIPMENT/I.D. #

Bailer: 3-3
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-16</u>	<u>9-20-94</u>	<u>940</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS: _____

SIGNATURE: _____



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD, WELL ID #: MW-17
SAN LORENZO CA.
 CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: J. Monnier

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 1400 TOB TOC
 Total depth: 2360 TOB TOC
 Date: Time (2400):

Probe Type and I.D. #
 Oil/Water interface
 Electronic indicator #3
 Other:

CASING

<u>DIAMETER</u>	<u>GAL/</u>
	<u>LINEAR FT.</u>
<input type="checkbox"/> 2	<u>0.17</u>
<input checked="" type="checkbox"/> 3	<u>0.38</u>
<input type="checkbox"/> 4	<u>0.66</u>
<input type="checkbox"/> 4.5	<u>0.83</u>
<input type="checkbox"/> 5	<u>1.02</u>
<input type="checkbox"/> 6	<u>1.5</u>
<input type="checkbox"/> 8	<u>2.6</u>

SAMPLE TYPE

Groundwater
 Duplicate
 Extraction well
 Trip blank
 Field blank
 Equipment blank
 Other:

TD 2360 - DTW 1400 = 9.6 x Gal/Linear Foot 0.38 = 3.65 x Number of Casings 5 = Calculated Purge 1824

DATE PURGED: 9-19-94 START: 1555 END (2400 hr): 1608 PURGED BY: DM
 DATE SAMPLED: 9-19-94 START: 1609 END (2400 hr): 1611 SAMPLED BY: DM

<u>TIME</u> (2400 hr)	<u>VOLUME</u> (gal.)	<u>pH</u> (units)	<u>E.C.</u> (umhos/cm @ 25°C)	<u>TEMPERATURE</u> (°F)	<u>COLOR</u>	<u>TURBIDITY</u>	<u>ODOR</u>
<u>1559</u>	<u>6.25</u>	<u>7.26</u>	<u>1314</u>	<u>74.0</u>	<u>CLOUDY</u>	<u>LIGHT</u>	<u>NONE</u>
<u>1603</u>	<u>12.50</u>	<u>7.20</u>	<u>1286</u>	<u>72.8</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>1607</u>	<u>18.75</u>	<u>7.09</u>	<u>1280</u>	<u>72.6</u>	<u>"</u>	<u>"</u>	<u>"</u>

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: #3 Dedicated:
 Other:

SAMPLING EQUIPMENT/I.D. #

Bailer: 3-2
 Dedicated:
 Other:

<u>SAMP. CNTRL #</u>	<u>DATE</u>	<u>TIME (2400)</u>	<u>No. of Cont.</u>	<u>SIZE</u>	<u>CONTAINER</u>	<u>PRESERVE</u>	<u>ANALYTICAL PARAMETER</u>
<u>MW-17</u>	<u>9-19-94</u>	<u>1610</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS:

SIGNATURE: J. Monnier



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD, WELL ID #: MW-18
SAN LORENZO CA

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

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 1203 TOB TOC
 Total depth: 21.70 TOB TOC
 Date: Time (2400):

Probe Type and I.D. #
 Oil/Water interface
 Electronic indicator #3
 Other:

CASING

<u>DIAMETER</u>	<u>GAL/LINEAR FT.</u>
<input type="checkbox"/> 2	<u>0.17</u>
<input checked="" type="checkbox"/> 3	<u>0.38</u>
<input type="checkbox"/> 4	<u>0.66</u>
<input type="checkbox"/> 4.5	<u>0.83</u>
<input type="checkbox"/> 5	<u>1.02</u>
<input type="checkbox"/> 6	<u>1.5</u>
<input type="checkbox"/> 8	<u>2.6</u>

SAMPLE TYPE

Groundwater
 Duplicate
 Extraction well
 Trip blank
 Field blank
 Equipment blank
 Other:

TD 21.70 - DTW 1203 = 9.67 x Gal/Linear Foot 0.38 = 3.68 x Number of Casings 5 = Calculated Purge 18.37

DATE PURGED: 9-20-94 START: 900 END (2400 hr): 912 PURGED BY: MM
 DATE SAMPLED: 9-20-94 START: 913 END (2400 hr): 916 SAMPLED BY: MM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>904</u>	<u>6.25</u>	<u>7.20</u>	<u>1554</u>	<u>72.4</u>	<u>BRN</u>	<u>MID</u>	<u>NONE</u>
<u>908</u>	<u>12.50</u>	<u>7.30</u>	<u>1356</u>	<u>73.9</u>	<u>"</u>	<u>HEAVY</u>	<u>"</u>
<u>9011</u>	<u>18.75</u>	<u>7.31</u>	<u>1365</u>	<u>74.3</u>	<u>CLR</u>	<u>LT</u>	<u>"</u>

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: 3-1
 Dedicated:
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-18</u>	<u>9-20-94</u>	<u>915</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS:

SIGNATURE: J. Monahan



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-19
SAN LORENZO CA
 CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: [Signature]

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 11.45 TOB TOC
 Total depth: 21.60 TOB TOC
 Date: Time (2400):

CASING
DIAMETER GAL/
LINEAR FT.

<input type="checkbox"/>	2	0.17
<input checked="" type="checkbox"/>	3	0.38
<input type="checkbox"/>	4	0.66
<input type="checkbox"/>	4.5	0.83
<input type="checkbox"/>	5	1.02
<input type="checkbox"/>	6	1.5
<input type="checkbox"/>	8	2.6

SAMPLE TYPE

- Groundwater
- Duplicate
- Extraction well
- Trip blank
- Field blank
- Equipment blank
- Other:

Probe Type Oil/Water interface
 and Electronic indicator # 3
 I.D. # Other:

TD 21.60 - DTW 11.45 = 10.15 Gal/Linear x Foot 0.38 = 3.86 Number of Casings 5 = Calculated Purge 19.29

DATE PURGED: 9-19-94 START: 1533 END (2400 hr): 1845 PURGED BY: [Signature]
 DATE SAMPLED: 9-19-94 START: 1547 END (2400 hr): 1551 SAMPLED BY: [Signature]

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1537</u>	<u>6.50</u>	<u>7.03</u>	<u>1455</u>	<u>72.5</u>	<u>YELLOW</u>	<u>Light</u>	<u>None</u>
<u>1541</u>	<u>13.0</u>	<u>7.12</u>	<u>1464</u>	<u>73.1</u>	<u>YELL</u>	<u>LT</u>	<u>None</u>
<u>1544</u>	<u>19.50</u>	<u>7.14</u>	<u>1452</u>	<u>73.3</u>	<u>"</u>	<u>"</u>	<u>"</u>

Pumped dry Yes / No
 FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:
 DTW: TOB/TOC

PURGING EQUIPMENT/I.D. # SAMPLING EQUIPMENT/I.D. #

Bailer: Airlift Pump: Bailer: 3-7
 Centrifugal Pump: #3 Dedicated: Dedicated:
 Other: Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-19</u>	<u>9-19-94</u>	<u>1530</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>ORG/BTEX</u>

REMARKS:

SIGNATURE: [Signature]



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-20

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

WELL INFORMATION

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

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

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

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

TD _____ - DTW _____ = _____ x Foot D. 66 = _____ x Casings 5 = 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
ABANDONED							

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
<u>MW-20</u>	<u>-</u>	<u>-</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS: _____

SIGNATURE: J. Montana



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD, WELL ID #: MW-21
SAN LORENZO CA.
 CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: O. Monnier

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 11.89 TOB TOC
 Total depth: 21.90 TOB TOC
 Date: Time (2400):

Probe Type and I.D. #
 Oil/Water interface
 Electronic indicator #3
 Other:

CASING
DIAMETER
 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 21.90 - DTW 11.89 = 10.01 Gal/Linear Foot 0.38 = 380 x Number of Casings 5 = Calculated Purge 19.02

DATE PURGED: 9-19-94 START: 1436 END (2400 hr): 1450 PURGED BY: DM
 DATE SAMPLED: 9-19-94 START: 1452 END (2400 hr): 1457 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1440</u>	<u>6.50</u>	<u>6.38</u>	<u>1400</u>	<u>73.8</u>	<u>CLY</u>	<u>MOD</u>	<u>NONE</u>
<u>1444</u>	<u>13.0</u>	<u>6.49</u>	<u>1380</u>	<u>71.5</u>	<u>"</u>	<u>LT</u>	<u>NONE</u>
<u>1449</u>	<u>19.50</u>	<u>6.48</u>	<u>1337</u>	<u>69.9</u>	<u>CLR</u>	<u>TRC</u>	<u>"</u>

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: #3-1
 Dedicated:
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-21</u>	<u>9-19-94</u>	<u>1455</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS:

SIGNATURE: O. Monnier



PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-22
SAN LORENZO CA

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

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 12.47 TOB TOC
 Total depth: 26.75 TOB TOC
 Date: Time (2400):

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;

Probe Type and I.D. #
 Oil/Water interface
 Electronic indicator #3
 Other;

TD 21.75 DTW 12.47 = 9.32 Gal/Linear Foot 0.38 = 3.54 Number of Casings 5 = Purge 17.71

DATE PURGED: 9-19-94 START: 1457 END (2400 hr): 1500 PURGED BY: DM
 DATE SAMPLED: 9-19-94 START: 1509 END (2400 hr): 1511 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1500</u>	<u>5.90</u>	<u>6.74</u>	<u>1342</u>	<u>72.5</u>	<u>CLDY</u>	<u>LT</u>	<u>NONE</u>
<u>1504</u>	<u>1180</u>	<u>6.45</u>	<u>1375</u>	<u>73.0</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>1507</u>	<u>1270</u>	<u>6.42</u>	<u>1354</u>	<u>72.1</u>	<u>"</u>	<u>"</u>	<u>"</u>

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: #3 Dedicated:
 Other:

SAMPLING EQUIPMENT/I.D. #

Bailer: 3-3
 Dedicated:
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-22</u>	<u>9-19-94</u>	<u>1510</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS:

SIGNATURE: J. Morne



PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD, WELL ID #: MW-23
SAN LORENZO CA.
 CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: P. Mank

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 13.55 TOB TOC
 Total depth: 21.96 TOB TOC
 Date: Time (2400):

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;

Probe Type Oil/Water interface
 and Electronic indicator #3
 I.D. # Other;

TD 21.96 - DTW 13.55 = 8.35 Gal/Linear x Foot 0.38 = 3.17 x Casings 5 = Calculated Purge 1585

DATE PURGED: 9-19-94 START: 1515 END (2400 hr): 1526 PURGED BY: M
 DATE SAMPLED: 9-19-94 START: 1520 END (2400 hr): 1522 SAMPLED BY: M

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 2.5°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1520</u>	<u>5.50</u>	<u>6.7</u>	<u>1436</u>	<u>73.5</u>	<u>Cloudy</u>	<u>Light</u>	<u>NONE</u>
<u>1522</u>	<u>10.10</u>	<u>6.5</u>	<u>1438</u>	<u>73.9</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>1524</u>	<u>15.60</u>	<u>6.45</u>	<u>1439</u>	<u>73.0</u>	<u>"</u>	<u>"</u>	<u>"</u>

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: 3-5
- Dedicated:
- Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-23</u>	<u>9-19-94</u>	<u>1530</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GA5/BTEX</u>

REMARKS:

SIGNATURE: P. Mank



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 #: MW-24

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

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 14.72 TOB TOC
 Total depth: 19.95 TOB TOC
 Date: Time (2400):

CASING

<u>DIAMETER</u>	<u>GAL/</u>
	<u>LINEAR FT.</u>
<input type="checkbox"/> 2	<u>0.17</u>
<input checked="" type="checkbox"/> 3	<u>0.38</u>
<input type="checkbox"/> 4	<u>0.66</u>
<input type="checkbox"/> 4.5	<u>0.83</u>
<input type="checkbox"/> 5	<u>1.02</u>
<input type="checkbox"/> 6	<u>1.5</u>
<input type="checkbox"/> 8	<u>2.6</u>

SAMPLE TYPE

- Groundwater
- Duplicate
- Extraction well
- Trip blank
- Field blank
- Equipment blank
- Other;

Probe Type and I.D. #
 Oil/Water interface
 Electronic indicator #9
 Other;

TD 19.95 - DTW 14.72 = 5.23 x Foot ^{Gal/Linear} 0.17 = 889 x Casings 5 = Purge 4.45

DATE PURGED: 9/20/94 START: 11:47 END (2400 hr): 1155 PURGED BY: MM
 DATE SAMPLED: 9/20/94 START: 1157 END (2400 hr): 1202 SAMPLED BY: MM

<u>TIME</u> (2400 hr)	<u>VOLUME</u> (gal.)	<u>pH</u> (units)	<u>E.C.</u> (umhos/cm @ 2.5°C)	<u>TEMPERATURE</u> (°F)	<u>COLOR</u>	<u>TURBIDITY</u>	<u>ODOR</u>
<u>11:48</u>	<u>1.5</u>	<u>7.59</u>	<u>1352</u>	<u>72.1</u>	<u>Cloudy</u>	<u>Heavy</u>	<u>None</u>
<u>11:50</u>	<u>3.0</u>	<u>7.76</u>	<u>1343</u>	<u>77.5</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>11:52</u>	<u>4.5</u>	<u>7.48</u>	<u>1341</u>	<u>78.5</u>	<u>"</u>	<u>"</u>	<u>"</u>

Pumped dry Yes No
 FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:
 DTW: TOB/TOC

PURGING EQUIPMENT/I.D. #

- Bailer: 17-1
- Centrifugal Pump:
- Other:
- Airlift Pump:
- Dedicated:

SAMPLING EQUIPMENT/I.D. #

- Bailer: 17-1
- Dedicated:
- Other:

<u>SAMP. CNTRL #</u>	<u>DATE</u>	<u>TIME (2400)</u>	<u>No. of Cont.</u>	<u>SIZE</u>	<u>CONTAINER</u>	<u>PRESERVE</u>	<u>ANALYTICAL PARAMETER</u>
<u>MW-24</u>	<u>9/20/94</u>	<u>12:00</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS:

SIGNATURE: J. Morrison



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-25

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

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 13.82 TOB TOC
 Total depth: 21.40 TOB TOC
 Date: Time (2400):

Probe Type and I.D. #
 Oil/Water interface
 Electronic indicator # 3
 Other;

CASING

DIAMETER	GAL/LINEAR FT.
<input checked="" type="checkbox"/> 2	0.17
<input type="checkbox"/> 3	0.38
<input checked="" type="checkbox"/> 4	0.66
<input type="checkbox"/> 4.5	0.83
<input type="checkbox"/> 5	1.02
<input type="checkbox"/> 6	1.5
<input type="checkbox"/> 8	2.6

SAMPLE TYPE

Groundwater
 Duplicate
 Extraction well
 Trip blank
 Field blank
 Equipment blank
 Other;

TD 21.40 DTW 13.82 = 7.58 Gal/Linear ^{0.17} x Foot 0.66 = 1.298 x Number of Casings 5 = Calculated Purge 6.44

DATE PURGED: 9-20-94 START: 1320 END (2400 hr): 1329 PURGED BY: MM
 DATE SAMPLED: 9-20-94 START: 1332 END (2400 hr): 1336 SAMPLED BY: MM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1323</u>	<u>2.14</u>	<u>6.82</u>	<u>1320</u>	<u>74.1</u>	<u>CMY</u>	<u>LT</u>	<u>NONE</u>
<u>1326</u>	<u>4.2</u>	<u>6.96</u>	<u>1315</u>	<u>74.2</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>1328</u>	<u>6.3</u>	<u>6.93</u>	<u>1317</u>	<u>74.2</u>	<u>"</u>	<u>"</u>	<u>"</u>

Pumped dry Yes No
 FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:
 DTW: TOB/TOC

PURGING EQUIPMENT/I.D. #

Bailer: 17-3 Airlift Pump:
 Centrifugal Pump: Dedicated:
 Other:

SAMPLING EQUIPMENT/I.D. #

Bailer: 17-3
 Dedicated:
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-25</u>	<u>9-20-94</u>	<u>1339</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS:

SIGNATURE: J. Minner



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD, WELL ID #: MW-26
SAN LORENZO CA.

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

WELL INFORMATION		CASING	GAL/	SAMPLE TYPE
Depth to Liquid: _____ TOB _____ TOC _____		DIAMETER	LINEAR FT.	<input checked="" type="checkbox"/> Groundwater
Depth to water: <u>14.05</u> TOB _____ TOC _____		<input checked="" type="checkbox"/> 2 _____ <u>0.17</u>		<input type="checkbox"/> Duplicate
Total depth: <u>19.20</u> TOB _____ TOC _____		<input checked="" type="checkbox"/> 3 _____ <u>0.38</u>		<input type="checkbox"/> Extraction well
Date: _____ Time (2400): _____		<input type="checkbox"/> 4 _____ <u>0.66</u>		<input type="checkbox"/> Trip blank
Probe Type <input type="checkbox"/> Oil/Water interface		<input type="checkbox"/> 4.5 _____ <u>0.83</u>		<input type="checkbox"/> Field blank
and <input checked="" type="checkbox"/> Electronic indicator <u>#3</u>		<input type="checkbox"/> 5 _____ <u>1.02</u>		<input type="checkbox"/> Equipment blank
I.D. # <input type="checkbox"/> Other; _____		<input type="checkbox"/> 6 _____ <u>1.5</u>		<input type="checkbox"/> Other; _____
		<input type="checkbox"/> 8 _____ <u>2.6</u>		

TD 19.20 - DTW 14.05 = 5.15 Gal/Linear 0.17 x Foot 0.38 = 0.875 Number of Casings 5 Calculated Purge 4.37

DATE PURGED: 9-20-94 START: 1122 END (2400 hr): 1126 PURGED BY: DM
 DATE SAMPLED: 9-20-94 START: 1127 END (2400 hr): 1130 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1123</u>	<u>1.5</u>	<u>7.42</u>	<u>1372</u>	<u>78.4</u>	<u>B2N</u>	<u>HEAVY</u>	<u>NONE</u>
<u>1124</u>	<u>3.0</u>	<u>6.7</u>	<u>1378</u>	<u>80.4</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>1125</u>	<u>4.5</u>	<u>6.9</u>	<u>1358</u>	<u>79.4</u>	<u>"</u>	<u>"</u>	<u>"</u>

Pumped dry Yes No
 FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:
 DTW: _____ TOB/TOC _____

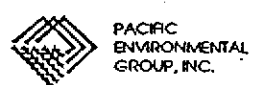
PURGING EQUIPMENT/I.D. #
 Bailer: 17-2 Airlift Pump: _____
 Centrifugal Pump: _____ Dedicated: _____
 Other: _____

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-26</u>	<u>9-20-94</u>	<u>11:28</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS: _____

SIGNATURE: [Signature]



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330 006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: E1-A

CLIENT/STATION No.: ARCO 0608 FIELD TECHNICIAN: Morison

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 19.61 TOB TOC
 Total depth: TOB TOC
 Date: Time (2400):

Probe Type and I.D. #
 Oil/Water interface
 Electronic indicator
 Other:

CASING
DIAMETER
 2 _____ 0.17
 3 _____ 0.38
 4 _____ 0.66
 4.5 _____ 0.83
 5 _____ 1.02
 6 _____ 1.5
 8 _____ 2.6

GAL
LINEAR FT.
 Groundwater
 Duplicate
 Extraction well
 Trip blank
 Field blank
 Equipment blank
 Other:

TD _____ - DTW _____ = _____ x Foot _____ = _____ x 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

Pumped dry Yes / No _____
 FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:
 DTW: 19.61 (TOB/TOC) 7.27 1345 78.8 CU LT NONE

PURGING EQUIPMENT/I.D. #
 Bailer: _____
 Centrifugal Pump: _____
 Other: _____
 Airlift Pump: _____
 Dedicated: PUMP

SAMPLING EQUIPMENT/I.D. #
 Bailer: _____
 Dedicated: SAMPLE PORT
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>E1-A</u>	<u>9-20-84</u>	<u>1455</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS: TOTALIZER: 0141676
1.5 GPM HOURS: 21741.4

SIGNATURE: [Signature]



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD, WELL ID #: ~~WADA~~ 590H
SAN LORENZO CA.

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

2 _____ 0.17
 3 _____ 0.38
 4 _____ 0.66
 4.5 _____ 0.83
 5 _____ 1.02
 6 _____ 1.5
 8 _____ 2.6

GAL/ LINEAR FT.

SAMPLE TYPE

Groundwater
 Duplicate
 Extraction well
 Trip blank
 Field blank
 Equipment blank
 Other; _____

TD _____ - DTW _____ = $\frac{\text{Gal/Linear}}{\text{x Foot}}$ 0.38 = $\frac{\text{Number of}}{\text{x Casings}}$ 5 = $\frac{\text{Calculated}}{\text{Purge}}$

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

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 6.14 1282 72.6 CLEAR LIGHT NONE

PURGING EQUIPMENT/I.D. #

Bailer: _____
 Centrifugal Pump: _____
 Other: DEDICATED

Airlift Pump: _____
 Dedicated: _____

SAMPLING EQUIPMENT/I.D. #

Bailer: _____
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>WADA 590H</u>	<u>9-21-94</u>	<u>935</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS: PURGED PRIOR TO SAMPLE

SIGNATURE: J. Monnier

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MWD-675H
SAN LORENZO CA.

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

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.**

<input type="checkbox"/>	2	_____	0.17
<input checked="" type="checkbox"/>	3	_____	0.38
<input type="checkbox"/>	4	_____	0.66
<input type="checkbox"/>	4.5	_____	0.83
<input type="checkbox"/>	5	_____	1.02
<input type="checkbox"/>	6	_____	1.5
<input type="checkbox"/>	8	_____	2.6

SAMPLE TYPE

Groundwater
 Duplicate
 Extraction well
 Trip blank
 Field blank
 Equipment blank
 Other; _____

TD _____ - DTW _____ = _____ Gal/Linear x Foot 038 = _____ Number of Casings 5 = Calculated Purge _____

DATE PURGED: _____ START: _____ END (2400 hr): _____ PURGED BY: _____
 DATE SAMPLED: 9-22-94 START: 1040 END (2400 hr): 1050 SAMPLED BY: DM

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

Pumped dry Yes / No _____

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC 7.08 1316 72.0 CLR TCE NDM

PURGING EQUIPMENT/I.D. #

Bailer: _____ Airlift Pump: _____
 Centrifugal Pump: _____ Dedicated: _____
 Other: _____

SAMPLING EQUIPMENT/I.D. #

Bailer: 17-PVC
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MWD-675H</u>	<u>9-22-94</u>	<u>MWD 1043</u>		<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS: 9-21-94 - 940 - NOT HOME
9-21-94 : 1110 - NOT HOME
9-22-94 : ANSWERED

SIGNATURE: J. Munnier



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD, WELL ID #: 1000-17200V1
SAN LORENZO CA.

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

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 _____ = _____ Gal/Linear x Foot 0.38 = _____ Number of Casings 5 = 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

Pumped dry Yes / No _____
 FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:
 DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
 Bailer: DISP Airlift Pump: _____
 Centrifugal Pump: _____ Dedicated: _____
 Other: _____

SAMPLING EQUIPMENT/I.D. #
 Bailer: DISP Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MLW</u>	<u>12/09/01</u>	<u>9:24</u>	<u>1000</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL GAS/BTEX</u>

REMARKS: _____

SIGNATURE: J. Minn



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

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

CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: _____

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 _____ = _____ Gal/Linear x Foot 0.38 = _____ Number of x Casings 5 = 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

Pumped dry Yes / No _____
 FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:
 DTW: _____ TOB/TOC _____
 PURGING EQUIPMENT/I.D. # _____
 SAMPLING EQUIPMENT/I.D. # _____

Bailer; _____ Airlift Pump; _____
 Centrifugal Pump; _____ Dedicated; _____
 Other; _____ Bailer; _____
 Dedicated; _____
 Other; _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>DCO-17203h</u>	<u>9-21-94</u>	<u>10:11</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

REMARKS: 9-21-94 : 10:11 2 NOT HOME
9-21-94 : 11:15 : NOT HOME
9-22-94 11:05 : NOT HOME
9-22-94 13:15 : NOT HOME

SIGNATURE: _____



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD, SAN LORENZO CA. WELL ID #: 0260-17348VE

CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: _____

<u>WELL INFORMATION</u>			<u>CASING DIAMETER</u>		<u>GAL/ LINEAR FT.</u>	<u>SAMPLE TYPE</u>	
Depth to Liquid: _____	TOB _____	TOC _____	<input type="checkbox"/> 2 _____	_____	0.17	<input checked="" type="checkbox"/> Groundwater	
Depth to water: _____	TOB _____	TOC _____	<input checked="" type="checkbox"/> 3 _____	_____	0.38	<input type="checkbox"/> Duplicate	
Total depth: _____	TOB _____	TOC _____	<input type="checkbox"/> 4 _____	_____	0.66	<input type="checkbox"/> Extraction well	
Date: _____	Time (2400): _____		<input type="checkbox"/> 4.5 _____	_____	0.83	<input type="checkbox"/> Trip blank	
Probe Type and I.D. #	<input type="checkbox"/> Oil/Water interface _____		<input type="checkbox"/> 5 _____	_____	1.02	<input type="checkbox"/> Field blank	
	<input type="checkbox"/> Electronic indicator _____		<input type="checkbox"/> 6 _____	_____	1.5	<input type="checkbox"/> Equipment blank	
	<input type="checkbox"/> Other; _____		<input type="checkbox"/> 8 _____	_____	2.6	<input type="checkbox"/> Other; _____	

TD _____ - DTW _____ = _____ Gal/Linear x Foot 0.38 = _____ Number of Casings 5 = 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					
					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 _____

<u>PURGING EQUIPMENT/I.D. #</u>	<u>SAMPLING EQUIPMENT/I.D. #</u>
<input type="checkbox"/> Bailer: _____	<input checked="" type="checkbox"/> Bailer: _____
<input type="checkbox"/> Centrifugal Pump: _____	<input type="checkbox"/> Dedicated: _____
<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Airlift Pump: _____	
<input type="checkbox"/> Dedicated: _____	

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>0260-17348VE</u>	<u>-</u>	<u>-</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS: 9-21-94 9:50 AM - NOT HOME

9-21-94 10:56 - NOT HOME

9-22-94 10:50 - NOT HOME

9-22-94 13:25 - NOT HOME

SIGNATURE: _____



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA. WELL ID #: DWO-17349VA
 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): _____

CASING
DIAMETER GAL/
LINEAR FT.

<input type="checkbox"/>	2	0.17
<input checked="" type="checkbox"/>	3	0.38
<input type="checkbox"/>	4	0.66
<input type="checkbox"/>	4.5	0.83
<input type="checkbox"/>	5	1.02
<input type="checkbox"/>	6	1.5
<input type="checkbox"/>	8	2.6

SAMPLE TYPE

- Groundwater
- Duplicate
- Extraction well
- Trip blank
- Field blank
- Equipment blank
- Other: _____

Probe Type and I.D. #

- Oil/Water interface
- Electronic indicator
- Other: _____

TD _____ - DTW _____ = $\frac{\text{Gal/Linear}}{\text{x Foot}}$ 0.38 = $\frac{\text{Number of}}{\text{x Casings}}$ 5 = 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. ($\mu\text{mhos/cm @ 25}^\circ\text{C}$)	TEMPERATURE ($^\circ\text{F}$)	COLOR	TURBIDITY	ODOR

Pumped dry: Yes / No _____

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC 6.04 1330 71.4 CLOUDY LIGHT FAINT

PURGING EQUIPMENT/I.D. #

- Bailer: _____
- Centrifugal Pump: DEVIANCE
- Other: _____
- Airlift Pump: _____
- Dedicated: _____

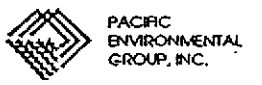
SAMPLING EQUIPMENT/I.D. #

- Bailer: _____
- Dedicated: _____
- Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>DWO-17349VMB</u>	<u>1020</u>	<u>1020</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS: PURGE BEFORE SAMPLE

SIGNATURE: [Signature]



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-17372VM

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): _____

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: _____

Probe Type and I.D. #
 Oil/Water interface _____
 Electronic indicator _____
 Other: _____

TD _____ - DTW _____ = _____ x Foot D.66 = _____ x Casings 5 = 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

Pumped dry Yes / No _____

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:
 DTW: _____ TOB/TOC 7.18 1384 79.5 CLK TOE NONE

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
<u>MW-17372VM</u>	<u>9-21-94</u>	<u>1125</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS: 9-21-94 : 1030 NOT HOME

PURGED PRIOR TO SAMPLE

SIGNATURE: J. Monnier



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MWF-17393VA
SAN LORENZO CA.
 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): _____

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; _____

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

TD _____ - DTW _____ = $\frac{\text{Gal/Linear}}{\text{x Foot}}$ 0.38 = $\frac{\text{Number of}}{\text{x Casings}}$ 5 = $\frac{\text{Calculated}}{\text{Purge}}$ _____

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
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. #				SAMPLING EQUIPMENT/I.D. #			
<input type="checkbox"/> Bailer: _____		<input type="checkbox"/> Airlift Pump: _____		<input checked="" type="checkbox"/> Bailer: _____			
<input type="checkbox"/> Centrifugal Pump: _____		<input type="checkbox"/> Dedicated: _____		<input type="checkbox"/> Dedicated: _____			
<input type="checkbox"/> Other: _____				<input type="checkbox"/> Other: _____			

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MWF-17393VA</u>			<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS: 9-21-94 : 10:27 : NOT HOME
9-21-94 : 11:20 : NOT HOME
9-22-94 : 10:55 : NOT HOME
9-22-94 : 13:20

SIGNATURE: J. Monnier



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: DW-TB-2

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

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.

<input type="checkbox"/>	2	_____	0.17
<input type="checkbox"/>	3	_____	0.38
<input checked="" type="checkbox"/>	4	_____	0.66
<input type="checkbox"/>	4.5	_____	0.83
<input type="checkbox"/>	5	_____	1.02
<input type="checkbox"/>	6	_____	1.5
<input type="checkbox"/>	8	_____	2.6

SAMPLE TYPE

Groundwater
 Duplicate
 Extraction well
 Trip blank
 Field blank
 Equipment blank
 Other; _____

TD _____ - DTW _____ = _____ Gal/Linear x Foot D. 66 = _____ Number of x Casings 5 = 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

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. #

SAMPLING EQUIPMENT/I.D. #

Bailer: _____
 Centrifugal Pump: _____
 Other: _____

Bailer: _____
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>DW-TB-2</u>	<u>9-21-94</u>	<u>NA</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS: _____

SIGNATURE: J. Morris

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-00625 LOCATION: 17601 HESPERIAN BLVD. WELL ID #: TB-3

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

WELL INFORMATION

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

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

CASING

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

SAMPLE TYPE

Groundwater
 Duplicate
 Extraction well
 Trip blank
 Field blank
 Equipment blank
 Other;

TD - DTW = x Foot = x 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

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
<u>TB-3</u>	<u>9-22-94</u>	<u>NA</u>	<u>2</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>6AS/BTEX</u>

REMARKS:

SIGNATURE: J. Norman



ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer C.C.	Telephone no. (ARCO)	Telephone no. (Consultant) (408) 441-7500	Contract number
Fax no. (Consultant) (408) 441-7539			

Consultant name **PACIFIC ENVIRONMENTAL GROUP** Address (Consultant) **2025 GATEWAY PLACE #440 SAN JOSE, CA 95110**

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH 805 EPA 8062/8020/8015	TPH Modified 8015 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/SM503E	EPA 601/810	EPA 624/8240	EPA 625/8270	TCIP Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/> Semm <input type="checkbox"/>	CAN Metals EPA 6010/7000 TLIC <input type="checkbox"/> STLIC <input type="checkbox"/>	Lead Org. DHS <input type="checkbox"/> Lead EPA 7420/7421 <input type="checkbox"/>	Method of shipment	
			Soil	Water	Other	Ice	Acid															
MW-13		3		X		X	HCL	9-20-94	1415		X											COURIER
MW-8								9-20-94	1445													
MW-26								9-20-94	1128													
MW-25								9-20-94	1339													
MW-24								9-20-94	1200													
MW-44								9-20-94	1055													
MW-16								9-20-94	940													
MW-17								9-19-94	1610													
MW-10								9-20-94	1110													
MW-9								9-20-94	1220													
MW-5								9-20-94	1430													
MW-15								9-20-94	958													
MW-19								9-19-94	1550													
MW-2								9-19-94	1455													
MW-23								9-19-94	1530													
MW-22								9-19-94	1570													

Condition of sample:	Temperature received:
Relinquished by sampler <i>[Signature]</i>	Date 9-20-94 Time 9:00
Relinquished by	Date _____ Time _____
Relinquished by	Date _____ Time _____
Relinquished by	Date _____ Time _____
Relinquished by	Date _____ Time _____

Special detection Limit/Reporting

Special QA/QC

Remarks

Lab number **0608-94-5**

Turnaround time

Priority Rush 1 Business Day

Rush 2 Business Days

Expedited 5 Business Days

Standard 10 Business Days

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer C.C.	Telephone no. (ARCO)	Telephone no. (Consultant) (408) 441-7500	Contract number
Consultant name PACIFIC ENVIRONMENTAL GROUP		Address (Consultant) 2025 GATEWAY PLACE #440, SAN JOSE CA 95110	
Fax no. (Consultant) (408) 441-7539		Method of shipment COURIER	

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA 1632/6020/8015	TPH Modified 8015 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8540	EPA 625/8270	TCLP Metals <input type="checkbox"/> VOA <input type="checkbox"/>	Semi Metals <input type="checkbox"/> VOA <input type="checkbox"/>	CMM Metals EPA 6010/7000 TTL <input type="checkbox"/> STL <input type="checkbox"/>	Lead Org./DHS Lead EPA 7420/7421 <input type="checkbox"/>		
			Soil	Water	Other	Ice	Acid																
MW-7		3		X		X	HCL	9-20-94	1355		X												
MW-11								9-20-94	1036														
MW-18								9-20-94	915														
E1-A								9-20-94	1455														
TB-1		2						9-19-94	NA														

Special detection Limit/reporting

Special QA/QC

Remarks

Lab number **94**
0608-94-5

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 Ja M...	Date 9-21-94	Time 800	Received by	Date	Time	Received by	Date
Relinquished by	Date	Time	Received by	Date	Time	Received by	Date
Relinquished by	Date	Time	Received by laboratory	Date	Time	Received by	Date

ARCO Facility no. 0608	City (Facility) SAN JOSE	Project manager (Consultant)
ARCO engineer C.C.	Telephone no. (ARCO)	Telephone no. (Consultant) (408) 441-7500
Consultant name PACIFIC ENVIRONMENTAL GROUP		Fax no. (Consultant) (408) 441-7539

Address (Consultant) **8025 GATEWAY PLACE #440 SAN JOSE CA 95170**

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX EPA 8020	BTEX/TPH EPA M602/6020/8015	TPH Modified 8015 Gas Diesel	Oil and Grease 413.1 413.2	TPH EPA 418.1/SM508E	EPA 801/8010	EPA 824/8240	EPA 825/8270	TCLP Metals	Semi VOA	CAN Metals EPA 6010/7000	TLC STL	Lead Org. DHS	Lead EPA 7420/7421	Laboratory name
			Soil	Water	Other	Ice	Acid																	
17349VM		3		X		X	HCL	9-21-94	1020		X													SEQUOIA
17376VM		3		X		X	HCL	9-21-94	1125		X													
590H		3		X		X	HCL	9-21-94	935		X													
17210VM		3		X		X	HCL	9-21-94	1000		X													
TB-2		2		X		X	HCL	9-21-94	NA		X													

Condition of sample:	Temperature received:
Relinquished by sampler <i>[Signature]</i>	Received by
Date 9-21-94 Time 1515	
Relinquished by	Received by
Date	
Relinquished by	Received by laboratory
Date	Date
	Time

Method of shipment

Special detection Limit/reporting

Special QA/QC

Remarks
LABS RELEASE
#0608-94-5

Lab number

Turnaround time

Priority Rush 1 Business Day

Rush 2 Business Days

Expedited 5 Business Days

Standard 10 Business Days



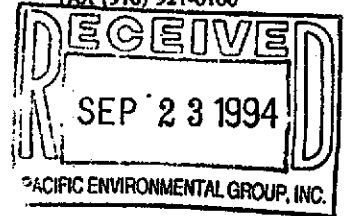
Sequoia Analytical

680 Chesapeake Drive
1900 Bates Avenue, Suite L
819 Striker Avenue, Suite 8

Redwood City, CA 94063
Concord, CA 94520
Sacramento, CA 95834

(415) 364-9600
(510) 686-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 686-9689
FAX (916) 921-0100



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

Project: 330-006.26/608, San Lorenzo

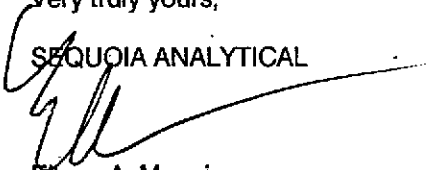
Enclosed are the results from 2 water samples received at Sequoia Analytical on September 13, 1994. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
940960001	Liquid, Infl	9/12/94	EPA 8015 Mod/8020
940960002	Liquid, Effl	9/12/94	Chemical Oxygen Demand pH Total Suspended Solids EPA 8015 Mod/8020

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





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

Client Proj. ID: 330-006.26/608, San Lorenzo

Lab Proj. ID: 9409600

Sampled: 09/12/94

Received: 09/13/94

Analyzed: see below

Attention: Maree Doden

Reported: 09/22/94

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9409600-02				
Sample Desc: LIQUID, Effl.				
Chemical Oxygen Demand	mg/L	09/15/94	20	170
pH	pH Units	09/13/94	N/A	6.8
Total Suspended Solids	mg/L	09/16/94	1.0	N.D.

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

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager





Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.26/608, San Lorenzo Sample Descript: Infl. Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9409600-01	Sampled: 09/12/94 Received: 09/13/94 Analyzed: 09/14/94 Reported: 09/22/94
Attention: Maree Doden		

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	107

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

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager





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

Attention: Maree Doden

Client Proj. ID: 330-006.26/608, San Lorenzo
Sample Descript: Effl
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9409600-02

Sampled: 09/12/94
Received: 09/13/94
Analyzed: 09/14/94
Reported: 09/22/94

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	107

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

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager



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

Client Project ID: 330-006.26/608, San Lorenzo
Matrix: Liquid

QC Sample Group: 9409600 02

Reported: Sep 22, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Chemical Oxygen Demand
Method:	EPA 410.4
Analyst:	C. Hirotsu

MS/MSD
Batch#: 9409449-01

Date Prepared: 9/15/94
Date Analyzed: 9/15/94
Instrument I.D.#: N.A.
Conc. Spiked: 100 mg/L

Matrix Spike
% Recovery: 88

Matrix Spike
Duplicate %
Recovery: 88

Relative %
Difference: 0.0

LCS Batch#:

Date Prepared:
Date Analyzed:
Instrument I.D.#:

LCS %
Recovery:

% Recovery Control Limits:	70-130
---	--------

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

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.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager





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

Client Project ID: 330-006.26/608, San Lorenzo
Matrix: Liquid

QC Sample Group: 9409600 02

Reported: Sep 22, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Total Suspended Solids	pH
Method:	EPA 160.2	EPA 9040
Analyst:	Y. Arteaga	Y. Arteaga

Date Analyzed: 9/6/94 9/13/94

Sample #: 9409533-01 9408D14-01

Sample Concentration: 27 6.5

Sample Duplicate Concentration: 25 6.5

% RPD: 7.7 0.0

Control Limits: 0-30 0-30

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager





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

Client Project ID: 330-006.26/608, San Lorenzo
Matrix: Liquid

QC Sample Group: 9409600 01-02

Reported: Sep 22, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	R. Vincent	R. Vincent	R. Vincent	R. Vincent

MS/MSD Batch#:	940955101	940955101	940955101	940955101
Date Prepared:	N.A.	N.A.	N.A.	N.A.
Date Analyzed:	9/14/94	9/14/94	9/14/94	9/14/94
Instrument I.D.#:	GCHP-3	GCHP-3	GCHP-3	GCHP-3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	97	100	110	103
Matrix Spike Duplicate % Recovery:	99	100	110	103
Relative % Difference:	2.0	0.0	0.0	0.0

LCS Batch#:

Date Prepared:
Date Analyzed:
Instrument I.D.#:

LCS %
Recovery:

% Recovery Control Limits:	71-133	72-128	72-130	71-120
-------------------------------	--------	--------	--------	--------

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

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.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager



ARCO Facility no. *608* City (Facility) *PSA Lorenz* Project manager (Consultant) *Shaw Garalani* Laboratory name *Sequoia*
 ARCO engineer *Mike Whelan* Telephone no. (ARCO) *408 441 7500* Telephone no. (Consultant) *408 441 7539* Fax no. (Consultant) *408 441 7539* Contract number *07-073*
 Consultant name *Pacific Env Group* Address (Consultant) *2025 Gateway Pl #470 San Jose* Method of shipment

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/8020/8015	TPH Modified 8015 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/SM503E	EPA 601/8010	COD EPA 821.1	EPA 625/8270	TCLP Metals VOA <input type="checkbox"/> VOA <input type="checkbox"/>	Semi Metals EPA 6010/7000 TLC <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org./DHS Lead EPA 7420/7421	TSS	PH	
			Soil	Water	Other	Ice	Acid																
<i>INF</i>	<i>3</i>	<i>3</i>		<i>X</i>		<i>X</i>	<i>HCL</i>	<i>9-12-94</i>		<i>X</i>													
<i>EFFL</i>	<i>3</i>	<i>3</i>		<i>X</i>		<i>X</i>	<i>HCL</i>			<i>X</i>													
<i>EFFL</i>	<i>3</i>	<i>3</i>		<i>X</i>		<i>X</i>	<i>H2SO4</i>								<i>X</i>								
<i>EFFL</i>	<i>1</i>	<i>1</i>		<i>X</i>		<i>X</i>	<i>NP</i>														<i>X</i>		
<i>EFFL</i>	<i>1</i>	<i>1</i>		<i>X</i>		<i>X</i>	<i>NP</i>															<i>X</i>	

Special detection Limit/reporting *-01*
-02
 Special QA/QC *X*
 Remarks *SEP 21*
 Lab number *9409600*
 Turnaround time
 Priority Rush 1 Business Day
 Rush 2 Business Days
 Expedited 5 Business Days
 Standard 10 Business Days

Condition of sample: *Good* Temperature received: *Cool*
 Date *9-13-94* Time *7:00* Received by *[Signature]* Date *9/13/94* Time *0730*
 Date *9/13/94* Time *9:45* Received by *[Signature]* Date *9/13/94* Time *9:45*
 Date *9/13/94* Time *10:30* Received by laboratory *[Signature]* Date _____ Time _____

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: PEG (Arco 330-006.26)
 REC. BY (PRINT): CB

MASTER LOG NO. / PAGE: _____
 DATE OF LOG-IN: _____

9409600
9/13/94

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
1. Custody Seal(s):	Present / <u>Absent</u> Intact / Broken*	01	A-C	INPI	3VORS	L	9/12/94	
2. Custody Seal Nos.:		02	44	EPH	6VORS	↓	↓	
3. Chain-of-Custody Records:	<u>Present</u> / Absent*							
4. Traffic Reports or Packing List:	Present / <u>Absent</u>							
5. Airbill:	Airbill / Sticker Present / <u>Absent</u>							
6. Airbill No.:								
7. Sample Tags:	<u>Present</u> / Absent*							
8. Sample Condition:	<u>Intact</u> / Broken* / Leaking*							
9. Does information on custody reports, traffic reports and sample tags agree?	<u>Yes</u> / No*							
10. Proper Preservatives Used:	<u>Yes</u> / No* <u>1200</u>							
11. Date Rec. at Lab:	<u>9/13/94</u>							
Time Rec. at Lab:	<u>1030</u>							

CB 9/13/94

Contact Project Manager and attach record of resolution

ARCO Facility no. 608	City (Facility) SAN LORENZO	Project manager (Consultant) SHAW GARALANI	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		

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX EPA 802/809	BTEX/TPH EPA 1602/802/8015	TPH Modified 8015 Gas Diesel	Oil and Grease 413.1 413.2	TPH EPA 418.1/SM508E	EPA 801/8010	EPA 825/8270	TCPL Metals VOA VOA	Semi Metals EPA 810/7000 TTLC STL	Lead Org/DHS Lead EPA 7420/7421	TSS	PH	
			Soil	Water	Other	Ice	Acid															
INFL	3	3		X		X	HCL	9-17-94		X												
EFFL	3	3		X		X	HCL			X												
EFFL	3	3		X		X	H2SO4							X								
EFFL	1	1		X		X	NP													X		
EFFL	1	1		X		X	NP														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 <i>Jay Vira</i>	Date 9-13-94 Time 7:00
Received by <i>M. D. Dode</i>	Date 9/13/94 Time 07:30
Relinquished by <i>M. D. Dode</i>	Date 9/13/94 Time 9:45
Received by <i>SK</i>	Date 9/13/94 Time 9:45
Relinquished by	Date
Received by laboratory	Date



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

Client Proj. ID: 330-006.26/608, San Lorenzo
Sample Descript: Infl
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9408A76-01

Sampled: 08/17/94
Received: 08/18/94
Analyzed: 08/18/94
Reported: 08/23/94

Attention: Maree Doden

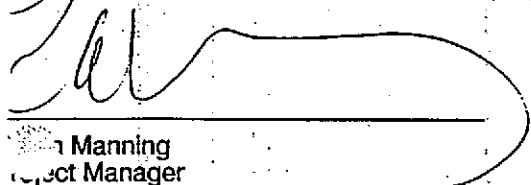
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	1.8
Toluene	0.50	N.D.
Ethyl Benzene	0.50	1.5
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


John Manning
Project Manager





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

Client Proj. ID: 330-006.26/608, San Lorenzo
Sample Descript: Effl
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9408A76-02

Sampled: 08/17/94
Received: 08/18/94
Analyzed: 08/18/94
Reported: 08/23/94

Attention: Maree Doden

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

Project Manager





Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Project ID: 330-006.26/608, San Lorenzo Sample Matrix: Water Analysis Method: EPA 5030/8015 Mod./8020 First Sample #: 4G83501	Sampled: Jul 14, 1994 Received: Jul 15, 1994 Reported: Jul 22, 1994
--	---	---

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4G83501 Infl	Sample I.D. 4G83502 Effl	Sample I.D. 4G83503 Mid-1
Purgeable Hydrocarbons	50	270	N.D.	N.D.
Benzene	0.50	6.9	N.D.	N.D.
Toluene	0.50	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	15	N.D.	N.D.
Total Xylenes	0.50	1.9	N.D.	N.D.
Chromatogram Pattern:		--	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0
Date Analyzed:	7/20/94	7/19/94	7/19/94
Instrument Identification:	GCHP-17	GCHP-2	GCHP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	115	96	93

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager



SITE INFORMATION FORM

Identification

Project # 330-006,26
 on # 0608
 Site Address: 17601 Hesperian Blvd, San Lorenzo
 County: Alameda
 Project Manager: Shaw G
 Requestor: restorm Anyika
 Client: ARCO
 Client P.O.C.: Mike Whelan
 Date of request: 1/94

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

- Cal Trans. _____
 - County _____
 - City _____
 - Private _____
 - Multi-Consultant Scheduling
- Date(s): _____

	Initials	Date
FIS	CG	9/13
Copy/Dat	da	9/14

Site Safety

Concerns: _____

Field Tasks

- System Sampling
- System Start-up
- System Repair
- System Modification
- System Resample
- System Shut-down
- Tank Pull
- Soil Sampling
- Subcontractor Observation
- SPH Bailing
- Report required for: _____
- Data summary required for: _____

1) sample system:

	Gas/BTEX	INFL	EFFL	
ALSOY	COD	M	M	M = monthly
1/p	TSS		Q	Q = Quarterly (3, 6, 9, 12)
1/p	pH		Q	

2) DTW in E-1A

3) Change filter

(Please attach: Site Map, Process and Instrumentation Diagram, Site Safety Plan, Well logs, Other information as appropriate)

Budgeted hours: _____ Actual hours; On-Site: 3 Mob-de-Mob: 1

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

SAMPLED SYSTEM

Groundwater Extraction System

ARCO Service Station 0608
17601 Hesperian Boulevard
San Lorenzo, California

Name: JV

Date/Time: 9-12-94

Treatment System Readings			
System On Upon Arrival?	yes	Electric Meter (kw-hrs)	12339
Effluent Totalizer (gallons)	0120910	Bag Filter INFL Pressure (psi)	10
E-1A Flowrate (gpm)	2 gpm	Bag Filter EFFL Pressure (psi)	9
E-1A Hourmeter (hours)	21549.0	MID-1 Pressure (psi)	6
E-1A Throttle Valve Position	100 % OPEN	MID-2 Pressure (psi)	0
E-1A DTW (TOB feet)	1998	EFFL Pressure (psi)	0
Enclosure Swept	yes	Does Sump Pump Work	N/A
Does the Autodialer Work? Batteries Replaced	yes	Number of Spare Filters On-Site	1

Comments _____

ARCO Facility no. 608	City (Facility) San Lorenzo	Project manager (Consultant) SHAW BARALANI	Laboratory name SEQUOIA
ARCO engineer Mike Whelan	Telephone no. (ARCO)	Telephone no. (Consultant) 408 441 7500	Contract number
Consultant name Pacific Env Group	Address (Consultant) 2025 Gate Way Pl #470 San Jose		

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX EPA 802	BTEX/TPH EPA 1602/802/8015	TPH Modified 8015 Gas Diesel	Oil and Grease 413.1 413.2	TPH EPA 418.1/SM503E	EPA 601/6010	COD	EPA 825/8270	TCMP Metals VOA VOA	Semi Metals EPA 6010/7000 TLIC STLC	Lead Org/DHS Lead EPA 7420/7421	TSS	PH
			Soil	Water	Other	Ice	Acid															
INFL	3	3		X		X	HCL	9-12-94		X												
EFFL	3	3		X		X	HCL			X												
EFFL	3	3		X		X	H2SO4							X								
EFFL	1	1		X		X	NP														X	
EFFL	1	1		X		X	NP															X

Condition of sample:	Temperature received:	Priority Rush 1 Business Day	<input type="checkbox"/>
Relinquished by sampler	Date 9-13-94 Time 7:00	Rush 2 Business Days	<input type="checkbox"/>
Relinquished by	Date	Expedited 5 Business Days	<input type="checkbox"/>
Relinquished by	Date	Standard 10 Business Days	<input checked="" type="checkbox"/>

SITE INFORMATION FORM

Identification

Project Type

Project # 330-006.26

Station # 0608

Site Address: 7601 Hesperian San Lorenzo County

Project Manager: Shaw G.

Requestor: Anyika H.

Client: ARCO

Client P.O.C.: Mike Wheelan

Date of request: 8/29/94

- 1st Time visit
Quarterly
Monthly
Semi-Monthly
Weekly
One time event
Other

Ideal field date(s): NEXT VISIT (Du Mon)

Circle Appropriate Category: In Budget Site Visit
Check Appropriate Category: Budget Hrs. 2

Site Safety

Pending
ARCO
SAFE

Field Tasks: For General Description

MUST BE DONE DURING MONTHLY VERY IMPORTANT

LOWER E-1A Well pump 4' to 24' at intake (to TOB)

NOTE: BRING A TRUCK W/ A HOIST. Will take one person w/ truck to lower pump 4'.

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

Identification

Project # 330-006,26
 Station # 0608
 Address: 17601 Hesperian Blvd, San Lorenzo
 County: Alameda
 Project Manager: Shaw G
 Requestor: Hesliem
 Client: ARCO
 Client P.O.C.: Mike Whelan
 Date of request: 1/94

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

- Cal Trans _____
- County _____
- City _____
- Private _____
- Multi-Consultant Scheduling
Date(s): _____

Site Safety

Concerns

Field Tasks

- System Sampling
- System Start-up
- System Repair
- System Modification
- System Resample
- System Shut-down
- Tank Pull
- Soil Sampling
- Subcontractor Observation
- SPH Bailing
- Report required for: _____
- Data summary required for: _____

1) Sample system:

	Gas/BTEX	INFL	EFFL	
1/2	COD	M	M	M = monthly Q = Quarterly (3, 6, 9, 12)
1/2	TSS		Q	
1/2	pH		Q	

2) DTU in E-1A

3) Change filter

(Please attach Site Map, Process and Instrumentation Diagram, Site Safety Plan, Well logs, Other information as appropriate)

Budgeted hours: _____ Actual hours; On-Site: 2.0 _____

Comments, remarks, etc. from Field Staff (include problems encountered and our solutions):
Sampled syst
TASK Completed
 • Increase pressure
 SW catch to
 25psi?
 • photos?

Groundwater Extraction System

ARCO Service Station 0608
17601 Hesperian Boulevard
San Lorenzo, California

Name: SV

Date/Time: 8-17-94

Treatment System Readings			
System On Upon Arrival?	NO System went down on High Bag PSI. 8/16/94	Electric Meter (kw-hrs)	12962
Effluent Totalizer (gallons)	0051260	Bag Filter INFL Pressure (psi)	10
E-1A Flowrate (gpm)	2.0 gpm	Bag Filter EFFL Pressure (psi)	9
E-1A Hourmeter (hours)	20920	MID-1 Pressure (psi)	6
E-1A Throttle Valve Position	100 % OPEN	MID-2 Pressure (psi)	21
E-1A DTW (TOB feet)	2.68	EFFL Pressure (psi)	0
Enclosure Swept	YES	Does Sump Pump Work	N/A
Does the Autodialer Work? Batteries Replaced	YES	Number of Spare Filters On-Site	1

Comments: Change Filter and Re started system

ARCO Facility no. 608 City (Facility) SAN LORENZO Project manager (Consultant) SHAW GARDNER

ARCO engineer Mike Whelan Telephone no. (ARCO) Telephone no. (Consultant) 441 7500 Fax no. (Consultant) 441 7539

Consultant name PACIFIC ENV GROUP Address (Consultant) 2025 GATEWAY PL #440 SAN JOSE

Laboratory name Sequoia

Contract number

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

Table with columns: Sample I.D., Lab no., Container no., Matrix (Soil, Water, Other), Preservation (Ice, Acid), Sampling date, Sampling time, and various chemical analysis parameters (BTEX, TPH, Metals, etc.).

Condition of sample:

Temperature received:

Relinquished by sampler (Signature) Date 8-18-94 Time 700

Received by

Relinquished by Date Time

Received by

Relinquished by Date Time

Received by laboratory Date Time

SITE INFORMATION FORM

Identification

Project Type

Project # 330-006.26
Station # 0608

Site Address:
17601 Esperian Blvd
San Lorenzo
County:

Project Manager: Shaw G.
Requestor: Angka Hester
Client: ARCO
Client P.O.C.: Mike Wheelan
Date of request: 8/15/94

- 1st Time visit
- Quarterly
 - 1st 2nd 3rd 4th
- Monthly
- Semi-Monthly
- Weekly
- One time event
- Other: _____

Circle Appropriate Category
 I = In Budget Site Visit
 O = In Budget Site Visit
 S = In Budget Site Visit

Check Appropriate Category
 Budget Hrs. 4
 Actual Hrs. _____
 Mob de Mob _____

Ideal field date(s): 8/17/94 (during monthly)

Site Safety

Concerns

Field Tasks: For General Description

- 1) Maximize pumping rate if possible (max EI-A flow rate = 2.0 gpm)
- 2) Take photos of system
- 3) Call engineer from site

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

TASK Completed with
Monthly visit

Identification

Project # 330-006,26
Station # 0608
Address: 17601 Hesperian Blvd, San Lorenzo
County: Alameda
Project Manager: Shau G
Requestor: Lesliem
Client: ARCO
Client P.O.C.: Mike Whelan
Date of request: 1/94

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

- Cal Trans _____
- County _____
- City _____
- Private _____
- Multi-Consultant Scheduling
Date(s): _____

Site Safety

Concerns

Field Tasks

- System Sampling
- System Start-up
- System Repair
- System Modification
- System Resample
- System Shut-down
- Tank Pull
- Soil Sampling
- Subcontractor Observation
- SPH Bailing
- Report required for: _____
- Data summary required for: _____

1) Sample system:

	Gas / BTEX	INFL	EFFL	
12504	COD	M	M	M = monthly
110	TSS		Q	Q = Quarterly (3, 6, 9, 12)
112	pH		Q	

2) DTU in E-1

3) Change filter

(Please attach: Site Map, Process and Instrumentation Diagram, Site Safety Plan, Well logs, Other information as appropriate)

Budgeted hours: _____ Actual hours; On-Site: 3 Mob-de-Mob: .5

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

Sampled System