



PACIFIC
ENVIRONMENTAL
GROUP INC.

12/11/95

December 20, 1995

Project 330-006.2B

Mr. Michael Whelan
ARCO Products Company
P.O. Box 612530
San Jose, California 95161

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

Dear Mr. Whelan:

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

QUARTERLY GROUNDWATER MONITORING RESULTS

Groundwater samples were collected from site groundwater monitoring and domestic irrigation wells on September 14 and 15, 1995, and analyzed for the presence of total purgeable petroleum hydrocarbons calculated as gasoline (TPPH-g), benzene, toluene, ethylbenzene, and xylenes (BTEX compounds). Additionally, analysis of groundwater samples for methyl t-butyl ether (MTBE) as requested by the Alameda County Health Care Services Agency (ACHCSA) was performed this quarter. Field and laboratory procedures are presented as Attachment A. Certified analytical reports, chain-of-custody documentation, and field data sheets are presented as Attachment B. Treatment system certified analytical reports and chain-of-custody documentation are presented as Attachment C.

Depth to water data collected on September 15, 1995 indicate that groundwater elevations have decreased in site groundwater monitoring wells an average of approximately 0.50 foot since May 30, 1995. Groundwater flow was to the west with an approximate gradient of 0.003. Groundwater elevation data are presented in Table 1. A groundwater elevation contour map based on the September 15, 1995 data is shown on Figure 1.

The results of groundwater monitoring this quarter for site groundwater monitoring wells indicate that TPPH-g and benzene concentrations are generally consistent with previous quarters. Wells MW-7, MW-9, MW-11, MW-13 through MW-16, MW-18, MW-19, MW-21 through MW-24, and MW-26 were below detection limits for TPPH-g and BTEX compounds. Benzene was below the detection limit in Wells MW-10, MW-17, and MW-25. TPPH-g was detected at concentrations ranging from 63 to 1,100 parts per billion (ppb). Benzene was detected at concentrations ranging from 3.3 to 30 ppb. Groundwater samples were also analyzed for methyl t-butyl ether (MTBE) this quarter. Separate-phase hydrocarbons (SPH) were not observed in any site well this quarter and have not been observed in any site well since August 29, 1990. Groundwater analytical data are presented in Tables 2 and 3. A TPPH-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 TPPH-g and benzene concentrations are generally within historical range. This quarter Wells 634 H, 642 H, 675 H, and 17371 VM were not sampled. Wells 634 H and 642 H were not sampled because the homeowners were not available to allow access.

Well 675 H was not sampled due to an inoperable pump. Well 17371 VM was not sampled as access was denied by the owner. TPPH-g and benzene were not detected in Wells 590 H, 17197 VM, 17203 VM, 17302 VM, 17348 VE, 17372 VM, and 17393 VM. TPPH-g was not detected in Well 633H; benzene was not detected in Well 17200 VM. TPPH-g was detected at 510 and 610 ppb in Wells 17200 VM and 17349 VM, respectively. Benzene was detected at 0.64 and 3.9 ppb in Wells 633 H and 17349 VM, respectively. Groundwater analytical data for domestic irrigation wells are presented in Tables 3 and 4.

REMEDIAL PERFORMANCE EVALUATION

Remedial action consisting of groundwater extraction (GWE) was initiated at the site on September 26, 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 TPPH-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 5 to August 21, 1995, are presented below.

Description

The GWE system is comprised of an extraction well (E-1A) containing an electric submersible pump, and three 1,200-pound granular activated carbon vessels to treat the

influent groundwater stream before it is discharged into the sanitary sewer. The carbon vessels are arranged in series, with valving to permit bed order rotation. This allows for the primary vessel to become the secondary vessel after the carbon has been renewed. The third vessel serves as a polishing vessel. Sample ports are located at the treatment system influent, effluent, the mid-point between the carbon vessels, and at each individual well head. Treatment system effluent is discharged into the sanitary sewer system in accordance with Permit No. 90-073-91, issued by the Oro Loma Sanitary District on April 4, 1991. The permit was recently renewed and will be effective through April 4, 1996.

Migration Control

Progress toward meeting the migration control objective is evaluated by comparison of the groundwater elevation contour map (Figure 1) and TPPH-g and benzene concentration map (Figure 2) from previous and current groundwater monitoring events. ~~The GWE system was not operational during the quarterly monitoring event, therefore the migration control objective could not be fully evaluated. However, TPPH-g and benzene concentrations in downgradient wells are consistent with historical concentrations.~~

Mass Reduction

Progress toward meeting the mass reduction objective is determined by evaluating GWE system mass removal data and the TPPH-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 TPPH-g mass removal values. During this quarter, GWE removed 0.2 pound (0.04 gallon) of TPPH-g and an undetectable amount of benzene from the impacted groundwater beneath the site. To date, GWE has removed approximately 4.9 pounds (0.8 gallon) of TPPH-g and 0.29 pound (0.04 gallon) of benzene from impacted groundwater beneath the site. Mass removal data for the GWE system are presented in Table 4. Treatment system certified analytical reports, chain-of-custody documentation, and field data sheets are presented as Attachment C. Cumulative progress toward site remediation is presented in the following table.

Analyte	Mass Removed			
	06/05/95 to 08/21/95 (lbs)	06/05/95 to 08/21/95 (gal)	Cumulative (lbs)	Cumulative (gal)
<u>Groundwater Extraction</u>				
TPPH-g	0.2	0.04	4.9	0.8
Benzene	<0.01	<0.01	0.29	0.04
lbs	= Pounds			
gal	= Gallons			
TPPH-g	= Total purgeable petroleum hydrocarbons calculated as gasoline			

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

Groundwater Extraction System Operational Data

The GWE system was 100 percent operational during the reporting period. The GWE system was deactivated on August 21, 1995, in preparation for the dissolved oxygen enhancement and monitoring program as discussed in the conclusions below. During the reporting period, the GWE system discharged treated groundwater at an average operational flow rate of approximately 1.5 gallons per minute (gpm) for a period discharge of 144,510 gallons. The instantaneous groundwater system flow rate ranged from 1.1 to 1.9 gpm. Calculations based on 8 percent loading isotherm by weight indicate the primary carbon vessel is approximately 6.1 percent loaded. Treatment system analytical data are presented in Table 5.

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

Conclusions

As indicated in PACIFIC's second quarter 1995 remedial system performance evaluation report, a dissolved oxygen (DO) enhancement and monitoring program was initiated at the site on September 21, 1995. The purpose of the program is to determine if DO can be significantly increased to enhance biodegradation of hydrocarbon in groundwater. This program was proposed in PACIFIC's RI/FS submitted to ACHCSA on June 28, 1995. The program calls for installing oxygen releasing compounds in Wells E-1A and MW-10. As approved by the ACHCSA, the GWE system was shut down on August 21, 1995, to allow natural transport of oxygen in groundwater. Please refer to the RI/FS report for more details about the program. Results of the program will be presented in PACIFIC's first quarter 1996 report. Baseline groundwater biodegradation study field and laboratory data is presented in Table 7.

SUMMARY OF WORK

Work Performed Third Quarter 1995

- Continued monitoring GWE system performance.
- Prepared and submitted second quarter 1995 groundwater monitoring and remedial system performance evaluation report.
- Initiated the DO enhancement and monitoring program.

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

Work Anticipated Fourth Quarter 1995

- Continue monitoring GWE system performance.
- Prepare and submit third quarter 1995 groundwater monitoring and remedial system performance evaluation report.
- Sample site groundwater monitoring and domestic irrigation wells for fourth quarter 1995 groundwater monitoring program.
- Prepare fourth quarter 1995 groundwater monitoring and remedial system performance evaluation report.
- Continue domestic irrigation well owner reimbursement program with owners who have discontinued well use.
- Continue DO enhancement and monitoring program.
- Include result of DO enhancement and monitoring program in fourth quarter 1995 groundwater monitoring report.

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

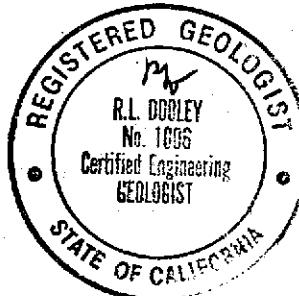
Sincerely,

Pacific Environmental Group, Inc.



Shaw Garakani
Project Engineer

R. Lee Dooley
Senior Geologist
CEG 1006



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- Attachments:
- Table 1 - Groundwater Elevation Data
 - Table 2 - Groundwater Analytical Data - Groundwater Monitoring Wells, Total Purgeable Petroleum Hydrocarbons (TPPH as Gasoline and BTEX Compounds)
 - Table 3 - Groundwater Analytical Data - Total Methyl t-Butyl Ether
 - Table 4 - Groundwater Analytical Data - Domestic Irrigation Wells Total Purgeable Petroleum Hydrocarbons (TPPH as Gasoline and BTEX Compounds)
 - Table 5 - Groundwater Extraction System Performance Data
 - Table 6 - Treatment System Analytical Data - Total Purgeable Petroleum Hydrocarbons (TPPH as Gasoline and BTEX Compounds)
 - Table 7 - Groundwater Biodegradation Study Field and Laboratory Data
 - Figure 1 - Groundwater Elevation Contour Map
 - Figure 2 - TPPH-g/Benzene Concentration Map
 - Figure 3 - Mass Removal Trend for the Groundwater Extraction System
 - Figure 4 - Concentration Trends for the Groundwater Extraction System
 - Attachment A - Field and Laboratory Procedures
 - Attachment B - Certified Analytical Reports, Chain-of-Custody Documentation, and Field Data Sheets
 - Attachment C - Treatment System Certified Analytical Reports and Chain-of-Custody Documentation

cc: Mr. Ron Sykora, David D. Bohannon Organization *Never Prop Owner?*
Ms. Amy Leech, Alameda County Health Care Services Agency
Mr. Kevin Graves, Regional Water Quality Control Board - S.F. Bay Region
Dr. Ravi Arulanthan, 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	Depth to Liquid	SPH Thickness	Liquid Surface Elevation
		(feet, MSL)	(feet, TOB)	(feet)	(feet, MSL)
MW-1	01/11/88	N/A	N/A	—	N/A
	06/14/88	—	Well Destroyed	—	—
MW-2	07/05/85	N/A	N/A	—	N/A
	01/11/88	N/A	N/A	—	N/A
	06/14/88	—	Well Destroyed	—	—
MW-3	01/11/88	33.27	N/A	—	N/A
	03/07/89	11.96	—	21.31	
	06/21/89	12.85	—	20.42	
	12/12/89	13.46	—	19.81	
	03/29/90	13.21	—	20.06	
	05/08/90	13.23	—	20.04	
	06/22/90	N/A	—	N/A	
	07/18/90	—	Well Destroyed	—	—
MW-4	01/11/88	32.43	N/A	—	N/A
	09/12/88	N/A	—	N/A	
	03/07/89	10.76	—	21.67	
	06/21/89	11.96	—	20.47	
	12/12/89	N/A	—	N/A	
	03/29/90	11.72	0.01	20.71	
	05/08/90	12.19	—	20.24	
	06/22/90	N/A	—	N/A	
MW-5	01/16/92	—	Well Dry	—	—
	02/19/92	33.99	13.50	—	20.49
	03/17/92	—	11.90	—	22.09
	04/15/92	—	12.18	—	21.81
	05/14/92	—	12.78	—	21.21
	06/15/92	—	Well Dry	—	—
	07/14/92	—	Well Dry	—	—
	08/18/92	—	Well Dry	—	—
	09/15/92	—	Well Dry	—	—
	10/16/92	—	Well Dry	—	—
	11/18/92	—	Well Dry	—	—
	12/17/92	—	12.74	—	21.25
	01/19/93	—	10.92	—	23.07
	02/22/93	—	11.10	—	22.89
	03/15/93	—	11.13	—	22.86
	04/09/93	—	11.46	—	22.53
	05/13/93	—	12.19	—	21.80
	06/04/93	—	12.51	—	21.48
	06/15/93	—	12.59	—	21.40
	09/13/93	—	13.40	—	20.59
	12/28/93	—	13.25	—	20.74
	03/28/94	—	12.22	—	21.77
	06/13/94	—	12.54	—	21.45

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-5 (cont.)	09/19/94		13.55	--	20.44
	12/19/94		12.43	--	21.56
	03/13/95		10.72	--	23.27
	05/30/95		11.88	--	22.11
	09/15/95		12.68	--	21.31
MW-6 (E-1)	06/21/89	32.95	12.48	--	20.47
	12/12/89		13.16	--	19.79
	03/29/90		12.39	--	20.56
	05/08/90		12.93	--	20.02
	06/22/90		12.94	--	20.01
	07/18/90		<u>Well Destroyed</u>		
MW-7	01/16/92	34.40	13.33	--	21.07
	02/19/92		12.16	--	N/A
	03/17/92		11.86	--	22.54
	04/15/92		12.30	--	22.10
	05/14/92		13.04	--	21.36
	06/15/92		13.78	--	20.62
	07/14/92		14.20	--	20.20
	08/18/92		14.79	--	19.61
	09/15/92		15.12	--	19.28
	10/16/92		15.38	--	19.02
	11/18/92		15.10	--	19.30
	12/17/92		13.69	--	20.71
	01/19/93		10.92	--	23.48
	02/22/93		10.91	--	23.49
	03/15/93		11.13	--	23.27
	04/09/93		11.46	--	22.94
	05/13/93		12.22	--	22.18
	06/04/93		12.51	--	21.89
	06/15/93		12.66	--	21.74
	09/13/93		13.78	--	20.62
	12/28/93		13.43	--	20.97
	03/28/94		12.32	--	22.08
	06/13/94		12.70	--	21.70
	09/19/94		14.16	--	20.24
	12/19/94		12.32	--	22.08
	03/13/95		10.72	--	23.68
	05/30/95		11.68	--	22.72
	09/15/95		12.77	--	21.63
MW-8	01/16/92	32.79	13.40	--	19.39
	02/19/92		11.26	--	21.53
	03/17/92		10.90	--	21.89
	04/15/92		11.35	--	21.44
	05/14/92		12.06	--	20.73
	06/15/92		12.83	--	19.96
	07/14/92		12.75	--	20.04

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-8	08/18/92		13.83	—	18.96
(cont.)	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
	12/19/94		11.22	—	21.57
	03/13/95		9.66	—	23.13
	05/30/95		10.87	—	21.92
	09/15/95		11.67	—	21.12
MW-9	01/16/92	32.11	12.45	—	19.66
	02/19/92		10.25	—	21.86
	03/17/92		10.01	—	22.10
	04/15/92		10.49	—	21.62
	05/14/92		11.19	—	20.92
	06/15/92		11.86	—	20.25
	07/14/92		12.28	—	19.83
	08/18/92		12.89	—	19.22
	09/15/92		13.28	—	18.83
	10/16/92		13.60	—	18.51
	11/18/92		13.24	—	18.87
	12/17/92		11.76	—	20.35
	01/19/93		8.99	—	23.12
	02/22/93		9.13	—	22.98
	03/15/93		9.48	—	22.63
	04/09/93		9.63	—	22.48
	05/13/93		10.35	—	21.76
	06/04/93		10.65	—	21.46
	06/15/93		10.81	—	21.30
	09/13/93		11.87	—	20.24
	12/28/93		11.61	—	20.50
	03/28/94		10.48	—	21.63
	06/13/94		10.80	—	21.31
	09/19/94		12.25	—	19.86
	12/19/94		10.40	—	21.71
	03/13/95		8.70	—	23.41

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-9	05/30/95		10.01	—	22.10
(cont.)	09/15/95		10.88	—	21.23
MW-10	01/16/92	31.67	12.55	—	19.12
	02/19/92		10.50	—	21.17
	03/18/92		10.12	—	21.55
	04/15/92		10.59	—	21.08
	05/14/92		11.30	—	20.37
	06/15/92		11.93	—	19.74
	07/14/92		12.42	—	19.25
	08/18/92		13.03	—	18.64
	09/15/92		13.42	—	18.25
	10/16/92		13.74	—	17.93
	11/18/92		13.42	—	18.25
	12/17/92		11.94	—	19.73
	01/19/93		9.13	—	22.54
	02/22/93		9.22	—	22.45
	03/15/93		9.64	—	22.03
	04/09/93		9.75	—	21.92
	05/13/93		10.49	—	21.18
	06/04/93		10.78	—	20.89
	06/15/93		10.93	—	20.74
	09/13/93		12.01	—	19.66
	12/28/93		11.41	—	20.26
	03/28/94		10.60	—	21.07
	06/13/94		10.95	—	20.72
	09/19/94		12.37	—	19.30
	12/19/94		10.64	—	21.03
	03/13/95		8.93	—	22.74
	05/30/95		10.18	—	21.49
	09/15/95		11.05	—	20.62
MW-11	01/16/92	32.54	13.28	—	19.26
	02/19/92		11.29	—	21.25
	03/17/92		10.81	—	21.73
	04/15/92		11.23	—	21.31
	05/14/92		11.96	—	20.58
	06/15/92		12.64	—	19.90
	07/14/92		13.08	—	19.46
	08/18/92		13.72	—	18.82
	09/15/92		14.13	—	18.41
	10/16/92		14.45	—	18.09
	11/18/92		14.11	—	18.43
	12/17/92		12.69	—	19.85
	01/19/93		9.91	—	22.63
	02/22/93		9.95	—	22.59
	03/15/93		10.30	—	22.24
	04/09/93		10.42	—	22.12
	05/13/93		11.16	—	21.38

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-11	06/04/93		11.44	--	21.10
(cont.)	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
	12/19/94		11.45	--	21.09
	03/13/95		9.70	--	22.84
	05/30/95		10.89	--	21.65
	09/15/95		11.71	--	20.83
E-1A	01/16/92	33.06	23.68	--	9.38
(MW-12)	02/19/92		18.71	--	14.35
	03/17/92		23.10	--	9.96
	04/15/92		20.54	--	12.52
	05/14/92		23.09	--	9.97
	06/15/92		23.72	--	9.34
	07/14/92		13.25	--	19.81
	08/18/92		23.73	--	9.33
	09/15/92		23.62	--	9.44
	10/16/92		23.78	--	9.28
	11/18/92		23.80	--	9.26
	12/17/92		22.65	--	10.41
	01/19/93		23.65	--	9.41
	02/22/93		23.70	--	9.36
	03/15/93		22.92	--	10.14
	04/09/93		22.50	--	10.56
	05/13/93		20.40	--	12.66
	06/04/93		18.74	--	14.32
	06/15/93		20.00	--	13.06
	09/13/93		19.50	--	13.56
	12/28/93		20.35	--	12.71
	03/28/94		18.13	--	14.93
	06/13/94		11.60	--	21.46
	09/19/94		19.61	--	13.45
	12/19/94		19.80	--	13.26
	03/13/95		21.75	--	11.31
	05/30/95		17.38	--	15.68
	09/15/95		11.83	--	21.23
MW-13	01/16/92	35.42	15.70	--	19.72
	02/19/92		13.60	--	21.82
	03/17/92		13.20	--	22.22
	04/15/92		13.64	--	21.78
	05/14/92		14.34	--	21.08
	06/15/92		15.13	--	20.29
	07/14/92		15.45	--	19.97
	08/18/92		16.15	--	19.27

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-13	09/15/92		16.51	—	18.91
(cont.)	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
	12/19/94		13.60	—	21.82
	03/13/95		12.06	—	23.36
	05/30/95		13.25	—	22.17
	09/15/95		14.04	—	21.38
MW-14	01/16/92	30.46	11.34	—	19.12
	02/19/92		9.32	—	21.14
	03/17/92		9.04	—	21.42
	06/15/92		10.83	—	19.63
	09/15/92		12.27	—	18.19
	12/17/92		10.69	—	19.77
	03/15/93		8.70	—	21.76
	06/15/93		9.90	—	20.56
	09/13/93		10.89	—	19.57
	12/28/93		10.24	—	20.22
	03/28/94		9.55	—	20.91
	06/13/94		9.92	—	20.54
	09/19/94		11.25	—	19.21
	12/19/94		9.52	—	20.94
	03/13/95		7.77	—	22.69
	05/30/95		9.18	—	21.28
	09/15/95		10.00	—	20.46
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

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-15	03/28/94		10.95	—	20.46
	09/19/94		12.68	—	18.73
	12/19/94		11.03	—	20.38
	03/13/95		9.32	—	22.09
	05/30/95		10.57	—	20.84
	09/15/95		11.44	—	19.97
MW-16	01/16/92	31.39	13.09	—	18.30
	02/19/92		10.99	—	20.40
	03/18/92		10.85	—	20.54
	06/15/92		12.64	—	18.75
	09/15/92		14.07	—	17.32
	12/17/92		12.56	—	18.83
	03/15/93		10.60	—	20.79
	06/15/93		11.86	—	19.53
	09/13/93		12.83	—	18.56
	12/28/93		12.14	—	19.25
	03/28/94		11.46	—	19.93
	06/13/94		11.87	—	19.52
	09/19/94		13.15	—	18.24
	12/19/94		11.36	—	20.03
	03/13/95		9.60	—	21.79
	05/30/95		11.17	—	20.22
	09/15/95		11.97	—	19.42
MW-17	01/16/92	32.43	13.92	—	18.51
	02/19/92		11.65	—	20.78
	03/18/92		11.71	—	20.72
	06/15/92		13.50	—	18.93
	09/15/92		14.95	—	17.48
	12/17/92		13.34	—	19.09
	03/15/93		11.47	—	20.96
	06/15/93		12.69	—	19.74
	09/13/93		13.66	—	18.77
	12/28/93		12.96	—	19.47
	03/28/94		12.33	—	20.10
	06/13/94		12.71	—	19.72
	09/19/94		14.00	—	18.43
	12/19/94		12.27	—	20.16
	03/13/95		10.64	—	21.79
	05/30/95		12.02	—	20.41
	09/15/95		12.83	—	19.60
MW-18	03/18/92	29.70	9.73	—	19.97
	06/15/92		11.50	—	18.20
	09/15/92		12.90	—	16.80
	12/17/92		11.21	—	18.49
	03/15/93		9.62	—	20.08
	06/15/93		10.85	—	18.85

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-18	09/13/93		11.75	—	17.95
(cont.)	12/28/93		11.06	—	18.64
	03/28/94		10.43	—	19.27
	06/13/94		10.80	—	18.90
	09/19/94		12.03	—	17.67
	12/19/94		10.30	—	19.40
	03/13/95		8.52	—	21.18
	05/30/95		10.21	—	19.49
	09/15/95		10.96	—	18.74
MW-19	03/18/92	29.02	9.22	—	19.80
	06/15/92		10.94	—	18.08
	09/15/92		12.38	—	16.64
	12/17/92		10.51	—	18.51
	03/15/93		9.23	—	19.79
	06/15/93		10.28	—	18.74
	09/13/93		11.16	—	17.86
	12/28/93		10.58	—	18.44
	03/28/94		9.92	—	19.10
	06/13/94		10.26	—	18.76
	09/19/94		11.45	—	17.57
	12/19/94		9.72	—	19.30
	03/13/95		8.04	—	20.98
	05/30/95		9.76	—	19.26
	09/15/95		10.40	—	18.62
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		<u>Well Destroyed</u>		
MW-21	03/18/92	28.72	9.55	—	19.17
	06/15/92		11.30	—	17.42
	09/15/92		12.78	—	15.94
	12/17/92		10.80	—	17.92
	03/15/93		9.59	—	19.13
	06/15/93		10.77	—	17.95
	09/13/93		11.63	—	17.09
	12/28/93		11.02	—	17.70
	03/28/94		10.30	—	18.42
	06/13/94		10.69	—	18.03
	09/19/94		11.89	—	16.83
	12/19/94		10.07	—	18.65
	03/13/95		8.34	—	20.38
	05/30/95		10.15	—	18.57
	09/15/95		10.88	—	17.84

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-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
	12/19/94		10.62	—	18.67
	03/13/95		8.78	—	20.51
MW-23	05/30/95		10.61	—	18.68
	09/15/95		11.40	—	17.89
	03/17/92	30.99	11.20	—	19.79
	06/15/92		12.94	—	18.05
	09/15/92		14.40	—	16.59
	12/17/92		13.01	—	17.98
	03/15/93		11.01	—	19.98
	06/15/93		12.26	—	18.73
	09/13/93		13.23	—	17.76
	12/28/93		12.57	—	18.42
	03/28/94		11.86	—	19.13
	06/13/94		12.26	—	18.73
	09/19/94		13.55	—	17.44
MW-24	12/19/94		11.81	—	19.18
	03/13/95		10.05	—	20.94
	05/30/95		11.67	—	19.32
	09/15/95		12.40	—	18.59
	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	12/19/94		13.05	—	21.33
	03/13/95		11.10	—	23.28
	05/30/95		12.62	—	21.76
	09/15/95		13.47	—	20.91
	04/09/93	34.12	11.18	—	22.94
	06/15/93		12.35	—	21.77
	09/13/93		13.45	—	20.67
MW-26	12/28/93		12.89	—	21.23
	03/28/94		12.02	—	22.10
	06/13/94		12.39	—	21.73

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)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-25 (cont.)	09/19/94		13.82	—	20.30
	12/19/94		12.00	—	22.12
	03/13/95		10.30	—	23.82
	05/30/95		11.58	—	22.54
	09/15/95		12.42	—	21.70
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
	12/19/94		12.39	—	21.32
	03/13/95		10.48	—	23.23
	05/30/95		11.93	—	21.78
	09/15/95		12.75	—	20.96
SPH	= Separate-phase hydrocarbons				
MSL	= Mean sea level				
TOB	= Top of box				
N/A	= Not available				
Well elevations are measured from set mark at top of vault box.					
For groundwater elevation data prior to January 1992, see previous groundwater monitoring reports.					

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

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

Well Number	Date Sampled	TPPH as Gasoline (ppb)			Ethyl-benzene (ppb)	Xylenes (ppb)
		Benzene (ppb)	Toluene (ppb)	benzene (ppb)	(ppb)	
MW-1	01/11/88	300	20	10	50	80
	06/14/88				Well Destroyed	
MW-2	07/05/85 a	32,000	1,000	690	N/A	1,500
	01/11/88	3,300	804	115	168	166
	06/14/88				Well Destroyed	
MW-3	01/11/88	1,800	20	20	80	60
	03/07/89	150,000	4,600	5,200	5,600	13,000
	06/21/89	63,000	2,700	5,800	3,300	12,000
	12/12/89			Well Dry		
	03/29/90 b	1,100,000	13,000	60,000	17,000	91,000
	06/22/90			Well Dry		
	07/18/90			Well Destroyed		
MW-4	01/11/88	62,000	2,700	7,900	850	5,200
	09/12/88			Separate-Phase Hydrocarbon Sheen		
	03/07/89	84,000	2,400	3,400	2,500	7,600
	06/21/89	31,000	400	800	200	1,500
	12/12/89			Well Dry		
	03/29/90			0.01 foot of Separate-Phase Hydrocarbon		
	06/22/90			Well Dry		
MW-5	01/11/88	31,000	4,000	2,700	3,800	5,500
	03/07/89	1,300	340	ND	140	50
	06/21/89	1,100	200	ND	130	40
	12/12/89			Well Dry		
	03/29/90			Well Dry		
	06/22/90			Well Dry		
	09/19/90			Well Dry		
	12/27/90			Well Dry		
	03/21/91			Well Dry		
	06/26/91			Well Dry		
	09/24/91			Well Dry		
	12/19/91			Well Dry		
	03/18/92	11,000	110	2	410	150
	06/15/92			Well Dry		
	09/16/92			Well Dry		
MW-6	12/22/92	960	220	6.5	4	2
	03/17/93	2,600	180	1.4	28	1.2
	06/17/93	2,500	450	7.5	55	<5
	09/17/93	1,400	230	<5.0	6.7	<5.0
	12/29/93	690	38	2.1	2.7	3.8
	03/30/94	1,400	30	<5	<5	<5
	06/14/94	1,700	42	<5	<5	<5
	09/20/94	500	18	<0.5	<0.5	0.52

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

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

Well Number	Date Sampled	TPPH as Gasoline (ppb)		Ethyl-benzene Xylenes (ppb)		
		Benzene (ppb)	Toluene (ppb)	(ppb)	(ppb)	(ppb)
MW-5	12/20/94	840	19	2.2	1.1	2.3
(cont.)	03/14/95	2,300	16	<5.0	8.6	<5.0
	06/01/95	750	13	<0.50	1.1	<0.50
	09/15/95	550	11	<1.0	<1.0	<1.0
MW-6	06/21/89	1,700	170	170	85	290
(E-1)	12/12/89	500	26	7	8	18
	03/29/90	130	14	9	4	11
	06/22/90	150	15	5	4	13
	07/18/90			Well Destroyed		
MW-7	04/13/90	<50	<0.3	<0.3	<0.3	<0.3
	06/22/90	<50	0.5	1	0.6	3
	09/19/90	<50	<0.3	<0.3	<0.3	<0.3
	12/27/90	69	<0.3	0.3	0.4	2
	03/21/91	<30	<0.3	<0.3	<0.3	<0.3
	06/26/91	<30	<0.3	<0.3	<0.3	<0.3
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/17/92	<30	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/14/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/14/95	<50	<0.50	<0.50	<0.50	<0.50
	06/01/95	<50	<0.50	<0.50	<0.50	<0.50
	09/15/95	<50	<0.50	<0.50	<0.50	<0.50
MW-8	04/13/90	4,900	350	16	450	33
	06/22/90	3,700	370	12	330	28
	09/19/90	140	4	3	3	3
	12/27/90	1,200	7	0.3	53	<0.3
	03/21/91	540	8.8	<6.0	21	9.6
	06/26/91	2,100	290	<6.0	56	<6.0
	09/24/91	260	51	0.34	7.9	<0.3
	12/19/91	5,300	300	<3.0	21	4.8
	03/17/92	9,200	370	3	48	4.9
	06/17/92	3,300	460	2.7	63	6.9
	09/16/92	1,500	58	<0.5	6.1	4.5
	12/22/92	3,600	410	56	62	4.4

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

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

Well Number	Date Sampled	TPPH as Gasoline (ppb)		Ethyl-benzene Xylenes (ppb)		
		Benzene (ppb)	Toluene (ppb)	(ppb)	(ppb)	(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
	12/20/94	1,800	120	<2.5	<2.5	<2.5
	03/14/95	840	17	<2.0	<2.0	<2.0
	06/01/95 c	810	5.2	<0.50	0.69	0.71
MW-9	09/15/95 c	850	30	<1.0	<1.0	<1.0
	04/13/90	<50	<0.3	<0.3	<0.3	2
	06/22/90	12,000	200	3	250	180
	09/19/90	<50	<0.3	<0.3	<0.3	0.6
	12/27/90	<50	<0.3	<0.3	<0.3	<0.3
	03/21/91	<30	<0.3	<0.3	<0.3	<0.3
	06/26/91	<30	<0.3	<0.3	<0.3	<0.3
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/16/92	<30	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92 c	75	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/14/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/14/95	<50	<0.50	<0.50	<0.50	<0.50
	06/01/95	<50	<0.50	<0.50	<0.50	<0.50
	09/15/95	<50	<0.50	<0.50	<0.50	<0.50
MW-10	04/13/90	10,000	150	4	280	200
	06/22/90	9,700	28	<0.3	131	210
	09/19/90	1,800	<0.3	4	0.8	10
	12/27/90	5,700	7	3	95	61
	03/21/91	6,900	22	<15	92	33
	06/26/91	9,300	51	<0.3	59	34
	09/24/91	360	8.6	5.2	14	6.2
	12/19/91	3,300	9.2	8.4	11	17
	03/18/92	4,700	14	<6.0	29	10
	06/16/92	4,800	0.46	0.34	7.4	3.8
	09/16/92	2,000	8.3	3	3.3	5.5

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

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

Well Number	Date Sampled	TPPH as Gasoline (ppb)		Ethylbenzene (ppb)			
		Benzene (ppb)	Toluene (ppb)	Xylenes (ppb)			
MW-10	12/22/92	c	2,700	6.2	<1.0	7.5	2.8
(cont.)	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	d	5,000	1,200	12	46	31
	03/29/94		4,700	470	<10	29	45
	06/14/94		3,700	370	<1.0	<1.0	<1.0
	09/20/94		2,600	79	<2.5	7.4	2.7
	12/20/94		3,000	150	<5.0	<5.0	<5.0
	03/13/95		2,500	18	<5.0	<5.0	<5.0
	06/01/95	c	1,100	<1.2	<1.2	<1.2	<1.2
	09/14/95	c	1,100	<2.0	<2.0	<2.0	<2.0
MW-11	04/13/90		<50	<0.3	<0.3	<0.3	<0.3
	06/22/90		63	0.4	0.9	0.7	3
	09/19/90		<50	<0.3	<0.3	<0.3	<0.3
	12/27/90		<50	<0.3	<0.3	<0.3	<0.3
	03/21/91		<30	<0.3	<0.3	<0.3	<0.3
	06/26/91		<30	<0.3	<0.3	<0.3	<0.3
	09/24/91		<30	<0.3	<0.3	<0.3	<0.3
	12/19/91		<30	<0.3	<0.3	<0.3	<0.3
	03/17/92		<30	<0.3	<0.3	<0.3	<0.3
	06/16/92		<30	<0.3	<0.3	<0.3	<0.3
	09/16/92		<50	<0.5	<0.5	<0.5	<0.5
	12/22/92		<50	<0.5	<0.5	<0.5	<0.5
	03/16/93		<50	<0.5	<0.5	<0.5	<0.5
	06/16/93		<50	<0.5	<0.5	<0.5	<0.5
	09/14/93		<50	<0.5	<0.5	<0.5	<0.5
	12/29/93		<50	<0.5	<0.5	<0.5	<0.5
	03/29/94		<50	<0.5	<0.5	<0.5	<0.5
	06/13/94		<50	<0.5	<0.5	<0.5	<0.5
	09/20/94		<50	<0.5	<0.5	<0.5	<0.5
	12/20/94		<50	<0.5	<0.5	<0.5	<0.5
	03/13/95		<50	<0.50	<0.50	<0.50	<0.50
	06/01/95		<50	<0.50	<0.50	<0.50	<0.50
	09/14/95		<50	<0.50	<0.50	<0.50	<0.50
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
	12/20/94		<50	2.4	<0.5	1.9	<0.5
	03/14/95		<50	<0.50	<0.50	<0.50	<0.50

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

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

Well Number	Date Sampled	TPPH as Gasoline (ppb)		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
E-1A	06/01/95	680		4.9	<0.50	18	2.4
(cont.)	09/15/95	73		3.3	<0.50	2.3	<0.50
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
	03/30/94	<50		<0.5	<0.5	<0.5	<0.5
	06/14/94	<50		<0.5	<0.5	<0.5	<0.5
	09/20/94	<50		<0.5	<0.5	<0.5	<0.5
	12/20/94	<50		<0.5	<0.5	<0.5	<0.5
	03/14/95 c	570		2.0	<0.50	3.9	7.9
	06/01/95	<50		<0.50	<0.50	<0.50	<0.50
	09/15/95	<50		<0.50	<0.50	<0.50	<0.50
MW-14	07/03/91	<30		<0.3	<0.3	<0.3	<0.3
	09/24/91	<30		<0.3	<0.3	<0.3	<0.3
	12/19/91	<30		<0.3	<0.3	<0.3	<0.3
	03/17/92	<30		<0.3	<0.3	<0.3	<0.3
	06/16/92	<30		<0.3	<0.3	<0.3	<0.3
	09/16/92	<50		<0.5	<0.5	<0.5	<0.5
	12/22/92	<50		<0.5	<0.5	<0.5	<0.5
	03/16/93	<50		<0.5	<0.5	<0.5	<0.5
	06/15/93	<50		<0.5	<0.5	<0.5	<0.5
	09/15/93	<50		<0.5	<0.5	<0.5	<0.5
	12/28/93	<50		<0.5	<0.5	<0.5	<0.5
	03/29/94	<50		<0.5	<0.5	<0.5	<0.5
	06/13/94	<50		<0.5	<0.5	<0.5	<0.5
	09/20/94	<50		<0.5	<0.5	<0.5	<0.5
	12/20/94	<50		<0.5	<0.5	<0.5	<0.5
	03/13/95	<50		<0.50	<0.50	<0.50	<0.50
	06/01/95	<50		<0.50	<0.50	<0.50	<0.50
	09/14/95	<50		<0.50	<0.50	<0.50	<0.50
MW-15	07/03/91	570		1.8	1	1	2.2
	09/24/91	<30		<0.3	<0.3	<0.3	<0.3
	12/19/91	360		<0.6	<0.6	0.64	<0.6
	03/18/92	730		0.74	0.98	1.8	0.68
	06/16/92	310		0.54	0.34	0.96	2.5
	09/16/92	100		1	<0.5	<0.5	<0.5

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

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

Well Number	Date Sampled	TPPH as			Ethyl-	
		Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	benzene (ppb)	Xylenes (ppb)
MW-15	12/22/92	130 c	<0.5	<0.5	<0.5	<0.5
(cont.)	03/18/93	130 c	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5
	09/17/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	52	<0.5	<0.5	<0.5	1.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	05/31/95	<50	<0.50	<0.50	<0.50	<0.50
	09/14/95	<50	<0.50	<0.50	<0.50	<0.50
MW-16	07/03/91	2,700	31	6.9	4.6	3.1
	09/24/91	430	1.8	1.3	1.9	1.5
	12/19/91	75	<0.3	<0.3	<0.3	<0.3
	03/18/92	1,500	4	0.73	2.2	1.3
	06/16/92	80	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/22/92	<50	<0.5	<0.5	<0.5	<0.5
	03/18/93	380 c	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5
	09/17/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	0.72	<0.5
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	52	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	05/31/95 c	52	<0.50	<0.50	<0.50	<0.50
	09/14/95	<50	<0.50	<0.50	<0.50	<0.50
MW-17	07/03/91	1,200	12	1.9	28	40
	09/24/91	150	2.7	0.5	3.9	0.59
	12/19/91	370	2.6	<0.3	7.2	6.5
	03/18/92	470	3.1	<0.3	9.1	8.6
	06/16/92	310	1.7	0.56	12	9.6
	09/16/92	77	1.5	<0.5	1.2	1
	12/21/92	220	1.2	<0.5	9.8	9.4
	03/17/93	250	<0.5	<0.5	7.8	3.3
	06/17/93	90	0.92	<0.5	2.7	2.4
	09/16/93	140	<0.5	<0.5	5.4	3.9
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	62	<0.5	<0.5	1.2	<0.90
	09/19/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	77	<0.5	<0.5	1.6	0.67

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

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

Well Number	Date Sampled	TPPH as Gasoline (ppb)		Ethyl-benzene Xylenes (ppb)		
		Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	
MW-17	03/13/95	110	<0.50	<0.50	2.9	1.2
	(cont.) 05/30/95	93	1.0	<0.50	1.2	<0.50
	09/14/95	63	<0.50	<0.50	1.1	0.51
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
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	05/30/95	<50	<0.50	<0.50	<0.50	<0.50
	09/14/95	<50	<0.50	<0.50	<0.50	<0.50
MW-19	10/04/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/18/92	<30	<0.3	<0.3	<0.3	<0.3
	06/15/92	<30	<0.3	<0.3	<0.3	<0.3
	09/15/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	09/16/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	<0.5	<0.5
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/19/94	<50	<0.5	<0.5	<0.5	<0.5
	12/19/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	05/30/95	<50	<0.50	<0.50	<0.50	<0.50
	09/14/95	<50	<0.50	<0.50	<0.50	<0.50
MW-20	10/04/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/18/92	<30	<0.3	<0.3	<0.3	<0.3
	06/15/92	<30	<0.3	<0.3	<0.3	<0.3
	09/15/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5

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

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

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

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

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

Well Number	Date Sampled	TPPH as		Ethyl-		
		Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	benzene (ppb)	Xylenes (ppb)
MW-23	09/15/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	<0.5	<0.5
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/19/94	<50	<0.5	<0.5	<0.5	<0.5
	12/19/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	05/30/95	<50	<0.50	<0.50	<0.50	<0.50
	09/14/95	<50	<0.50	<0.50	<0.50	<0.50
MW-24	03/29/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	06/01/95	<50	<0.50	<0.50	<0.50	<0.50
MW-25	03/29/93	<50	0.69	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/14/95	<50	<0.50	<0.50	<0.50	<0.50
	06/01/95	<50	<0.50	<0.50	<0.50	<0.50
	09/15/95	140	<0.50	<0.50	1.9	3.6
MW-26	03/29/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50

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

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

Well Number	Date Sampled	TPPH as Gasoline			Ethyl-	
		(ppb)	Benzene (ppb)	Toluene (ppb)	benzene (ppb)	Xylenes (ppb)
MW-26	06/01/95	<50	<0.50	<0.50	<0.50	<0.50
(cont.)	09/15/95	<50	<0.50	<0.50	<0.50	<0.50

TPPH = Total purgeable petroleum hydrocarbons
 ppb = Parts per billion
 N/A = Not available
 ND = Not detected
 a. Ethylbenzene and xylenes given as a combined value.
 b. Well contained slight product sheen.
 c. Non-typical gasoline chromatograph pattern.
 d. Anomalous data point.
 < = Denotes minimum laboratory detection limit. See certified analytical report for detection limits.
 * = Value taken from system influent sampling.
 Wells MW-1 and MW-2 destroyed prior to March 7, 1989 sampling event.
 Wells MW-3, MW-4, and MW-6 (E-1) destroyed June 18, 1990.
 Prior to June 1995, TPPH as gasoline was reported as TPH as gasoline.

Table 3
Groundwater Analytical Data
Total Methyl t-Butyl Ether

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

Groundwater Monitoring Wells

Well Number	Date Sampled	Methyl t-Butyl Ether (ppb)
MW-5	09/15/95	660
MW-7	09/15/95	<2.5
MW-8	09/15/95	110
MW-9	09/15/95	<2.5
MW-10	09/14/95	630
MW-11	09/14/95	<2.5
E-1A (MW-12)	09/15/95	220
MW-13	09/15/95	<2.5
MW-14	09/14/95	<2.5
MW-15	09/14/95	9.4
MW-16	09/14/95	17
MW-17	09/14/95	<2.5
MW-18	09/14/95	<2.5
MW-19	09/14/95	<2.5
MW-21	09/14/95	<2.5
MW-22	09/14/95	<2.5
MW-23	09/14/95	<2.5
MW-24	09/15/95	<2.5
MW-25	09/15/95	<2.5
MW-26	09/15/95	<2.5

Domestic Irrigation Wells

Well Number	Date Sampled	Methyl t-Butyl Ether (ppb)
590 H	09/15/95	<2.5
633 H	09/14/95	<2.5
634 H	09/14/95	NS
642 H	09/14/95	NS
675 H	09/14/95	NS
17348 VE	09/14/95	<2.5
17197 VM	09/14/95	<2.5
17200 VM	09/14/95	4.8
17203 VM	09/14/95	<2.5
17302 VM	09/14/95	<2.5
17349 VM	09/15/95	32
17371 VM	09/15/95	NS
17372 VM	09/14/95	<2.5
17393 VM	09/15/95	<2.5

Table 4
Groundwater Analytical Data
Domestic Irrigation Wells
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

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

Well Address	Date Sampled	TPPH as			Ethyl-	
		Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	benzene (ppb)	Xylenes (ppb)
590 H	11/13/91	<30	<0.3	<0.3	<0.3	<0.3
	10/14/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5
	09/16/93	<50	<0.5	<0.5	<0.5	<0.5
	12/30/93 a	NS	NS	NS	NS	NS
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/16/94	<50	<0.5	<0.5	<0.5	<0.5
	09/21/94	<50	<0.5	<0.5	<0.5	<0.5
	12/21/94	<50	<0.5	<0.5	<0.5	<0.5
	03/15/95	<50	<0.50	<0.50	<0.50	<0.50
	05/26/95	<50	<0.50	<0.50	<0.50	<0.50
	09/15/95	<50	<0.50	13	<0.50	<0.50
633 H	09/11/91 b,d	NS	NS	NS	NS	NS
	10/14/92 a	NS	NS	NS	NS	NS
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5
	09/15/93 b,d	NS	NS	NS	NS	NS
	12/30/93 b,d	NS	NS	NS	NS	NS
	03/29/94 b,d	NS	NS	NS	NS	NS
	06/15/94 b,d	NS	NS	NS	NS	NS
	09/21/94 b,d	NS	NS	NS	NS	NS
	10/07/94	<50	<0.5	<0.5	<0.5	<0.5
	12/21/94	<50	<0.5	<0.5	<0.5	<0.5
	03/15/95	250	5.1	9.8	0.65	46
	03/15/95 e	<50	<0.50	<0.50	<0.50	<0.50
634 H	05/31/95	<50	0.93	2.4	<0.50	14
	09/14/95	<50	0.64	1.2	<0.50	7.6
	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

Table 4 (continued)
Groundwater Analytical Data
Domestic Irrigation Wells
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

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

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

Table 4 (continued)
Groundwater Analytical Data
Domestic Irrigation Wells
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

ARCO Service Station 0606
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Address	Date Sampled	TPPH as			Ethyl-	
		Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	benzene (ppb)	Xylenes (ppb)
17200 VM (cont.)	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
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/15/95	<50	<0.50	<0.50	<0.50	<0.50
17203 VM	05/30/95	<50	<0.50	<0.50	<0.50	<0.50
	09/14/95	510	<0.50	<0.50	3.1	3.4
	11/13/91	<30	<0.3	<0.3	<0.3	<0.3
	10/16/92 a	NS	NS	NS	NS	NS
	12/21/92	<50	<0.5	<0.5	<0.5	1.3
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5
	09/16/93	<50	<0.5	<0.5	<0.5	<0.5
	12/30/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
17302 VM	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
	09/21/94 a	NS	NS	NS	NS	NS
	12/21/94	<50	<0.5	<0.5	<0.5	<0.5
	03/15/95	<50	<0.50	<0.50	<0.50	<0.50
	05/31/95	<50	<0.50	<0.50	<0.50	<0.50
	09/14/95	<50	<0.50	<0.50	<0.50	<0.50
	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
17348 VE	06/17/93 b,d	NS	NS	NS	NS	NS
	09/16/93	66	<0.5	<0.5	<0.5	<0.5
	12/30/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
	09/21/94 a	NS	NS	NS	NS	NS
	12/21/94	<50	<0.5	<0.5	<0.5	<0.5
	03/15/95	<50	<0.50	<0.50	<0.50	<0.50
	09/14/95	<50	<0.50	<0.50	<0.50	<0.50

Table 4 (continued)
Groundwater Analytical Data
Domestic Irrigation Wells
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

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

Well Address	Date Sampled	TPPH as			Ethyl-	
		Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	benzene (ppb)	Xylenes (ppb)
17348 VE (cont.)	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	09/15/93	<50	<0.5	<0.5	<0.5	<0.5
	12/30/93 b,d	NS	NS	NS	NS	NS
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
	09/21/94 a	NS	NS	NS	NS	NS
	12/21/94	<50	<0.5	<0.5	<0.5	<0.5
	03/15/95	<50	<0.50	<0.50	<0.50	<0.50
	05/30/95	<50	<0.50	<0.50	<0.50	<0.50
	09/14/95	<50	<0.50	<0.50	<0.50	<0.50
17349 VM	09/27/91	780	13	<3.0	<3.0	<3.0
	10/14/92	2,200	<50	<50	<50	110
	12/18/92	1,500	14	1.8	7.1	56
	03/16/93	1,100	16	4.2	1.8	1.8
	06/17/93	1,100	1.5	6.7	2.9	7.9
	09/16/93	1,200	13	21	3	10
	12/30/93 a	NS	NS	NS	NS	NS
	03/30/94	420	<1	<1	<1	5.3
	06/15/94	460	<0.5	<0.5	<0.5	1.8
	09/21/94	590	1.8	<0.5	1.1	7.6
	12/21/94	670	<0.5	<0.5	<0.5	1.8
	03/15/95	1,400	19	<5.0	7.9	48
	05/31/95	890	<2.0	<2.0	4.3	22
	09/15/95	610	3.9	<0.50	<0.50	<0.50
17371 VM	11/13/91	870	9	1	2.1	4.5
	10/14/92	<50	<0.5	<0.5	<0.5	<0.5
	12/18/92	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	500	8.7	<0.5	3.9	3.1
	06/17/93 c	NS	NS	NS	NS	NS
	09/16/93 c	NS	NS	NS	NS	NS
	12/30/93 c	NS	NS	NS	NS	NS
	03/30/94 c	NS	NS	NS	NS	NS
	06/15/94 c	NS	NS	NS	NS	NS
	09/21/94 c	NS	NS	NS	NS	NS
	12/21/94 c	NS	NS	NS	NS	NS
	03/15/95 c	NS	NS	NS	NS	NS
	05/31/95 c	NS	NS	NS	NS	NS
17372 VM	09/27/91	300	5.5	<0.60	1.3	0.72
	10/14/92	220	<1.0	<1.0	<1.0	<1.0
	12/18/92	290	3.8	0.88	0.99	1.2
	03/16/93 *	110	<0.5	<0.5	<0.5	<0.5
	06/17/93	140	<0.5	1.3	0.63	1.1
	09/15/93	120	<0.5	1.1	0.62	1.2

Table 4 (continued)
Groundwater Analytical Data
Domestic Irrigation Wells
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

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

Well Address	Date Sampled	TPPH as			Ethyl-benzene Xylenes	
		Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	(ppb)	(ppb)
17372 VM (cont.)	12/30/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	110	<0.5	<0.5	<0.5	<0.5
	09/21/94	55	<0.5	<0.5	<0.5	<0.5
	12/21/94	<50	<0.5	<0.5	<0.5	<0.5
	03/15/95	<50	<0.50	<0.50	<0.50	<0.50
	05/31/95	60	<0.50	<0.50	<0.50	<0.50
	09/14/95	<50	<0.50	<0.50	<0.50	<0.50
17393 VM	11/13/91	31	<0.3	<0.3	<0.3	<0.3
	10/14/92 a	NS	NS	NS	NS	NS
	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
	12/21/94	<50	<0.5	<0.5	<0.5	<0.5
	03/15/95	<50	<0.50	<0.50	<0.50	<0.50
	05/31/95	<50	<0.50	<0.50	<0.50	<0.50
	09/15/95	<50	<0.50	<0.50	<0.50	<0.50
TPPH = Total purgeable petroleum hydrocarbons ppb = Parts per billion H = Hacienda Avenue < = Denotes laboratory detection limit NS = Not sampled VM = Via Magdalena * = Non-typical chromatogram pattern; did not sample. VE = Via Encinas a. Owner not available to approve sampling access; well not sampled. b. Pump not functioning; well not sampled. c. Access denied by owner; well not sampled. d. Pumping equipment obstructing sampling access; well not sampled. e. Laboratory analyzed duplicate sample for confirmation. See certified analytical report. Homeowners are contacted one week prior to sampling event. Prior to June 1995, TPPH as gasoline was reported as TPH as gasoline.						

Table 5
Groundwater Extraction System Performance Data

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

Influent Sample Date	Hour Meter Reading (hours)	System			TPPH as Gasoline			Benzene			Primary Carbon Loading (%)
		Down Time (%)	Volume Reading (gallons)	Net Volume (gallons)	Average Flow (gpm)	Influent Concentration (µg/L)	Net Removed (pounds)	Removed To Date (pounds)	Influent Concentration (µg/L)	Net Removed (pounds)	
09/25/91	0	N/A	0	0	0.0	ND	N/A	0.0	N/A	0.00	0.00
09/26/91	N/A	N/A	1,144	1,144	N/A	36	0.0	0.0	4.8	0.00	0.00
10/22/91	26	96	12,844	11,700	7.6	ND	N/A	0.0	ND	0.00	0.00
11/22/91	77	93	52,532	39,688	13.0	ND	N/A	0.0	0.52	0.00	0.00
12/19/91	322	62	122,540	70,008	4.8	ND	N/A	0.0	ND	0.00	0.00
01/16/92	994	0	283,289	160,749	4.0	ND	N/A	0.0	ND	0.00	0.00
02/19/92	1,809	0	485,200	201,911	4.1	370	0.3	0.3	14	0.01	0.01
03/17/92	2,462	0	662,847	177,647	4.5	160	0.4	0.7	18	0.02	0.04
04/15/92	3,150	1	851,100	188,253	4.6	200	0.3	1.0	11	0.02	0.06
05/14/92	3,849	0	1,030,086	178,986	4.3	45	0.2	1.2	1.4	0.01	0.07
06/19/92	4,712	0	1,229,960	199,874	3.9	ND	N/A	1.2	ND	0.00	0.07
07/14/92	5,091	52	1,291,201	61,241	3.5	97	0.0	1.2	25.0	0.01	0.08
08/18/92	N/A	N/A	1,410,018	118,817	N/A	ND	N/A	1.2	ND	0.01	0.09
09/15/92	6,298	N/A	1,535,640	125,622	3.1	ND	N/A	1.2	ND	0.00	0.09
10/16/92	7,012	4	1,651,623	115,983	2.7	ND	N/A	1.2	ND	0.00	0.09
11/18/92	7,809	0	1,768,076	116,453	2.4	ND	N/A	1.2	ND	0.00	0.09
12/17/92	8,502	0	1,864,300	96,224	2.3	96	0.0	1.2	7.7	0.00	0.09
01/18/93	8,798	61	1,915,165	50,565	2.9	100	0.0	1.3	13	0.00	0.10
02/22/93	9,607	0	2,096,930	181,765	3.7	480	0.4	1.7	36	0.04	0.13
03/15/93	10,113	0	2,205,833	108,903	3.6	310	0.4	2.1	29	0.03	0.16
04/09/93	10,517	33	2,298,770	92,937	3.8	140	0.2	2.2	11	0.02	0.18
05/13/93	11,211	15	2,449,160	150,390	3.6	530	0.4	2.7	27	0.02	0.20
06/04/93	11,734	1	2,543,500	94,340	3.0	170	0.3	2.9	5.2	0.01	0.21
07/20/93	12,573	24	2,689,697	146,197	2.9	200	0.2	3.2	12	0.01	0.22
08/16/93	13,219	0	2,791,366	101,669	2.6	150	0.1	3.3	4.9	0.01	0.23
09/13/93	13,888	0	2,864,736	93,370	2.3	80	0.1	3.4	22	0.00	0.23
10/08/93	14,485	1	2,951,737	67,001	1.9	ND	0.0	3.4	ND	0.00	0.24
11/19/93	15,494	0	3,036,032	64,295	1.4	ND	0.0	3.4	ND	0.00	0.24
12/21/93	16,260	0	3,113,565	77,533	1.7	73	0.0	3.5	3.5	0.00	0.24
01/18/94	16,939	0	3,190,900	77,335	1.9	60	0.0	3.5	3.1	0.00	0.24
02/17/94	17,658	0	3,273,720	82,820	1.9	ND	0.0	3.5	2.5	0.00	0.24
03/15/94	18,235	7	3,344,249	70,529	2.0	ND	0.0	3.5	ND	0.00	0.24
04/21/94	18,849	31	3,418,537	74,268	2.0	110	0.0	3.5	7.8	0.00	0.24
05/13/94	19,351	5	3,476,919	60,373	2.0	230	0.1	3.6	8.3	0.00	0.25
06/14/94	19,680	57	3,518,608 a	39,698	2.0	230	0.1	3.7	12	0.00	0.25
07/14/94	20,145	35	3,574,408 b	55,800	2.0	270	0.1	3.8	8.9	0.00	0.26
08/17/94	20,920	5	51,260 c	91,580 c	2.0	ND	0.1	3.9	1.8	0.00	0.26
09/12/94	21,549	0	120,910	69,650	1.8	ND	0.0	3.9	ND	0.00	0.26
10/18/94	22,408	1	211,880	90,970	1.8	ND	0.0	3.9	ND	0.00	0.26
11/15/94	23,080	0	280,840	68,960	1.7	ND	0.0	3.9	0.66	0.00	0.26
12/05/94	23,489	15	325,830	44,990	1.8	470	0.1	4.0	32	0.01	0.27
01/04/95	24,205	1	408,740	62,910	1.9	ND	0.2	4.2	1.1	0.01	0.26
02/06/95	24,926	9	499,690	90,950	2.1	100	0.0	4.2	2.4	0.00	0.28
03/02/95	25,465	6	569,160	69,490	2.1	ND	0.0	4.2	ND	0.00	0.28
											5.3

Table 5 (continued)
Groundwater Extraction System Performance Data

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

Influent Sample Date	Hour Meter Reading (hours)	System			TPPH as Gasoline			Benzene			Primary Carbon Loading (%)
		Down Time (%)	Volume Reading (gallons)	Net Volume (gallons)	Average Flow (gpm)	Influent Concentration ($\mu\text{g/L}$)	Net Removed (pounds)	Removed To Date (pounds)	Influent Concentration ($\mu\text{g/L}$)	Net Removed (pounds)	
04/04/95	26,253	1	672,510	103,330	2.2	290	0.1	4.3	6.6	0.00	0.28
05/02/95	26,924	0	760,350	87,840	2.2	240	0.2	4.5	7.1	0.01	0.29
06/05/95	27,721	2	848,810	88,460	1.9	ND	0.1	4.6	ND	0.00	0.29
07/06/95	26,464	0	921,260	72,450	1.6	270	0.1	4.7	2.4	0.00	0.29
08/21/95 d	29,568	0	993,320	72,060	1.1	230	0.2	4.9	1.8	0.00	0.29
REPORTING PERIOD: 06/05/95 - 08/30/95 (d)											
TOTAL GALLONS EXTRACTED:						4,608,048					
PERIOD GALLONS EXTRACTED:						144,510					
TOTAL POUNDS REMOVED:							4.9				0.29
TOTAL GALLONS REMOVED:							0.8				0.04
PERIOD POUNDS REMOVED:							0.2				0.00
PERIOD GALLONS REMOVED:							0.04				0.00
AVERAGE PERIOD FLOW RATE (gpm):											1.5
AVERAGE PERCENT DOWNTIME SINCE START-UP:											13.6%
PERIOD PERCENT OPERATIONAL:											100%
TPPH	= Total purgeable petroleum hydrocarbons					a. Totalizer broken; volume estimated from hourmeter and flow rate.					
gpm	= Gallons per minute					b. Volume estimated from hourmeter and instantaneous flow rate.					
$\mu\text{g/L}$	= Micrograms per liter					c. Sewer totalizer replaced July 28, 1994; volume discharged estimated between July 14 and 28, 1994 at 2.0 gpm.					
N/A	= Not available or not applicable					d. GWE system temporarily shut down August 21, 1995.					
ND	= Not detected above detection limit					Primary carbon loading estimated using isotherm of 8 percent by weight.					
Densities: Gasoline = 6.1 lbs/gallon; Benzene = 7.34 lbs/gallon.											
Equations: Net Dissolved TPH-g Removed (pounds) = TPH-g concentration ($\mu\text{g/L}$) x net volume (gallon) x density of gasoline (pound/gallon). (Net dissolved TPH-g removed is calculated by averaging influent concentrations.)											

Table 6
Treatment System Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

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

Date Sampled	TPPH as Gasoline ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethyl-benzene ($\mu\text{g/L}$)	Xylenes ($\mu\text{g/L}$)
INFL (influent to primary carbon)					
09/26/91	38	4.8	0.6	1.6	1.1
10/22/91	<30	<0.3	<0.3	<0.3	<0.3
11/22/91	<30	0.5	<0.3	<0.3	<0.3
12/19/91	<30	<0.3	<0.3	<0.3	<0.3
01/16/91	<30	<0.3	<0.3	<0.3	<0.3
02/19/92	370	14	0.34	1.4	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	98	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	0.6	<1.0
05/13/94	230	8.3	<0.5	14	6.0
06/14/94	230	12	<0.5	16	15
07/14/94	270	6.9	<0.5	15	1.9
08/18/94	<50	1.8	<0.5	1.5	<0.5
09/12/94	<50	<0.5	<0.5	<0.5	<0.5
10/15/94	<50	<0.5	<0.5	<0.5	<0.5
11/05/94	<50	0.66	<0.5	2.6	<0.5
12/05/94	170	32	0.59	29	6.2
01/04/95	<50	1.1	<0.50	1.4	<0.50
02/06/95	160	2.4	1.1	1.2	2.5
03/02/95	<50	<0.50	<0.50	<0.50	<0.50
04/04/95	290	5.8	<0.50	19	1.7
05/02/95	240	7.1	<0.50	3.2	1.6
06/05/95	<50	<0.50	<0.50	<0.50	<0.50
07/06/95	270	2.4	<0.50	7.6	1.0
08/21/95	230	1.8	<0.50	1.6	0.9

Table 6 (continued)
Treatment System Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

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

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

Table 6 (continued)
Treatment System Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

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

Date Sampled	TPPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
EFFL (effluent to sewer) (cont.)					
01/18/93	<50	<0.5	<0.5	<0.5	<0.5
02/22/93	<50	<0.5	<0.5	<0.5	<0.5
03/15/93	<50	<0.5	<0.5	<0.5	<0.5
04/09/93	<50	<0.5	<0.5	<0.5	<0.5
05/13/93	<50	<0.5	<0.5	<0.5	<0.5
06/04/93	<50	<0.5	<0.5	<0.5	<0.5
07/20/93	<50	<0.5	<0.5	<0.5	<0.5
08/16/93	<50	<0.5	<0.5	<0.5	<0.5
09/13/93	<50	<0.5	<0.5	<0.5	<0.5
10/08/93	<50	<0.5	<0.5	<0.5	<0.5
11/19/93	<50	<0.5	<0.5	<0.5	<0.5
12/21/93	<50	<0.5	<0.5	<0.5	<0.5
01/18/94	<50	<0.5	<0.5	<0.5	<0.5
02/17/94	<50	<0.5	<0.5	<0.5	<0.5
03/15/94	<50	<0.5	<0.5	<0.5	<0.5
04/21/94	<50	<0.5	<0.5	<0.5	<0.5
05/13/94	<50	<0.5	<0.5	<0.5	<0.5
06/14/94	<50	<0.5	<0.5	<0.5	<0.5
07/14/94	<50	<0.5	<0.5	<0.5	<0.5
08/17/94	<50	<0.5	<0.5	<0.5	<0.5
09/12/94	<50	<0.5	<0.5	<0.5	<0.5
10/18/94	<50	<0.5	<0.5	<0.5	<0.5
11/05/94	<50	<0.5	<0.5	<0.5	<0.5
12/05/94	<50	<0.5	<0.5	<0.5	<0.5
01/04/95	<50	<0.50	<0.50	<0.50	<0.50
02/06/95	<50	<0.50	<0.50	<0.50	<0.50
03/02/95	<50	<0.50	<0.50	<0.50	<0.50
04/04/95	<50	<0.50	<0.50	<0.50	<0.50
05/02/95	<50	<0.50	<0.50	<0.50	<0.50
06/05/95	<50	<0.50	<0.50	<0.50	<0.50
07/06/95	<50	<0.50	<0.50	<0.50	<0.50
08/21/95	<50	<0.50	<0.50	<0.50	<0.50
TPPH = Total purgeable petroleum hydrocarbons					
ppb = Parts per billion					
< = Denotes minimum laboratory detection limit.					
NS = Not sampled					
ND = Not detected					
Prior to June 1995, TPPH as gasoline was reported as TPH as gasoline.					

Table 7
Groundwater Biodegradation Study Field and Laboratory Data

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

Well	Sample Date	Field Analyses										Laboratory Analyses			
		Color	Odor	pH (units)	Electrical Conductivity (millimhos)	Oxidation Reduction Potential (millivolts)	Temperature (degrees C)	Turbidity (NTU)	Hydrogen Sulfide (mg/L)	Dissolved Oxygen (mg/L)	Ferrous Iron (mg/L)	Nitrate as Nitrate (mg/L)	Sulfate (mg/L)	TPPH as Gasoline (µg/L)	Benzene (µg/L)
	Background Range (Approximate)	NA	NA	6.5 to 8.0	<1,000	-400 to +200	10.0 to 20.0	<250	~0	>1.0	>0	>1.0	>5.0	<50	<0.50
	Approximate Range Indicating Biodegradation	NA	NA	6.5 to 8.0	<1,000	-400 to +200	10.0 to 20.0	<250	~0	<1.0	~0	<1.0	<5.0	>50	>0.50
590 H	05/26/95	Clear	None	7.37	2,360	-95	20.5	9.51	0.0	6.0	0.0	38	70	<50	<0.50
	09/15/95	Clear	Heavy	7.10	1,060	NM	19.4	100 a	NM	NM	NM	NS	NS	<50	<0.50
633 H	05/31/95	Clear	None	7.09	1,295	-72	18.9	17.85	0.0	1.0	0.2	38	61	<50	0.93
	09/12/95	Clear	None	7.41	861	NM	20.0	100 a	NM	1.0/2.0	NM	NS	NS	<50	0.64
634 H	05/31/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	09/12/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
642 H	05/31/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	09/12/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
675 H	05/31/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	09/12/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
17197 VM	05/31/95	Clear	None	7.37	1,333	-149	19.0	7.44	0.0	2.0	0.8	22	45	<50	<0.50
	09/14/95	Clear	None	7.48	850	NM	18.2	100 a	NM	8.0/10	NM	NS	NS	<50	<0.50
17200 VM	05/30/95	Brown	None	7.49	1,365	-185	19.8	30.40	0.0	1.0	0.18	31	67	<50	<0.50
	09/14/95	Clear	Faint	7.21	951	NM	21.1	100 a	NM	1.0/1.0	NM	NS	NS	510	<0.50
17203 VM	05/31/95	Brown	None	7.21	1,236	-168	18.3	35.10	0.0	1.0	0.1	26	48	<50	<0.50
	09/14/95	Clear	None	7.36	920	NM	20.0	100 a	NM	2.0/2.0	NM	NS	NS	<50	<0.50

Table 7 (continued)
Groundwater Biodegradation Study Field and Laboratory Data

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

Well	Sample Date	Field Analyses										Laboratory Analyses				
		Color	Odor	pH (units)	Electrical Conductivity (millimhos)	Oxidation Reduction		Temperature (degrees C)	Turbidity (NTU)	Hydrogen Sulfide (mg/L)	Dissolved Oxygen (mg/L)	Ferrous Iron (mg/L)	Nitrate as Nitrate (mg/L)	Sulfate (mg/L)	TPPH as Gasoline (μ g/L)	Benzene (μ g/L)
						Potential (millivolts)										
17302 VM	05/31/95	Clear	None	7.41	1,193	-159		18.6	8.83	0.0	2.0	0.1	9	58	<50	<0.50
	09/14/95	Clear	None	7.56	920	NM		20.6	100 a	NM	1.0/1.0	NM	NS	NS	<50	<0.50
17348 VE	05/30/95	Brown	None	7.28	1,423	-113		22.5	>200	0.0	2.0	0.6	22 b	85 b	<50	<0.50
	09/14/95	Clear	Faint	7.00	1,001	NM		18.1	100 a	NM	1.0/1.0	NM	NS	NS	<50	<0.50
17349 VM	05/31/95	Clear	Moderate	7.02	1,190	-226		19.3	15.11	0.0	1.0	0.5	<0.10	15	890	<0.50
	09/15/95	Clear	Faint	7.04	1,106	NM		18.0	100 a	NM	1.0/1.0	NM	NS	NS	610	3.9
17371 VM	05/31/95	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA
	09/15/95	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA
17372 VM	05/31/95	Clear	None	7.09	1,371	-227		19.5	11.25	0.0	1.0	0.1	<0.10	100	60	<0.50
	09/14/95	Clear	None	7.36	946	NM		18.7	100 a	NM	NM	NM	NS	NS	<50	<0.50
17393 VM	05/31/95	Brown	None	7.40	1,508	-228		19.9	18.13	0.0	1.0	0.1	33	74	<50	<0.50
	09/15/95	Clear	None	7.11	1,020	NM		19.4	100 a	NM	1.0/2.0	NM	NS	NS	<50	<0.50
E-1A c	06/01/95	Clear	None	7.63	1,340	-155		20.4	8.50	0.0	2.0	0.1	23	54	680	4.9
	09/15/95	Clear	Moderate	7.36	1,208	NM		15.9	100 a	NM	1.0/1.5	NM	NS	NS	73	3.3
MW-5	06/01/95	Brown	Faint	7.10	1,400	-119		20.2	98.85	0.0	2.0	*	19	<0.1	750	13
	09/15/95	Clear	Heavy	7.20	1,068	NM		17.7	100 a	NM	1.0/2.0	NM	NS	NS	550	11
MW-7	06/01/95	Brown	None	7.11	1,156	-99		20.7	43.27	0.0	*	*	42	68	<50	<0.50
	09/15/95	Brown	None	7.20	1,406	NM		18.3	100 a	NM	NM	NM	NS	NS	<50	<0.50
MW-8	06/01/95	Brown	Strong	7.09	1,071	-199		20.4	29.00	0.0	1.0	0.1	<0.10	33	810	5.2
	09/15/95	Clear	Moderate	7.01	1,000	NM		17.3	100 a	NM	1.0/1.0	NM	NS	NS	850	30

Table 7 (continued)
Groundwater Biodegradation Study Field and Laboratory Data

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

Well	Sample Date	Field Analyses										Laboratory Analyses				
		Color	Odor	pH (units)	Electrical Conductivity (millimhos)	Oxidation Reduction Potential (millivolts)		Temperature (degrees C)	Turbidity (NTU)	Hydrogen Sulfide (mg/L)	Dissolved Oxygen (mg/L)	Ferrous Iron (mg/L)	Nitrate as Nitrate (mg/L)	Sulfate (mg/L)	TPPH as Gasoline (μ g/L)	Benzene (μ g/L)
						Oxidation	Reduction									
MW-9	06/01/95	Brown	None	7.27	1,191	-117		20.6	>200	0.0	*	*	27	67	<50	<0.50
	09/15/95	Brown	None	7.10	926	NM		19.4	100 a	NM	1.0/2.0	NM	NS	NS	<50	<0.50
MW-10	c 06/01/95	Clear	Moderate	7.00	1,301	-199		18.0	9.28	0.0	1.0	0.2	<0.10	8.1	1,100	<1.2
	09/14/95	Clear	Moderate	7.10	968	NM		20.0	100 a	NM	1.0/2.0	NM	NS	NS	1,100	<2.0
MW-11	06/01/95	Brown	None	7.15	1,275	-152		18.0	55.40	0.0	1.0	0.1	43	75	<50	<0.50
	09/14/95	Cloudy	None	7.06	608	NM		19.8	100 a	NM	1.0/2.0	NM	NS	NS	<50	<0.50
MW-13	06/01/95	Brown	None	7.23	1,247	-104		21.2	>200	0.0	*	*	43	66	<50	<0.50
	09/15/95	Clear	None	7.10	1,190	NM		17.2	100 a	NM	1.0/1.0	NM	NS	NS	<50	<0.50
MW-14	06/01/95	Brown	None	7.09	1,223	-185		18.9	32.93	0.0	1.0	0.0	27	62	<50	<0.50
	09/14/95	Cloudy	None	6.99	860	NM		20.0	150 a	NM	2.0/2.0	NM	NS	NS	<50	<0.50
MW-15	05/31/95	Brown	None	6.98	1,336	-230		20.2	39.70	0.0	1.0	0.2	<0.10	73	<50	<0.50
	09/14/95	Brown	None	7.30	901	NM		20.3	100 a	NM	1.0/2.0	NM	NS	NS	<50	<0.50
MW-16	05/31/95	Brown	None	7.43	1,135	-188		20.2	51.67	0.0	2.0	0.12	12	41	52	<0.50
	09/14/95	Brown	None	7.36	996	NM		21.2	100 a	NM	2.0/2.0	NM	NS	NS	<50	<0.50
MW-17	05/30/95	Clear	None	7.25	1,351	-126		18.8	16.82	0.0	1.0	0.18	18	58	93	1.0
	09/14/95	Clear	None	7.11	827	NM		15.6	100 a	NM	1.0/1.0	NM	NS	NS	63	<0.50
MW-18	05/30/95	Clear	None	7.04	1,401	-136		20.3	14.39	0.0	1.0	0.15	31	57	<50	<0.50
	09/14/95	Cloudy	None	7.41	1,018	NM		20.6	150 a	NM	1.0/1.0	NM	NS	NS	<50	<0.50
MW-19	05/30/95	Clear	None	7.52	1,466	-167		19.5	25.43	0.0	1.0	0.15	30	63	<50	<0.50
	09/14/95	Clear	None	7.06	937	NM		21.7	100 a	NM	1.0/2.0	NM	NS	NS	<50	<0.50

Table 7 (continued)
Groundwater Biodegradation Study Field and Laboratory Data

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

Well	Sample Date	Field Analyses									Laboratory Analyses					
		Color	Odor	pH (units)	Electrical Conductivity (millimhos)	Oxidation Reduction		Temperature (degrees C)	Turbidity (NTU)	Hydrogen Sulfide (mg/L)	Dissolved Oxygen (mg/L)	Ferrous Iron (mg/L)	Nitrate as Nitrate (mg/L)	Sulfate (mg/L)	TPPH as Gasoline (µg/L)	Benzene (µg/L)
						Potential (millivolts)										
MW-21	05/30/95	Clear	None	7.34	1,294	-149		19.9	17.39	0.0	1.0	0.1	42	56	<50	<0.50
	09/14/95	Clear	None	7.30	940	NM		18.2	100 a	NM	1.0/1.0	NM	NS	NS	<50	<0.50
MW-22	05/30/95	Clear	None	7.28	1,118	-150		18.9	13.30	0.0	1.0	0.15	11	80	<50	<0.50
	09/14/95	Cloudy	None	7.31	960	NM		17.9	150 a	NM	2.0/2.0	NM	NS	NS	<50	<0.50
MW-23	05/30/95	Brown	None	7.25	1,353	-98		20.1	84.40	0.0	2.0	0.2	35	74	<50	<0.50
	09/14/95	Clear	None	6.93	954	NM		18.2	100 a	NM	1.0/2.0	NM	NS	NS	<50	<0.50
MW-24	06/01/95	Brown	None	6.66	1,280	-91		21.4	>200	0.0	*	*	29	58	<50	<0.50
	09/15/95	Brown	None	7.18	996	NM		19.4	100 a	NM	2.0/2.0	NM	NS	NS	<50	<0.50
MW-25	06/01/95	Brown	None	7.23	1,222	-76		19.5	>200	0.0	*	*	31	73	<50	<0.50
	09/15/95	Brown	None	7.20	609	NM		17.8	100 a	NM	1.0/1.0	NM	NS	NS	140	<0.50
MW-26	06/01/95	Brown	Faint	7.13	1,261	-92		22.4	>200	0.0	*	*	29	62	<50	<0.50
	09/15/95	Brown	None	7.21	680	NM		17.8	100 a	NM	1.0/1.0	NM	NS	NS	<50	<0.50
SP-1	09/15/95	Clear	None	6.94	1,040	NM		18.3	100 a	NM	1.0/2.0	NM	NS	NS	<50	<0.50
SP-2	09/15/95	Clear	None	7.18	1,110	NM		20.1	100 a	NM	2.0/2.0	NM	NS	NS	94	<0.50

NTU = Nephelometric turbidity unit

mg/L = Milligrams per liter

µg/L = Micrograms per liter

TPPH = Total purgeable petroleum hydrocarbons

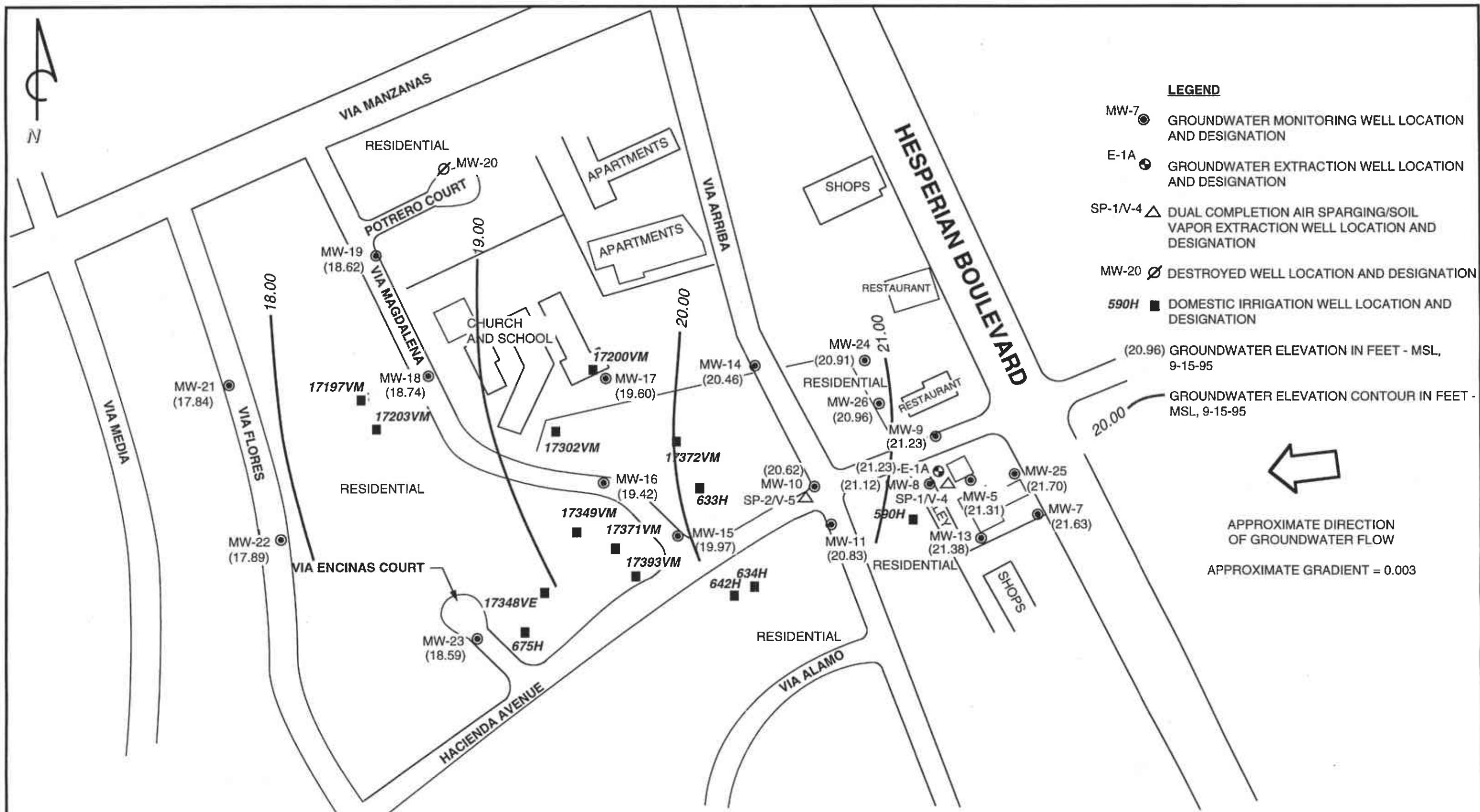
NA = Not available or not applicable due to well blockage, inoperable pump, or not authorized by well owner to sample.

a. Numerical values were not given for turbidity; light was assumed to be 100 NTU and moderate was assumed to be 150 NTU.

b. The sulfate and nitrate samples for Well 17348 VE were lost at the laboratory. The well was resampled for these analyses on June 2, 1995.

c. ORC's installed September 21, 1995 in Wells E-1A and MW-10.

Recorded values represent an average of one to three samples.



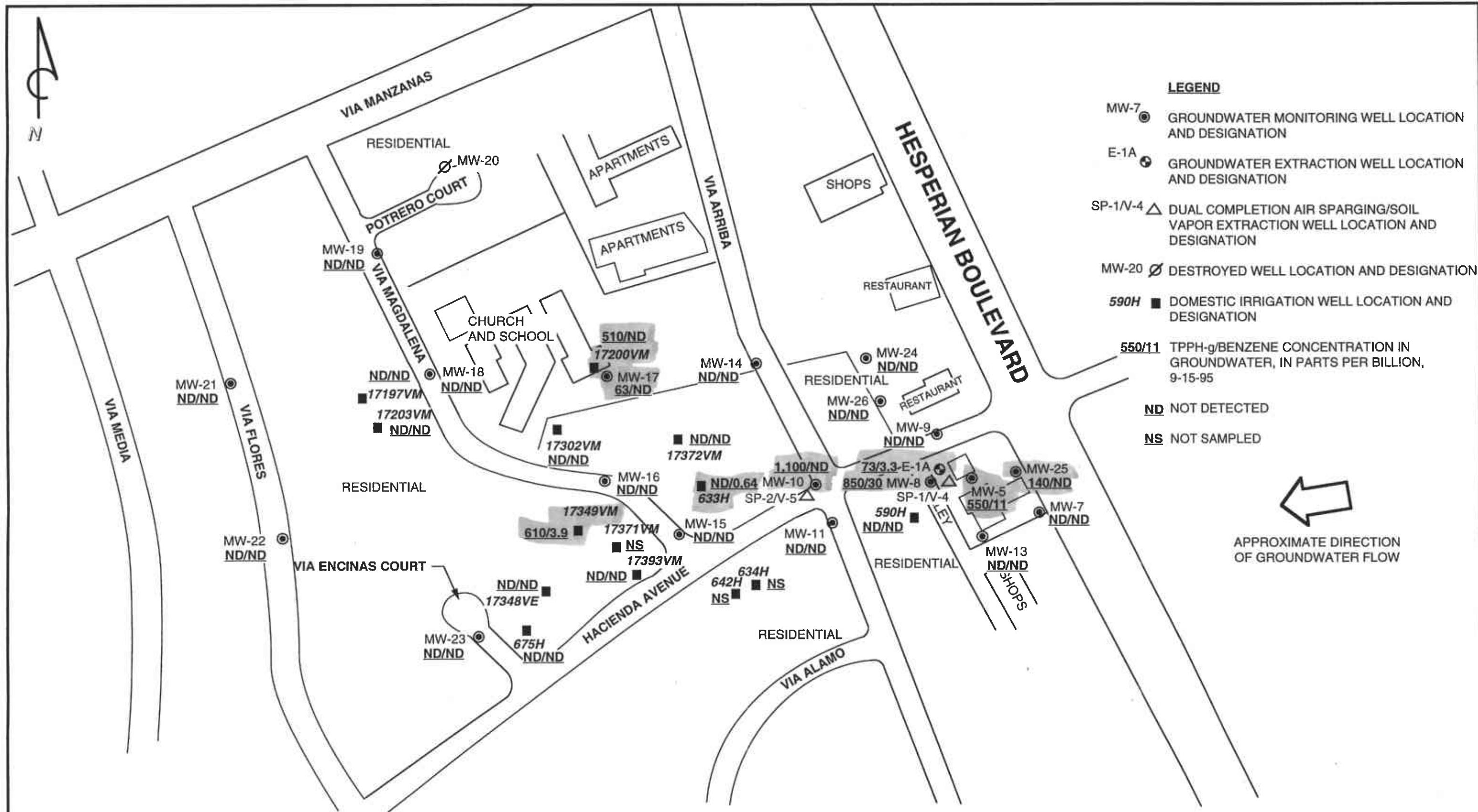
PACIFIC
ENVIRONMENTAL
GROUP, INC.

APPROXIMATE SCALE
0 150 300 FEET

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

GROUNDWATER ELEVATION CONTOUR MAP

FIGURE:
1
PROJECT:
330-006.2B



PACIFIC
ENVIRONMENTAL
GROUP, INC.

APPROXIMATE SCALE
0 150 300 FEET

FIGURE:
2
PROJECT:
330-006.2B

Figure 3
Mass Removal Trend for the Groundwater Extraction System

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

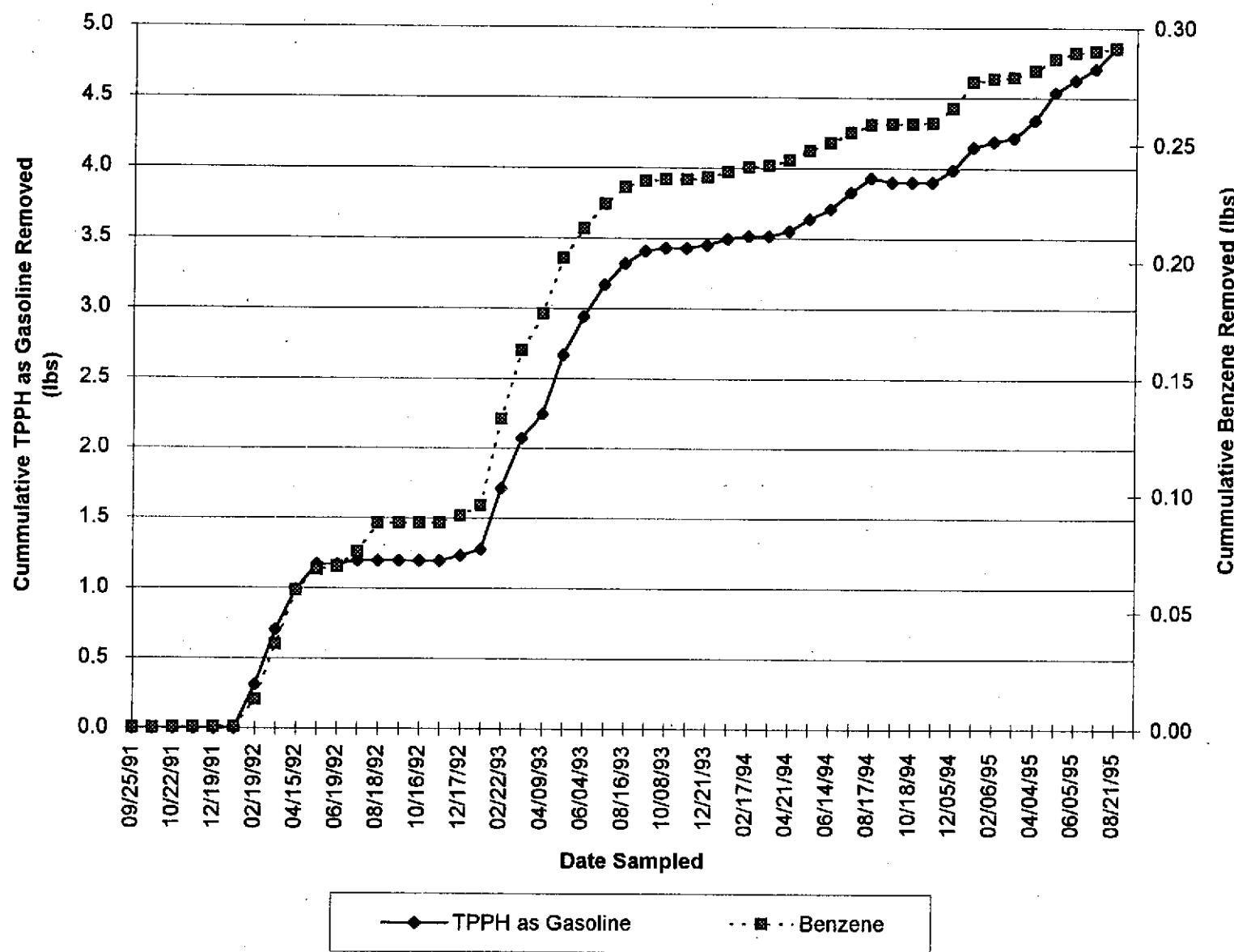
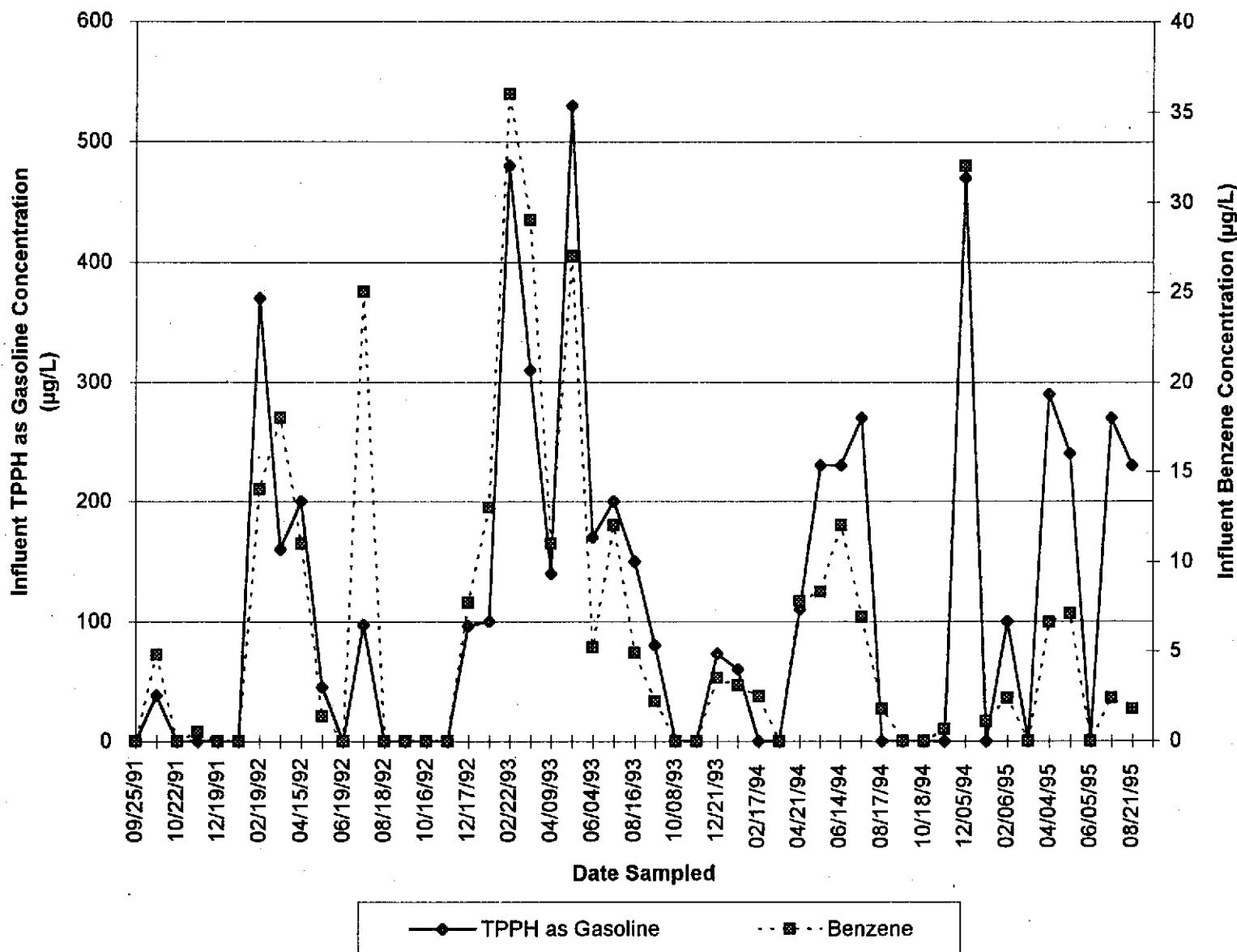


Figure 4
Concentration Trends for the Groundwater Extraction System

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



ATTACHMENT A

FIELD AND LABORATORY PROCEDURES

ATTACHMENT A **FIELD AND LABORATORY PROCEDURES**

Sampling Procedures

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

Laboratory Procedures

The groundwater samples were analyzed for the presence of total purgeable petroleum hydrocarbons calculated as gasoline, benzene, toluene, ethylbenzene, and xylenes. The analyses were performed according to EPA Methods 8015 (modified), 8020, and 5030 utilizing a purge-and-trap extraction technique. Final detection was by gas chromatography using flame-and photo-ionization detectors. The methods of analysis for the groundwater samples are documented in the certified analytical reports. Certified analytical reports, chain-of-custody documentation, and field data sheets are presented as Attachment B.

ATTACHMENT B

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



Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834

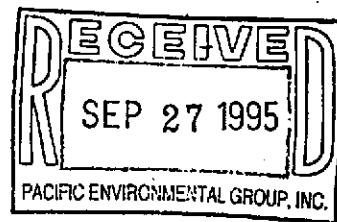
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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

Project: 330-006.2G/0608, San Lorenzo

Enclosed are the results from samples received at Sequoia Analytical on September 18, 1995.
The requested analyses are listed below:



<u>SAMPLE #</u>	<u>SAMPLE DESCRIPTION</u>	<u>DATE COLLECTED</u>	<u>TEST METHOD</u>
9509A32 -01	LIQUID, MW-5	09/15/95	TPGBMW Purgeable TPH/BTEX
9509A32 -02	LIQUID, MW-7	09/15/95	TPGBMW Purgeable TPH/BTEX
9509A32 -03	LIQUID, MW-8	09/15/95	TPGBMW Purgeable TPH/BTEX
9509A32 -04	LIQUID, MW-9	09/15/95	TPGBMW Purgeable TPH/BTEX
9509A32 -05	LIQUID, MW-10	09/14/95	TPGBMW Purgeable TPH/BTEX
9509A32 -06	LIQUID, MW-11	09/14/95	TPGBMW Purgeable TPH/BTEX
9509A32 -07	LIQUID, MW-13	09/15/95	TPGBMW Purgeable TPH/BTEX
9509A32 -08	LIQUID, MW-14	09/14/95	TPGBMW Purgeable TPH/BTEX
9509A32 -09	LIQUID, MW-15	09/14/95	TPGBMW Purgeable TPH/BTEX
9509A32 -10	LIQUID, MW-16	09/14/95	TPGBMW Purgeable TPH/BTEX
9509A32 -11	LIQUID, MW-17	09/14/95	TPGBMW Purgeable TPH/BTEX
9509A32 -12	LIQUID, MW-18	09/14/95	TPGBMW Purgeable TPH/BTEX
9509A32 -13	LIQUID, MW-19	09/14/95	TPGBMW Purgeable TPH/BTEX
9509A32 -14	LIQUID, MW-21	09/14/95	TPGBMW Purgeable TPH/BTEX
9509A32 -15	LIQUID, MW-22	09/14/95	TPGBMW Purgeable TPH/BTEX
9509A32 -16	LIQUID, MW-23	09/14/95	TPGBMW Purgeable TPH/BTEX
9509A32 -17	LIQUID, MW-24	09/15/95	TPGBMW Purgeable TPH/BTEX
9509A32 -18	LIQUID, MW-25	09/15/95	TPGBMW Purgeable TPH/BTEX
9509A32 -19	LIQUID, MW-26	09/15/95	TPGBMW Purgeable TPH/BTEX



Sequoia
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acific Environmental Group
025 Gateway Place, Suite 440
an Jose, CA 95110
ttention: Maree Doden

roject: 330-006.2G/0608, San Lorenzo

Enclosed are the results from samples received at Sequoia Analytical on September 18, 1995.
he requested analyses are listed below:

<u>SAMPLE #</u>	<u>SAMPLE DESCRIPTION</u>	<u>DATE COLLECTED</u>	<u>TEST METHOD</u>
509A33 -20	LIQUID, E-1A	09/15/95	TPGBMW Purgeable TPH/BTEX
509A33 -21	LIQUID, SP-1	09/15/95	TPGBMW Purgeable TPH/BTEX
509A33 -22	LIQUID, SP-2	09/15/95	TPGBMW Purgeable TPH/BTEX
509A33 -23	LIQUID, 590H	09/15/95	TPGBMW Purgeable TPH/BTEX
509A33 -24	LIQUID, 633H	09/14/95	TPGBMW Purgeable TPH/BTEX
509A33 -25	LIQUID, 17348VE	09/14/95	TPGBMW Purgeable TPH/BTEX
509A33 -26	LIQUID, 17197Vm	09/14/95	TPGBMW Purgeable TPH/BTEX
509A33 -27	LIQUID, 17200VM	09/14/95	TPGBMW Purgeable TPH/BTEX
509A33 -28	LIQUID, 17203VM	09/14/95	TPGBMW Purgeable TPH/BTEX
509A33 -29	LIQUID, 17302VM	09/14/95	TPGBMW Purgeable TPH/BTEX
509A33 -30	LIQUID, 17349VM	09/15/95	TPGBMW Purgeable TPH/BTEX
509A33 -31	LIQUID, 17372VM	09/14/95	TPGBMW Purgeable TPH/BTEX
509A33 -32	LIQUID, 17393VM	09/15/95	TPGBMW Purgeable TPH/BTEX
509A33 -33	LIQUID, TB-1	09/14/95	TPGBMW 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

B Fletcher

Tracie Fletcher
Project Manager

Quality Assurance Department



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

Attention: Maree Doden

GC Batch Number: GC092095BTEX03A
Instrument ID: GCHP03

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: MW-5
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A32-01

Sampled: 09/15/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	550
Methyl t-Butyl Ether	5.0	660
Benzene	1.0	11
Toluene	1.0	N.D.
Ethyl Benzene	1.0	N.D.
Xylenes (Total)	1.0	N.D.
Chromatogram Pattern: Weathered Gas	.....	C6-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	75

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

SEQUOIA ANALYTICAL - ELAP #1210

B Fletcher

Brucie Fletcher
Project Manager



Sequoia
Analytical

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

Attention: Maree Doden

GC Batch Number: GC092095BTEX03A
Instrument ID: GCHP03

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: MW-7
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A32-02

Sampled: 09/15/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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

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

SEQUOIA ANALYTICAL - ELAP #1210

B Fletcher

Brucie Fletcher
Project Manager



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Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.2G/0608, San Lorenzo Sample Descript: MW-8 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9509A32-03	Sampled: 09/15/95 Received: 09/18/95 Analyzed: 09/20/95 Reported: 09/25/95
Attention: Maree Doden		

QC Batch Number: GC092095BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	100	850
Methyl t-Butyl Ether	5.0	110
Benzene	1.0	30
Toluene	1.0	N.D.
Ethyl Benzene	1.0	N.D.
Xylenes (Total)	1.0	N.D.
Chromatogram Pattern: Gas & Unidentified HC		>C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	73

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

SEQUOIA ANALYTICAL - ELAP #1210

B Fletcher

Brucie Fletcher
Project Manager



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

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: MW-9
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A32-04

Sampled: 09/15/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

QC Batch Number: GC092095BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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

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

SEQUOIA ANALYTICAL - ELAP #1210

Brucie Fletcher

Brucie Fletcher
Project Manager



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

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: MW-10
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A32-05

Sampled: 09/14/95
Received: 09/18/95

Analyzed: 09/20/95
Reported: 09/25/95

QC Batch Number: GC092095BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	200	1100
Methyl t-Butyl Ether	10	630
Benzene	2.0	N.D.
Toluene	2.0	N.D.
Ethyl Benzene	2.0	N.D.
Xylenes (Total)	2.0	N.D.
Chromatogram Pattern: Gas & Unidentified HC		>C12
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

Brucie Fletcher
Project Manager



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

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: MW-11
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A32-06

Sampled: 09/14/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

QC Batch Number: GC092095BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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

Brucie Fletcher
Project Manager



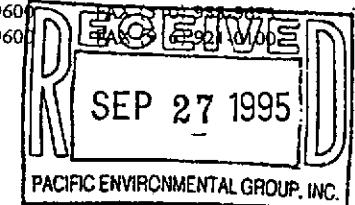
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FAX (415) 364-9233



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

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: MW-13
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A32-07

Sampled: 09/15/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

QC Batch Number: GC092095BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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

Brucie Fletcher
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San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: MW-14
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A32-08

Sampled: 09/14/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

QC Batch Number: GC092095BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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

B Fletcher

Brucie Fletcher
Project Manager



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San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: MW-15
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A32-09

Sampled: 09/14/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

GC Batch Number: GC092095BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	9.4
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	77

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

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Brucie Fletcher
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San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: MW-16
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A32-10

Sampled: 09/14/95
Received: 09/18/95
Analyzed: 09/21/95
Reported: 09/25/95

QC Batch Number: GC092195BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	17
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

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

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B Fletcher

Brucie Fletcher
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2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: MW-17
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A32-11

Sampled: 09/14/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

QC Batch Number: GC092095BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	63
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	1.1
Xylenes (Total)	0.50	0.51
Chromatogram Pattern:		Gas
Surrogates		Control Limits %
Trifluorotoluene	70	130
		% Recovery
		92

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

SEQUOIA ANALYTICAL - ELAP #1210

B Fletcher

Brucie Fletcher
Project Manager



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Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: MW-18
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A32-12

Sampled: 09/14/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

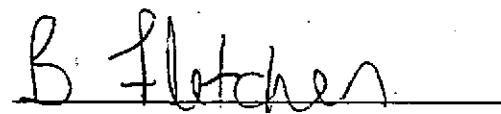
Attention: Maree Doden
GC Batch Number: GC092095BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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	92

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

SEQUOIA ANALYTICAL - ELAP #1210.


Brucie Fletcher

Project Manager



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Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: MW-19
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A32-13

Sampled: 09/14/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

Attention: Maree Doden
QC Batch Number: GC092095BTEX17A
Instrument ID: GCHP17

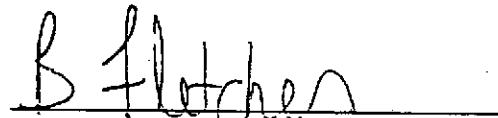
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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

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

SEQUOIA ANALYTICAL - ELAP #1210


Brucie Fletcher
Project Manager



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Pacific Environmental Group
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Attention: Maree Doden

IC Batch Number: GC092095BTEX17A
Instrument ID: GCHP17

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: MW-21
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A32-14

Sampled: 09/14/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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

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

SEQUOIA ANALYTICAL - ELAP #1210

Suzie Fletcher
Project Manager



Sequoia
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Pacific Environmental Group
2025 Gateway Place, Suite 440
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Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: MW-22
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A32-15

Sampled: 09/14/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

GC Batch Number: GC092095BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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

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

SEQUOIA ANALYTICAL - ELAP #1210

Barbie Fletcher

Barbie Fletcher
Project Manager



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San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: MW-23
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A32-16

Sampled: 09/14/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

QC Batch Number: GC092095BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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	80

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

SEQUOIA ANALYTICAL - ELAP #1210

Brucie Fletcher
Project Manager



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Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Proj. ID: 330-006.2G/0608, San Lorenzo Sample Descript: MW-24 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9509A32-17	Sampled: 09/15/95 Received: 09/18/95 Analyzed: 09/20/95 Reported: 09/25/95
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QC Batch Number: GC092095BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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

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

SEQUOIA ANALYTICAL - ELAP #1210

Brucie Fletcher

Brucie Fletcher
Project Manager



Sequoia
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San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: MW-25
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A32-18

Sampled: 09/15/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

QC Batch Number: GC092095BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	140
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	1.9
Xylenes (Total)	0.50	3.6
Chromatogram Pattern:		Gas
Surrogates		
Trifluorotoluene	Control Limits % 70 130	% Recovery 91

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

SEQUOIA ANALYTICAL - ELAP #1210

B Fletcher

Brucie Fletcher
Project Manager



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San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: MW-26
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A32-19

Sampled: 09/15/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

JC Batch Number: GC092095BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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	77

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

SEQUOIA ANALYTICAL - ELAP #1210

B Fletcher

Brucie Fletcher
Project Manager



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San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: E-1A
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A33-20

Sampled: 09/15/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

QC Batch Number: GC092095BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	73
Methyl t-Butyl Ether	2.5	220
Benzene	0.50	3.3
Toluene	0.50	N.D.
Ethyl Benzene	0.50	2.3
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:	.....	Gas
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	80

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

SEQUOIA ANALYTICAL - ELAP #1210

Brucie Fletcher
Project Manager



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Pacific Environmental Group
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San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: SP-1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A33-21

Sampled: 09/15/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

QC Batch Number: GC092095BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	150
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

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

SEQUOIA ANALYTICAL - ELAP #1210

Brucie Fletcher
Project Manager



Sequoia
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Pacific Environmental Group
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San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: SP-2
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A33-22

Sampled: 09/15/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

GC Batch Number: GC092095BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	94
Methyl t-Butyl Ether	2.5	380
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern: Gas & Unidentified HC		< C8
Surrogates		Control Limits %
Trifluorotoluene	70	130
		% Recovery
		98

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

SEQUOIA ANALYTICAL - ELAP #1210

B Fletcher

Brucie Fletcher
Project Manager



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

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: 590H
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A33-23

Sampled: 09/15/95
Received: 09/18/95
Analyzed: 09/21/95
Reported: 09/25/95

IC Batch Number: GC092195BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	13
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	87

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

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2025 Gateway Place, Suite 440
San Jose, CA 95110

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: 633H
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A33-24

Sampled: 09/14/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

Attention: Maree Doden

C Batch Number: GC092095BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	0.64
Toluene	0.50	1.2
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	7.6
Chromatogram Pattern:		
Surrogates	Control Limits %	
Trifluorotoluene	70	130
	% Recovery	
		96

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

SEQUOIA ANALYTICAL - ELAP #1210

B. Fletcher

Barbie Fletcher
Project Manager



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

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: 17348VE
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A33-25

Sampled: 09/14/95
Received: 09/18/95
Analyzed: 09/21/95
Reported: 09/25/95

GC Batch Number: GC092195BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	88

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

SEQUOIA ANALYTICAL - ELAP #1210

Brucie Fletcher

Brucie Fletcher
Project Manager



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

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: 17197Vm
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A33-26

Sampled: 09/14/95
Received: 09/18/95
Analyzed: 09/21/95
Reported: 09/25/95

QC Batch Number: GC092195BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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

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

SEQUOIA ANALYTICAL - ELAP #1210

B Fletcher

Brucie Fletcher
Project Manager



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2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: 17200VM
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A33-27

Sampled: 09/14/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

QC Batch Number: GC092095BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	510
Methyl t-Butyl Ether	2.5	4.8
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	3.1
Xylenes (Total)	0.50	3.4
Chromatogram Pattern:	.....	Gas
Surrogates		Control Limits %
Trifluorotoluene	70	130
		% Recovery
		110

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

SEQUOIA ANALYTICAL - ELAP #1210

Brucie Fletcher

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

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: 17203VM
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A33-28

Sampled: 09/14/95
Received: 09/18/95
Analyzed: 09/21/95
Reported: 09/25/95

QC Batch Number: GC092195BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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

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

SEQUOIA ANALYTICAL - ELAP #1210

Brucie Fletcher

Brucie Fletcher
Project Manager



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

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: 17302VM
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A33-29

Sampled: 09/14/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

QC Batch Number: GC092095BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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:		N.D.
Surrogates		
Trifluorotoluene	Control Limits % 70	% Recovery 130 95

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

SEQUOIA ANALYTICAL - ELAP #1210

B Fletcher

Brucie Fletcher
Project Manager



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Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Proj. ID: 330-006.2G/0608, San Lorenzo Sample Descript: 17349VM Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9509A33-30	Sampled: 09/15/95 Received: 09/18/95 Analyzed: 09/21/95 Reported: 09/25/95
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QC Batch Number: GC092195BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	510
Methyl t-Butyl Ether	2.5	32
Benzene	0.50	3.9
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern: Gas & Unidentified HC	.....	< C8
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	125

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

SEQUOIA ANALYTICAL - ELAP #1210

B Fletcher

Brucie Fletcher
Project Manager



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

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: 17372VM
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A33-31

Sampled: 09/14/95
Received: 09/18/95

Analyzed: 09/20/95
Reported: 09/25/95

IC Batch Number: GC092095BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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	81

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

SEQUOIA ANALYTICAL - ELAP #1210

B Fletcher

Rucie Fletcher
Project Manager



Sequoia
Analytical

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

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: 17393VM
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A33-32

Sampled: 09/15/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

QC Batch Number: GC092095BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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

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

SEQUOIA ANALYTICAL - ELAP #1210

B Fletcher

Brucie Fletcher
Project Manager



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

Attention: Maree Doden

Client Proj. ID: 330-006.2G/0608, San Lorenzo
Sample Descript: TB-1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9509A33-33

Sampled: 09/14/95
Received: 09/18/95
Analyzed: 09/20/95
Reported: 09/25/95

QC Batch Number: GC092095BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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	75

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

SEQUOIA ANALYTICAL - ELAP #1210

B Fletcher

Brucie Fletcher
Project Manager



**Sequoia
Analytical**

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

Client Project ID: 330-006.2G/0608, San Lorenzo
Matrix: LIQUID

Work Order #: 9509A32 01,02,04,06-08

Reported: Sep 26, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC092095BTEX03A	GC092095BTEX03A	GC092095BTEX03A	GC092095BTEX03A
Anal. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950973607	950973607	950973607	950973607
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/20/95	9/20/95	9/20/95	9/20/95
Analyzed Date:	9/20/95	9/20/95	9/20/95	9/20/95
Instrument I.D. #:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.5	9.3	9.2	28
MS % Recovery:	95	93	92	93
Dup. Result:	9.8	9.5	9.5	29
MSD % Recov.:	98	95	95	97
RPD:	3.1	2.1	3.2	3.5
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

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

LCS Result:
LCS % Recov.:

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

Brucie Fletcher
Project Manager



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

Client Project ID: 330-006.2G/0608, San Lorenzo
Matrix: LIQUID

Work Order #: 9509A32 09

Reported: Sep 26, 1995

9509A33 20, 22, 24, 27, 29, 31-33

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC092095BTEX02A	GC092095BTEX02A	GC092095BTEX02A	GC092095BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950973607	950973607	950973607	950973607
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/20/95	9/20/95	9/20/95	9/20/95
Analyzed Date:	9/20/95	9/20/95	9/20/95	9/20/95
Instrument I.D. #:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.7	9.7	9.5	29
MS % Recovery:	97	97	95	97
Dup. Result:	10	9.8	9.7	29
MSD % Recov.:	100	98	97	97
RPD:	3.0	1.0	2.1	0.0
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

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

LCS Result:
LCS % Recov.:

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

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

SEQUOIA ANALYTICAL
B Fletcher
Brucie Fletcher
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.



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

Client Project ID: 330-006.2G/0608, San Lorenzo
Matrix: LIQUID

Work Order #: 9509A32 03, 05, 11-19

Reported: Sep 26, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC092095BTEX17A	GC092095BTEX17A	GC092095BTEX17A	GC092095BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950973607	950973607	950973607	950973607
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/20/95	9/20/95	9/20/95	9/20/95
Analyzed Date:	9/20/95	9/20/95	9/20/95	9/20/95
Instrument I.D. #:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
 Result:	11	11	11	33
MS % Recovery:	110	110	110	110
 Dup. Result:	11	11	10	31
MSD % Recov.:	110	110	100	103
 RPD:	0.0	0.0	9.5	6.3
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

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

LCS Result:
LCS % Recov.:

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120
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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
B Fletcher
Brucie Fletcher
Project Manager



**Sequoia
Analytical**

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

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

Client Project ID: 330-006.2G/0608, San Lorenzo
Matrix: LIQUID

Work Order #: 9509A32 10

Reported: Sep 26, 1995

9509A33 23, 25, 26, 2

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC092195BTEX20A	GC092195BTEX20A	GC092195BTEX20A	GC092195BTEX20A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950977409	950977409	950977409	950977409
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/21/95	9/21/95	9/21/95	9/21/95
Analyzed Date:	9/21/95	9/21/95	9/21/95	9/21/95
Instrument I.D. #:	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	11	11	11	33
MS % Recovery:	110	110	110	110
Dup. Result:	10	10	10	31
MSD % Recov.:	100	100	100	103
RPD:	9.5	9.5	9.5	6.3
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

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

LCS Result:
LCS % Recov.:

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

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

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

Brucie Fletcher
Project Manager



**Sequoia
Analytical**

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

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

Client Project ID: 330-006.2G/0608, San Lorenzo
Matrix: LIQUID

Work Order #: 9509A33 30

Reported: Sep 26, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC092195BTEX21A	GC092195BTEX21A	GC092195BTEX21A	GC092195BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950977409	950977409	950977409	950977409
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/21/95	9/21/95	9/21/95	9/21/95
Analyzed Date:	9/21/95	9/21/95	9/21/95	9/21/95
Instrument I.D. #:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.4	9.3	9.3	27
MS % Recovery:	94	93	93	90
Dup. Result:	9.5	9.5	9.3	27
MSD % Recov.:	95	95	93	90
RPD:	1.1	2.1	0.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

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

LCS Result:
LCS % Recov.:

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

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

SEQUOIA ANALYTICAL
B Fletcher
Brucie Fletcher
Project Manager

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

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

9509A32.PPP <5>

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: PEG
REC. BY (PRINT): L Krause

WORKORDER: 9568432
DATE OF LOG-IN: 7/18/95

CIRCLE THE APPROPRIATE RESPONSE	
1. Custody Seal(s)	Present / <input checked="" type="radio"/> Absent <input type="radio"/> Intact / Broken*
2. Custody Seal Nos.:	Put in Remarks Section
3. Chain-of-Custody Records:	<input checked="" type="radio"/> Present / <input type="radio"/> Absent*
4. Traffic Reports or Packing List:	Present / <input checked="" type="radio"/> Absent
5. Airbill:	Airbill / Sticker
	<input checked="" type="radio"/> Present / <input type="radio"/> Absent
6. Airbill No.:	
7. Sample Tags:	<input checked="" type="radio"/> Present / <input type="radio"/> Absent*
Sample Tag Nos.:	<input checked="" type="radio"/> Listed / Not Listed on Chain-of-Custody
8. Sample Condition:	<input checked="" type="radio"/> Intact / <input type="radio"/> Broken* / Leaking*
9. Does Information on custody reports, traffic reports and sample tags agree?	<input checked="" type="radio"/> Yes / <input type="radio"/> No
10. Proper preservatives used:	<input checked="" type="radio"/> Yes / <input type="radio"/> No
11. Date Rec. at Lab:	9/18/95
12. Temp. Rec. at Lab:	10° C
13. Time Rec. at Lab:	1144

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

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: DEG
 REC. BY (PRINT): JKrause

WORKORDER: 9509A32
 DATE OF LOG-IN: 9/18/95

CIRCLE THE APPROPRIATE RESPONSE

1. Custody Seal(s) Present / Absent
2. Custody Seal Nos.: Put in Remarks Section
3. Chain-of-Custody Records: Present / Absent*
4. Traffic Reports or Packing List: Present / Absent
5. Airbill: Airbill / Sticker
6. Airbill No.:
7. Sample Tags: Present / Absent*
8. Sample Tag Nos.: Listed / Not Listed on Chain-of-Custody
9. Does information on custody reports, traffic reports and sample tags agree? Yes / No*
10. Proper preservatives used: Yes / No*
11. Date Rec. at Lab: 9/18/95
12. Temp. Rec. at Lab: 10°C
13. Time Rec. at Lab: 1144

LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION(ETC.)
1	ac	MW5	3vca	liq	9/15	
2		7				
3		8				↓
4		9				
5		10				9/14
6		11				↓
7		13				9/15
8		14				9/14
9		15				
10		16				
11		17				
12		18				
13		19				
14		21				
15		22				
16		23				↓
17		24				9/15
18		25				
19		26				↓
20		E-1A				↓

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

ARCO Facility no.	0608	City (Facility)	SAN LORENZO		Project manager (Consultant)	KELLY BROWN		Laboratory													
ARCO engineer	MIKE WHELAN	Telephone no. (ARCO)			Telephone no. (Consultant)	408/441/7520	Fax no. (Consultant)	408/441-7539													
Consultant name	PACIFIC ENVIRONMENTAL Group		Address (Consultant)		2025 GATEWAY PLACE #106 SAN JOSE CA 95110			Contract number													
Sample I.D.	Lat. no.	Matrix		Preservation		Sampling date	Sampling time	BTEX EPA 8020	BTEX/TPH EPA 8020/8015	TPH Modified 5015 Gas	Oil & Grease 412.1	Crast. 413.2	TPH EPA 418.1/SM503E	EPA 825.8/8270	TCLP Heavy Metals	Semi VOC	CAN Lab EPA 8020/8000 TTLIC	Lead DHS	Lead EPA 7420/7421	Method of shipment	
		Soil	Water	Other	Ice																Acid
MW-24	3	X		X	HCl	9/15/95	910		X											17	
MW-25						9/15/95	950														18
MW-26						9/15/95	855														18
E-1A						9/15/95	1130														20
SP-1						9/15/95	1055														21
SP-2						9/15/95	1225														22
5901						9/15/95	1140														23
6331						9/14/95	1430														24
173481E						9/14/95	1050														25
17197VM						9/14/95	1215														26
17200VM						9/14/95	1605														27
17203VM						9/14/95	1240														28
17302VM						9/14/95	1235														29
17349VM						9/15/95	1315														30
17372VM						9/14/95	1325														31
17393VM		↓	↓	↓	↓	9/15/95	1255	↓													32
Condition of sample:								Temperature received:													
Relinquished by sampler				Date	Time	Received by		Relinquished by				Date	Time	Received by		Relinquished by					
Mike Whelan				9/15/95	1445	M. Dodge		Mike Dodge				9/15/95	1445	Ralph Bonelli		Ralph Bonelli					
Mike Dodge				9/18/95	1050	Ralph Bonelli		Ralph Bonelli				9/18/95	1050	John Green		John Green					
John Green				9/18/95	11:44	John Green		John Green				9/18/95	11:44								
Distribution: White copy — Laboratory; Canary copy — ARCO Environmental Engineering; Pink copy — Consultant APC-3292 (2-91)																Turnaround time					
																Priority Rush 1 Business Day					
																Rush 2 Business Days					
																Expedited 5 Business Days					
																Standard 10 Business Days					

Special detection
Limit/reporting

DP 18

Special QA/QC

Remarks

2013
pages

Lab number
9569 A32

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															
ARCO engineer	MIKE WHELAN		Telephone no. (ARCO)			Telephone no. (Consultant)	(408) 941-7500	Fax no. (Consultant)	(408) 941-7539	SEQUL													
Consultant name	ARAC ENVIRONMENTAL Group		Address (Consultant)	2025 Camino Real #440, San Jose CA 95110		Contract number																	
Sample I.D.	Lab no.	Container no.	Matrix		Preservation		Sampling date	Sampling time	STELA 602/EPA 8220	BTEX/TPH 621/11724 EPA Method 8220/15	TPH Modified 9015 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.15/M50E	EPA 80/8010	EPA 824/8243	EPA 624/6270	Semi VOC <input type="checkbox"/> VOC <input type="checkbox"/>	TCP Method <input type="checkbox"/> VOC <input type="checkbox"/>	CMV Needs EPA 80/8010 TLC <input type="checkbox"/>	Lead OSHA <input type="checkbox"/> Lead EPA 74/201/421 <input type="checkbox"/>	Method of shipment		
			Soil	Water	Other	Ice																Acid	
TB-1	2		X	X	HCl	9/1/95	NA	X											COURIER				
												Special detection limit/reporting											
												Special QA/QC											
												Remarks		3 of 3 pg 1									
												Lab number		S508A32									
												Turnaround time											
												Priority Rush 1 Business Day		<input type="checkbox"/>									
												Rush 2 Business Days		<input type="checkbox"/>									
												Expedited 5 Business Days		<input type="checkbox"/>									
												Standard 10 Business Days		<input checked="" type="checkbox"/>									

Chain of Custody

ARCO Facility no.	0608	City (Facility)	SPRINGFIELD	Project manager (Consultant)	KELLY BROWN	Laboratory name	SFCWQ1A									
ARCO engineer	MIKE WIGLAN	Telephone no. (ARCO)	(408) 241-7500	Telephone no. (Consultant)	(408) 241-7535	Contract number										
Consultant name	PACIFIC ENVIRONMENTAL GROUP	Address (Consultant)	2025 GATEWAY PARK, MILPITAS CA 95035	Fax no. (Consultant)	(408) 241-7535	Method of shipment	COURIER									
Sample I.D.	Lab no.	Matrix		Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH/C EPA M602/EPA 8015	TPH Modified 8015 Gas <input type="checkbox"/> Diesel <input checked="" type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	EPA 801/8010	EPA 624/8240	TCLP Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA CAN Metals EPA 8010/8000 TTC <input type="checkbox"/> STLC <input type="checkbox"/>	Semi Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA Lead Org DHS <input type="checkbox"/> Lead Org EPA 720/7421 <input type="checkbox"/>	Special detection Limit/reporting
		Soil	Water	Other	Ice			Acid								
MW5	3	X	X	HCl 9/15/95	1045			X						Special QA/QC		
MW7				9/15/95	1005											
MW8				9/15/95	1205											
MW9				9/15/95	940											
MW10				9/14/95	1505											
MW11				9/14/95	1610											
MW13				9/15/95	1025											
MW14				9/14/95	1445											
MW15				9/14/95	1110											
MW16				9/14/95	1325											
MW17				9/14/95	1545											
MW18				9/14/95	1230											
MW19				9/14/95	1620											
MW21				9/14/95	1200											
MW22				9/14/95	1140											
MW23				9/14/95	1125											
Condition of sample:													Remarks	1 of 3 pg A		
Relinquished by sampler	Temperature received:												Lab number			
<i>[Signature]</i>	Date	9/15/95	Time	1445	Received by	<i>[Signature]</i>	Date	9/15/95	Time	1445	Priority Rush 1 Business Day	<input type="checkbox"/>				
Relinquished by	Date	1/18/95	Time	1050	Received by	<i>[Signature]</i>	Date	9/18/95	Time	1050	Rush 2 Business Days	<input type="checkbox"/>				
Relinquished by	Date		Time		Received by laboratory	<i>[Signature]</i>	Date	9/18/95	Time	1050	Expedited 5 Business Days	<input type="checkbox"/>				
											Standard 10 Business Days	<input checked="" type="checkbox"/>				

550-006-16 Task Order No. 17076 00

Chain of Custody

ARCO Facility no.	0603	City (Facility)	SAN LUIS OBISPO	Project manager (Consultant)	KELLY BROWN	Laboratory name
ARCO engineer	MIKE WHELAN	Telephone no. (ARCO)		Telephone no. (Consultant)	4108441-7500	Fax no. (Consultant)
Consultant name	PACIFIC ENVIRONMENTAL Group	Address (Consultant)	2025 GATEWAY PLACE STE 100 SAN JOSE CA 95110			Contract number

Sample ID.	Lab no.	Container no.	Matrix		Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH/CLP/BLE EPA M602/80/20/80/015	TPH Modified 80/15 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 410.1/SN503E	EPA 601/80/10	EPA 624/82/40	EPA 625/82/70	TCLP Metals <input type="checkbox"/> VOA <input type="checkbox"/>	Semi Metals <input type="checkbox"/> VOA <input type="checkbox"/>	CAN Metals EPA 6010/7000	TLCP <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org/JDHS <input type="checkbox"/>	Lead EPA 7420/7421 <input type="checkbox"/>	Method of shipment	
			Soil	Water	Other	Ice																		
MW-24	3	X	X	HCl	9/15/95	910			X															
MW-25	1				9/15/95	950																		
MW-26					9/15/95	855																		
E-1A					9/15/95	1130																		
SP-1					9/15/95	1055																		
SP-2					9/15/95	1225																		
59011					9/15/95	1140																		
633L1					9/19/95	1130																		
173481K					9/14/95	1020																		
17197VM					9/14/95	1215																		
17200VM					9/14/95	1105																		
17203VM					9/14/95	1240																		
17302VM					9/14/95	1255																		
17349VM					9/15/95	1315																		
17372VM					9/14/95	1325																		
17393VM		↓	↓	↓	9/15/95	1255	↓	↓																

Condition of sample:

Relinquished by sampler

Relinquished by

Relinquished by

Temperature received:

Date 9/15/95 Time 1145 Received by M. Dod

Date 9/18/95 Time 1050 Received by P.M. Smith

Date 9/18/95 Time 1050 Received by laboratory

Date 9/15/95 Time 1445
Date 9/17/95 Time 1050

Lab number

Turnaround time

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

Division of Atlantic Richfield Company		S302UVL-26 Task Order No.		1101600		Status of custody																									
ARCO Facility no.	0608	City (Facility)	SAN LORENZO		Project manager (Consultant)	KELLY BROWN																									
ARCO engineer	MIKE WHELAN		Telephone no. (ARCO)			Telephone no. (Consultant)	(408) 441-2500																								
Consultant name	PACIFIC ENVIRONMENTAL GROUP		Address (Consultant)	2025 GENERATION PLACE, SUITE 100, MOUNTAIN VIEW, CA 95110		Fax no. (Consultant)	(408) 441-1539																								
Sample I.D.	Lab no.	Matrix		Preservation		Sampling date	Sampling time	BTEX 802/EPA 8020		BTEX/TPH EPA 600/8020/8015		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/SM 503E		EPA 601/8010		EPA 624/8240		EPA 625/8270		TCLP Semi Metals <input type="checkbox"/> VOA <input type="checkbox"/> VDA <input type="checkbox"/>		CAM Metals EPA 601/8700 TLC <input type="checkbox"/> STLC <input type="checkbox"/>		Lead Org/DHS <input type="checkbox"/> Lead EPA 7420/7421 <input type="checkbox"/>		Method of shipment	
		Soil	Water	Other	Ice			Acid																							
TB-1	2	X		X	HCl	9/1/95	NA	X																							
Condition of sample:										Temperature received:										Special detection limit/reporting											
Relinquished by sampler					Date	9/15/95	Time	1445	Received by					R.P. Dickey					9/15/95 1445					Special QA/QC							
Relinquished by					Date	9/18/95	Time	1050	Received by					R.P. Benoff					9/18/95 1050					Remarks							
Relinquished by					Date		Time		Received by laboratory										Date		Time		Lab number								
																							Turnaround time								
																							Priority Rush 1 Business Day <input type="checkbox"/>								
																							Rush 2 Business Days <input type="checkbox"/>								
																							Expedited 5 Business Days <input type="checkbox"/>								
																							Standard 10 Business Days <input checked="" type="checkbox"/>								

FIELD SERVICES / O & M REQUEST

SITE INFORMATION FORM

Initials Date

F/S

RJ 9-19-95

Copy/Disc

RJ 10-3-95

Project #:330-006.2G

 1st time visit

Station #:0608

 1st 2nd 3rd 4th

Date of Request: 9-19-95

Site Address: 17601 Hesperian Bl
San Lorenzo, California Monthly

Ideal Field Date:

County: Alameda

 WeeklyPurge water ~~2310~~ 277.5

Project Manager: Kelly Brown

 One time Event

Budget Hrs.

Requestor: Chuck Graves

 Other. _____

Actual Hrs.

Client: Arco

Client P.O.C.: Mike Whelan

Mob de Mob. ~~6.0~~Total Wells 32

Prefield contacts: All Homeowners are to be contacted 1-2 weeks in advance of arrival.

Field Tasks: For General Description

Third Quarter groundwater sampling event: DTW/DTL on all wells from TOB/TOC

Sample per attached protocol: Note that MTBE has been added to the analysis for all wells. ~~MEASURE DO, PH, TEMP BEFORE AND AFTER SAMPLING~~SAMPLE SP-1/V-4 AND SP-2/V-5PURGING77 WELLSComments, remarks, from Field Staff (include problems encountered)DO₁ : DISS O₂ BEFORE PURGEDO₂ : DISS O₂ AFTER PURGENUMBERS IN "FIELD MEASUREMENTS AT TIME OF SAMPLE"ARE ACTUALLY MEASUREMENTS BEFORE PURGECompleted by: J. Morrison Date: 9-15-95Checked by: C.D.

WELL SAMPLING REQUEST

SAMPLING PROTOCOL								
Project No.	Station #	Project Name	SEQUENCE	Project Manager	Approval	Date/s	Laboratory:	Client Engineer:
330-006.2G	608	17601 Hesperian San Lorenzo		Kelly Brown			Sequoia	Mike Whelan

Well Number	Ideal Sampling Order	Sample I.D.	Sampling Frequency	Analyses	TOB TOC	Well Depth	Casing Diameter	Well gone Dry?	Comments
MW-5			QLY	GAS/BTEX/MTBE	TOB/TOC	14	4"	YES	
MW-7			QLY	GAS/BTEX/MTBE	TOB/TOC	19	3"	NO	
MW-8			QLY	GAS/BTEX/MTBE	TOB/TOC	22	3"	NO	
MW-9			QLY	GAS/BTEX/MTBE	TOB/TOC	19	3"	YES	
MW-10			QLY	GAS/BTEX/MTBE	TOB/TOC	22	3"	YES	
MW-11			QLY	GAS/BTEX/MTBE	TOB/TOC	19	3"	YES	
MW-13			QLY	GAS/BTEX/MTBE	TOB/TOC	23.5	3"	YES	
MW-14			QLY	GAS/BTEX/MTBE	TOB/TOC	24	3"	YES	
MW-15			QLY	GAS/BTEX/MTBE	TOB/TOC	24	3"	YES	
MW-16			QLY	GAS/BTEX/MTBE	TOB/TOC	23	3"	YES	
MW-17			QLY	GAS/BTEX/MTBE	TOB/TOC	24	3"	YES	
MW-18			QLY	GAS/BTEX/MTBE	TOB/TOC	22	3"	YES	
MW-19			QLY	GAS/BTEX/MTBE	TOB/TOC	22	3"	YES	
<i>MW-20</i>				DESTROYED		0	3"	YES	
MW-21			QLY	GAS/BTEX/MTBE	TOB/TOC	22	3"	YES	
MW-22			QLY	GAS/BTEX/MTBE	TOB/TOC	22	3"	YES	
MW-23			QLY	GAS/BTEX/MTBE	TOB/TOC	22	3"	YES	
E-1A			QLY	GAS/BTEX/MTBE	TOB/TOC	?	?	YES	
MW-24			QLY	GAS/BTEX/MTBE	TOB/TOC	20	2"	YES	
MW-25			QLY	GAS/BTEX/MTBE	TOB/TOC	21	2"	YES	
MW-26			QLY	GAS/BTEX/MTBE	TOB/TOC	20	2"	YES	
TB-1			QLY	GAS/BTEX/MTBE					

WELL SAMPLING REQUEST

SAMPLING PROTOCOL				TEST RESULTS				
Project No.	Station #	Project Name	SEQUENCE	Project Manager	Approval	Date/a	Laboratory:	Client Engineer:
330-006.2G	608	17601 Hesperian San Lorenzo		Kelly Brown			Sequoia	Mike Whelan

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 330-00626LOCATION: 17601 HESPERIANDATE: THURS SUNNYCLIENT/STATION NO.: ARCO/0608FIELD TECHNICIAN: J. M. MUNIZDAY OF WEEK: 9/5/95-2

PROBE TYPE/ID No.:

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

D/w Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock	Expanding Cap	(TOC)	Total Depth (feet)	First Depth to Water (feet) TOB/TOC	Second Depth to Water (feet) TOB/TOC	SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	SEPARATE-PHASE HYDROCARBONS (SPH)					LIQUID REMOVED (gallons)
														Fresh	Weathered	Gas	Oil	VISCOSITY Lite Medium Heavy	
													COLOR					H ₂ O	
MW5	1007	✓	✓	-	-	-	-	(TOC)	13.60	12.29	12.68	-	-						-
MW7	959	/	/	/	/	/	/		18.46	12.28	12.77	-	-						-
MW8	1021	✓	-	-	-	-	-		21.05	10.96	10.86	11.67	11.67						-
MW9	951	✓	-	-	-	-	-		18.28	10.35	10.35	10.88	-	-					-
MW10	927	✓	/	-	-	/	/		22.47	10.41	10.41	11.05	-	-					-
MW11	939	/	/	/	/	/	/		18.93	11.29	11.29	11.71	11.71	-	-				-
MW13	1004	✓	-	-	-	-	-		23.21	13.74	13.74	14.04	14.04	-	-				-
MW14	924	/	-	-	-	/	/		23.00	9.73	9.73	10.00	10.00	-	-				-
MW15	920	✓	✓	✓	✓	✓	✓		23.15	11.00	11.00	11.44	11.44	-	-				-

Comments: _____

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 330-006.2G LOCATION: 1760 HESPERIAN BLVD. DATE: 9-14-95
 SAN JOSE, CA
 CLIENT/STATION NO.: ARCO/0608 FIELD TECHNICIAN: J. M. Brown DAY OF WEEK: THURS. OVERCAST

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	(TOC) Total Depth (feet)	First Depth to Water (feet) TOB/TOC	Second Depth to Water (feet) TOB/TOC	SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	SEPARATE-PHASE HYDROCARBONS (SPH)					LIQUID REMOVED (gallons)	
													Fresh	Weathered	Gas	Oil	VISCOSITY Lite Medium Heavy		
														COLOR					
	mw-16	916	-	-	-	-	-	22.30	11.51	11.97	-	-							/
	mw-17	904	/	/	/	/	/	23.13	12.31	12.83	-	-							/
	mw-18	913	/	/	/	/	/	21.49	10.67	10.96	-	-							/
	mw-19	908	/	/	/	/	/	21.50	10.27	10.40	-	-							/
	mw-20							DESTROYED											/
	mw-21	902	/	/	/	/	/	21.54	10.35	10.88	-	-							/
	mw-22	959	/	/	/	/	/	21.46	11.10	11.40	-	-							/
	mw-23	953	/	/	/	/	/	21.68	12.14	12.40	-	-							/
	EIA	1029	-	-	-	-	-	24.85	10.65	11.83	-	-							/

Comments:

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 330-006.2GLOCATION: 17601 HESPERIAN RDDATE: 9-14-95CLIENT/STATION NO.: ARO/1608FIELD TECHNICIAN: J. MannDAY OF WEEK: THURS SURVEY

PROBE TYPE/ID No.

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

Dw Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock	Expanding Cap	(TOC)	First Depth to Water (feet) TOB/TOC	Second Depth to Water (feet) TOB/TOC	SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	SEPARATE-PHASE HYDROCARBONS (SPH)					LIQUID REMOVED (gallons)	
													Fresh	Weathered	Gas	Oil	VISCOSITY Lite		
													COLOR						
	MW24	946	/	/	/	/	/	(TOC)	20.77	13.15 13.15	13.47 13.47	—	—						/—/
	MW25	954	/	-	-	-	-	(TOC)	20.91	11.94 11.94	12.42 12.42	—	—						/—/
	MW26	943	/	/	/	/	/	(TOC)	19.65	12.30 12.30	12.75 12.75	—	—						/—/
V-4	SP-1	1019	/	-	-	-	-	(TOC)	12.50 12.50	11.71 11.71	12.22 12.22	—	—						/—/
V-1	SP-1	1017	/	/	/	/	/	(TOC)	20.30	11.80 11.80	12.43 12.43	—	—						/—/
	SP-2	1018	/	-	-	-	-	(TOC)	18.94	10.76 10.76	10.91 10.91	—	—						/—/
V-5	SP-1	1019	/	/	/	/	/	(TOC)	10.12	9.80 9.80	9.98 9.98	—	—						/—/

Comments:

11.11 / 11.11
 11.71 / 12.22
 12.50 (60) ← 11.80 / 12.43
 EIH Company SP-1 20.30

11 CUR 15

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.2G LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-5CLIENT/STATION No.: ARCO 10608FIELD TECHNICIAN: J. Monnier

WELL INFORMATION

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

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

CASING	GALL	LINEAR FT.
DIAMETER		
<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

- | |
|---|
| <input checked="" type="checkbox"/> Groundwater |
| <input type="checkbox"/> Duplicate |
| <input type="checkbox"/> Extraction well |
| <input type="checkbox"/> Trip blank |
| <input type="checkbox"/> Field blank |
| <input type="checkbox"/> Equipment blank |
| <input type="checkbox"/> Other: _____ |

$$\text{TD } \underline{13.60} - \text{ DTW } \underline{12.29} = \underline{1.31} \quad \text{Gal/Linear} \\ \times \text{Foot } \underline{D.66} = \underline{0.86} \quad \text{Number of Casings } \underline{3} \quad \text{Calculated Purge } \underline{2.60}$$

DATE PURGED: 9/15/85 START: 1032 END (2400 hr): 1042 PURGED BY: mDATE SAMPLED: 9/15/85 START: 1043 END (2400 hr): 1047 SAMPLED BY: m

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1035</u>	<u>1.0</u>	<u>7.18</u>	<u>1033</u>	<u>64.0</u>	<u>CCR</u>	<u>LT</u>	<u>H/V</u>
<u>1038</u>	<u>2.0</u>	<u>7.21</u>	<u>1030</u>	<u>65.1</u>	<u>CCR</u>	<u>LT</u>	<u>H/V</u>
<u>1041</u>	<u>3.0</u>	<u>7.24</u>	<u>1030</u>	<u>65.6</u>	<u>CCR</u>	<u>LT</u>	<u>H/V</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: 12.19 TOB/TOC 720 1068 63.8 CCR LT H/V

PURGING EQUIPMENT/I.D.

Bailer: 13-12 Airlift Pump:
 Centrifugal Pump: Dedicated:
 Other: _____

SAMPLING EQUIPMENT/I.D.

Bailer: 13-12 Dedicated:
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-5</u>	<u>9/15/85</u>	<u>1045</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX/MTH</u>

REMARKS: _____

DO₁ : 1DO₂ : 2SIGNATURE: J. Monnier

PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.26 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-7
SAN LORENZO CA.CLIENT/STATION No.: ARCO/0608FIELD TECHNICIAN: J. M. MinnigWELL INFORMATION

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

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

CASING	GAL/
DIAMETER	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

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

$$\text{TD } \underline{1046} - \text{ DTW } \underline{1228} = \underline{618} \quad \text{Gal/Linear} \underline{0.38} \times \text{Foot} \underline{0.38} = \underline{2.35} \quad \text{Number of Casings } \underline{3} \quad \text{Calculated Purge } \underline{705}$$

DATE PURGED: 9/15/95 START: 956 END (2400 hr): 1003 PURGED BY: CM
 DATE SAMPLED: 9/15/95 START: 1003 END (2400 hr): 1006 SAMPLED BY: CM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>958</u>	<u>2.5</u>	<u>7.17</u>	<u>1333</u>	<u>65.6</u>	<u>BRN</u>	<u>LT</u>	<u>Nom</u>
<u>1001</u>	<u>5.0</u>	<u>7.30</u>	<u>1198</u>	<u>67.4</u>	<u>BRN</u>	<u>TOS</u>	<u>Nom</u>
<u>1003</u>	<u>7.5</u>	<u>7.28</u>	<u>1190</u>	<u>67.6</u>	<u>BRN</u>	<u>TIC</u>	<u>Nom</u>

Pumped dry Yes No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 12.28 TOB/TOC 7.20 1406 65.0

BRN LT NONE

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer: #3-7 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-7</u>	<u>9-15-95</u>	<u>1005</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS:

SIGNATURE: Gilliam

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-26 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-8
SAN LORENZO CA

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

WELL INFORMATION

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

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

CASING	GAL/
DIAMETER	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

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

$$\text{TD } \underline{2105} - \text{ DTW } \underline{1086} = \underline{10.9} \quad \text{Gal/Linear} \times \text{Foot } \underline{0.38} = \underline{3.87} \quad \text{Number of Casings } \underline{3} \quad \text{Calculated Purge } \underline{1162}$$

DATE PURGED: 9-15-95 START: 1157 END (2400 hr): 1204 PURGED BY: MM

DATE SAMPLED: 9-15-95 START: 1204 END (2400 hr): 1206 SAMPLED BY: MM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1159</u>	<u>4.0</u>	<u>6.99</u>	<u>1021</u>	<u>63.7</u>	<u>CUR</u>	<u>LT</u>	<u>MOD</u>
<u>1201</u>	<u>8.0</u>	<u>6.77</u>	<u>1014</u>	<u>65.2</u>	<u>CUR</u>	<u>LT</u>	<u>MOD</u>
<u>1204</u>	<u>12.0</u>	<u>6.75</u>	<u>1018</u>	<u>65.8</u>	<u>CUR</u>	<u>LT</u>	<u>MOD</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: 1086 TOB/TOC 7.01 1000 63.1

CUR LT MOD

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/I.D.

Bailer: 13-15
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-8</u>	<u>9-15-95</u>	<u>1205</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GAS/BTEX/MTBE</u>

REMARKS:

DO₁ : 1
DO₂ : 1

SIGNATURE: John W. Henn

PACIFIC
 ENVIRONMENTAL
 GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-2G LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-9
SAN LORENZO CA.

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

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 #3
 Electronic indicator #3
 Other: _____

CASING	GAL
DIAMETER	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

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

$$\text{TD } 18.28 - \text{ DTW } 10.35 = 7.93 \quad \text{Gal/Linear} \times \text{Foot } 0.38 = 3.01 \quad \text{Number of Casings } 3 \quad \text{Calculated } 9.04 \\ = \text{Purge }$$

DATE PURGED: 9/15/95 START: 916 END (2400 hr): 931 PURGED BY: M
 DATE SAMPLED: 9/15/95 START: 938 END (2400 hr): 942 SAMPLED BY: M

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE °F	COLOR	TURBIDITY	ODOR
<u>929</u>	<u>3.0</u>	<u>7.08</u>	<u>907</u>	<u>67.2</u>	<u>BRN</u>	<u>MED</u>	<u>NONE</u>
<u>932</u>	<u>6.0</u>	<u>7.08</u>	<u>890</u>	<u>67.4</u>	<u>BRN</u>	<u>MED</u>	<u>NONE</u>
<u>935</u>	<u>9.0</u>	<u>7.06</u>	<u>901</u>	<u>67.4</u>	<u>BRN</u>	<u>LT</u>	<u>NONE</u>

Pumped dry Yes / No /

Cobalt 0-100	NTU 0-200
Clear	Heavy
Cloudy	Moderate
Yellow	Light
Brown	Trace

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 10.35 TOB 710 926 67.0 BRN LT nose

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer: 13-2
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-9</u>	<u>9/15/95</u>	<u>940</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GAS/B.TEX/MTBE</u>

REMARKS:

DO - 1

DO_r = 2

SIGNATURE: J. Minniger



PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-WW6-2G LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA. WELL ID #: MW-10

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

WELL INFORMATION

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

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

CASING	GAL/
DIAMETER	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

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

$$\text{TD } 27.47 - \text{ DTW } 10.41 = 17.6 \quad \text{Gal/Linear Foot } 0.38 = 4.58 \quad \text{Number of Casings } 3 \quad \text{Calculated Purge } 13.75$$

DATE PURGED: 9/14/95 START: 1452 END (2400 hr): 1455 1502 PURGED BY: DM

DATE SAMPLED: 9/14/95 START: 1503 END (2400 hr): 1507 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1455</u>	<u>2.0</u>	<u>7.06</u>	<u>922</u>	<u>68.2</u>	<u>CLR</u>	<u>LT</u>	<u>MOD</u>
<u>1458</u>	<u>10.0</u>	<u>6.96</u>	<u>954</u>	<u>69.1</u>	<u>CLR</u>	<u>LT</u>	<u>MOD</u>
<u>1500</u>	<u>15.0</u>	<u>6.80</u>	<u>950</u>	<u>69.8</u>	<u>CLR</u>	<u>LT</u>	<u>MED</u>

Pumped dry Yes No

Cobalt 0-100	NTU 0-200
Clear	Heavy
Cloudy	Moderate
Yellow	Light
Brown	Trace

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 10.41 TOB/TOC 7.10 96.0 68.0 CLR LT MOD

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer: 13-11
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-10</u>	<u>9/14/95</u>	<u>1505</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GAS/B.TEX</u>

REMARKS:

DO₁ : 1

DO₂ : 2

J. Monnier

SIGNATURE: _____



PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-2G LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: MW-11

CLIENT/STATION No.: ARCO/0608

FIELD TECHNICIAN: J. Monahan

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 #3
 Electronic indicator #3
 Other: _____

CASING	GAL
DIAMETER	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

- | | |
|-------------------------------------|-----------------|
| <input checked="" type="checkbox"/> | Groundwater |
| <input type="checkbox"/> | Duplicate |
| <input type="checkbox"/> | Extraction well |
| <input type="checkbox"/> | Trip blank |
| <input type="checkbox"/> | Field blank |
| <input type="checkbox"/> | Equipment blank |
| <input type="checkbox"/> | Other; _____ |

$$\text{TD } \underline{18.93} - \text{ DTW } \underline{11.29} = \underline{7.64} \quad \text{Gal/Linear Foot } \underline{0.38} = \underline{2.90} \quad \text{Number of Casings } \underline{3} \quad \text{Calculated Purge } \underline{8.71}$$

DATE PURGED: 9/14/95 START: 1510 END (2400 hr): 1518 PURGED BY: M

DATE SAMPLED: 9/14/95 START: 1518 END (2400 hr): 1522 SAMPLED BY: M

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1513</u>	<u>3.0</u>	<u>6.87</u>	<u>584</u>	<u>68.0</u>	<u>CLDY</u>	<u>M'D</u>	<u>NONE</u>
<u>1516</u>	<u>6.0</u>	<u>6.84</u>	<u>568</u>	<u>69.1</u>	<u>CLM</u>	<u>M'D</u>	<u>NONE</u>
<u>1518</u>	<u>9.0</u>	<u>6.84</u>	<u>526</u>	<u>69.4</u>	<u>CLP</u>	<u>M'D</u>	<u>NONE</u>

Pumped dry Yes No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 11.28 TOB TOC 7.06 608 67.6 CLDY LT NONE

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer: 13-15
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-11</u>	<u>9/14/95</u>	<u>1320</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS:

DO₁ : 1

DO₂ : 2

D. M. M.

SIGNATURE: _____



PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-2G LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-13
SAN LORENZO CA.

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

WELL INFORMATION

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

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

CASING	GAL/	SAMPLE TYPE
DIAMETER	LINEAR FT.	
<input type="checkbox"/> 2	0.17	<input checked="" type="checkbox"/> Groundwater
<input checked="" type="checkbox"/> 3	0.38	<input type="checkbox"/> Duplicate
<input type="checkbox"/> 4	0.66	<input type="checkbox"/> Extraction well
<input type="checkbox"/> 4.5	0.83	<input type="checkbox"/> Trip blank
<input type="checkbox"/> 5	1.02	<input type="checkbox"/> Field blank
<input type="checkbox"/> 6	1.5	<input type="checkbox"/> Equipment blank
<input type="checkbox"/> 8	2.6	<input type="checkbox"/> Other: _____

$$\text{TD } \underline{23.21} - \text{ DTW } \underline{13.74} = \underline{9.47} \quad \text{Gal/Linear} \times \text{Foot } \underline{0.38} = \underline{3.60} \quad \text{Number of Casings } \underline{3} \quad \text{Calculated Purge } \underline{1080}$$

DATE PURGED: 9/15/95 START: 1017 END (2400 hr): 1024 PURGED BY: M
 DATE SAMPLED: 9/15/95 START: 1024 END (2400 hr): 1026 SAMPLED BY: M

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. ($\mu\text{mhos/cm}$ @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1019</u>	<u>4.0</u>	<u>7.08</u>	<u>1167</u>	<u>63.3</u>	<u>BRN</u>	<u>MED</u>	<u>NONE</u>
<u>1022</u>	<u>8.0</u>	<u>7.15</u>	<u>1185</u>	<u>64.9</u>	<u>BRN</u>	<u>LT</u>	<u>NONE</u>
<u>1024</u>	<u>12.0</u>	<u>7.14</u>	<u>1211</u>	<u>65.4</u>	<u>BRN</u>	<u>TCE</u>	<u>NONE</u>

Pumped dry Yes 1 No

Cobalt 0-100	NTU 0-200
Clear	Heavy
Cloudy	Moderate
Yellow	Light
Brown	Trace

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 13.74 TOB/TOC 710 1190 63

CLR LT NONE

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/I.D.

Bailer: 130
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-13</u>	<u>9/15/95</u>	<u>1025</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GAS/BTEX/MMT</u>

REMARKS:

DO₁ : 1

DO₂ : 1

SIGNATURE: Allen

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-2G LOCATION: 17601 HESPERIAN BVD WELL ID #: MW-14
SAN LORENZO CA

CLIENT/STATION No.: ARCO/0608FIELD TECHNICIAN: J. MonnierWELL 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 F3
 Other: _____

CASING	GAL
DIAMETER	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

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

$$\text{TD } 23.00 - \text{ DTW } 9.73 = 13.27 \quad \text{Gal/Linear} \times \text{Foot } 0.38 = 5.04 \quad \text{Number of Casings } 3 \quad \text{Calculated Purge } 15.13$$

DATE PURGED: 9/14/95 START: 1434 END (2400 hr): 1443 PURGED BY: JM

DATE SAMPLED: 9/14/95 START: 1443 END (2400 hr): 1447 SAMPLED BY: JM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1437</u>	<u>5.0</u>	<u>7.26</u>	<u>364</u>	<u>69.5</u>	<u>CLRY</u>	<u>MND</u>	<u>None</u>
<u>1440</u>	<u>10.0</u>	<u>7.06</u>	<u>930</u>	<u>69.8</u>	<u>CLRY</u>	<u>MND</u>	<u>None</u>
<u>1443</u>	<u>15.0</u>	<u>6.89</u>	<u>921</u>	<u>69.9</u>	<u>CLRY</u>	<u>MND</u>	<u>None</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: 9.73 TOB/TOC 6.99 860 68.0 CLRY MND None

PURGING EQUIPMENT/I.D. #

Bailer: _____ Airlift Pump: _____
 Centrifugal Pump: F3 Dedicated: _____
 Other: _____

SAMPLING EQUIPMENT/I.D. #

Bailer: _____
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-14</u>	<u>9/14/95</u>	<u>1445</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GAS/BTEX/MPBE</u>

REMARKS: D0, ; dDO₂ : 2J. Monnier

SIGNATURE: _____

PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-2G LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-15
SAN LORENZO CA

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

WELL INFORMATION

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

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

CASING	GAL/L
DIAMETER	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

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

$$\text{TD } 2315 - \text{ DTW } 1100 = 1215 \text{ Gal/Linear Foot } 0.38 = 4.62 \text{ Number of Casings } 3 \text{ Calculated Purge } 13.85$$

DATE PURGED: 9/14/95 START: 1408 END (2400 hr): 1418 PURGED BY: AM

DATE SAMPLED: 9/14/95 START: 1408 END (2400 hr): 1412 SAMPLED BY: AM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1414	5.0	7.26	891	69.9	BRN	MED	None
1406	10.0	7.19	895	69.7	BRN	MED	None
1408	15.0	7.11	894	69.6	CLR	LT	None

Pumped dry Yes No

Cobalt 0-100
 Clear
 Cloudy
 Yellow
 Brown

NTU 0-200
 Heavy
 Moderate
 Light
 Trace

Strong
 Moderate
 Faint
 None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 11.00 TOB/TOC 7.30 901 69.6 BRN LT None

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/I.D.

Bailer: #13-4
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-15	9/14/95	1410	3	40ml	VAA	HCl	GAS/BTEX

REMARKS:

DO₁ : 1DO₂ : 2SIGNATURE: J. Monahan

PACIFIC
 ENVIRONMENTAL
 GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-26 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: MW-16

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

WELL INFORMATION

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

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

CASING	GAL/
DIAMETER	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

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

$$\text{TD } 22.30 \cdot \text{ DTW } 11.55 = 10.75 \quad \text{Gal/Linear Foot } 0.38 = 4.09 \quad \text{Number of Casings } 3 \quad \text{Calculated Purge } 12.26$$

DATE PURGED: 9/14/95 START: 1310 END (2400 hr): 1321 PURGED BY: DM
 DATE SAMPLED: 9/14/95 START: 1322 END (2400 hr): 1327 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE °F	COLOR	TURBIDITY	ODOR
<u>1314</u>	<u>4.5</u>	<u>7.29</u>	<u>910</u>	<u>70.7</u>	<u>Brown</u>	<u>mod</u>	<u>Minty</u>
<u>1317</u>	<u>9.0</u>	<u>7.23</u>	<u>920</u>	<u>70.0</u>	<u>Brown</u>	<u>mod</u>	<u>Minty</u>
<u>1319</u>	<u>13.5</u>	<u>7.20</u>	<u>886</u>	<u>69.3</u>	<u>Brown</u>	<u>mod</u>	<u>Minty</u>

Pumped dry Yes No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 11.55 TOB/TOC 7.36 906 70.1

Brown LT None

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/I.D.

Bailer: 13-11
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-16</u>	<u>9/14/95</u>	<u>1325</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/B-TEX</u>

REMARKS:

DO = 2
DO = 2

SIGNATURE: J. Monahan

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-2G LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA. WELL ID #: MW-17

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

WELL INFORMATION

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

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

CASING	GAL
DIAMETER	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

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

$$\text{TD } \underline{23.13} - \text{ DTW } \underline{12.31} = \underline{10.82} \quad \text{Gal/Linear Foot } \underline{0.38} = \underline{4.11} \quad \text{Number of Casings } \underline{3} \quad \text{Calculated Purge } \underline{12.33}$$

DATE PURGED: 9/14/95 START: 1532 END (2400 hr): 1541 PURGED BY: M

DATE SAMPLED: 9/14/95 START: 1542 END (2400 hr): 1547 SAMPLED BY: M

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE °F	COLOR	TURBIDITY	ODOR
<u>1534</u>	<u>4.8</u>	<u>709</u>	<u>816</u>	<u>60.9</u>	<u>CLR</u>	<u>LT</u>	<u>None</u>
<u>1537</u>	<u>9.0</u>	<u>6.97</u>	<u>790</u>	<u>60.2</u>	<u>CLR</u>	<u>LT</u>	<u>None</u>
<u>1539</u>	<u>135</u>	<u>6.92</u>	<u>761</u>	<u>60.1</u>	<u>CLR</u>	<u>LT</u>	<u>None</u>

Pumped dry Yes ✓ No

Cobalt 0-100	NTU 0-200
Clear	Heavy
Cloudy	Moderate
Yellow	Light
Brown	Trace

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 12.31 TOB/TOC 711 827 60.0 CLR LT None

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/I.D.

Bailer: 13-14
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-17</u>	<u>9/14/95</u>	<u>1545</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS:

DO, : 1

DO₂ : 1

Julian

SIGNATURE: _____



PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-2G LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-18
SAN LORENZO CA.

CLIENT/STATION No.: ARCO/0608

FIELD TECHNICIAN: J. Moana

WELL INFORMATION

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

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

CASING DIAMETER	GAL/ LINEAR FT.
<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

- | |
|---|
| <input checked="" type="checkbox"/> Groundwater |
| <input type="checkbox"/> Duplicate |
| <input type="checkbox"/> Extraction well |
| <input type="checkbox"/> Trip blank |
| <input type="checkbox"/> Field blank |
| <input type="checkbox"/> Equipment blank |
| <input type="checkbox"/> Other: _____ |

$$\text{TD } \underline{21.49} - \text{ DTW } \underline{1067} = \underline{1082} \quad \text{Gal/Linear} \times \text{Foot } \underline{0.38} = \underline{4.11} \quad \text{Number of Casings } \underline{3} \quad \text{Calculated} = \text{Purge } \underline{12.33}$$

DATE PURGED: 9/14/95 START: 1218 END (2400 hr): 1226 PURGED BY: MM

DATE SAMPLED: 9/14/95 START: 1227 END (2400 hr): 1231 SAMPLED BY: MM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1220</u>	<u>4.5</u>	<u>7.38</u>	<u>1007</u>	<u>69.7</u>	<u>C/D</u>	<u>MAD</u>	<u>none</u>
<u>1223</u>	<u>9.0</u>	<u>7.24</u>	<u>1010</u>	<u>70.5</u>	<u>C/D</u>	<u>MAD</u>	<u>none</u>
<u>1225</u>	<u>13.5</u>	<u>7.17</u>	<u>997</u>	<u>70.1</u>	<u>C/D</u>	<u>LT</u>	<u>none</u>

Pumped dry Yes No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 1067 TOB/TOC 7.41 1018 69.0 C/D MAD none

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/I.D.

Bailer: 13-7
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-18</u>	<u>9/14/95</u>	<u>1230</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GAS/B.TEX/MILS</u>

REMARKS:

DO₁ = 1

DO₂ = 1

SIGNATURE: A. M.



PACIRC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.2G LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-19
SAN LORENZO CA.

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

WELL INFORMATION

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

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

CASING	GAL
DIAMETER	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

- | | |
|-------------------------------------|-----------------|
| <input checked="" type="checkbox"/> | Groundwater |
| <input type="checkbox"/> | Duplicate |
| <input type="checkbox"/> | Extraction well |
| <input type="checkbox"/> | Trip blank |
| <input type="checkbox"/> | Field blank |
| <input type="checkbox"/> | Equipment blank |
| <input type="checkbox"/> | Other: _____ |

$$\text{TD } \underline{21.50} - \text{ DTW } \underline{10.27} = \underline{11.23} \quad \text{Cal/Linear} \times \text{Foot } \underline{0.38} = \underline{4.27} \quad \text{Number of Casings } \underline{3} \quad \text{Calculated Purge } \underline{12.80}$$

DATE PURGED: 9/14/95 START: 16:07 END (2400 hr): 16:18 PURGED BY: DM

DATE SAMPLED: 9/14/95 START: 16:18 END (2400 hr): 16:21 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>10:10</u>	<u>4.5</u>	<u>6.94</u>	<u>943</u>	<u>71.7</u>	<u>CIVY</u>	<u>LT</u>	<u>NONE</u>
<u>16:14</u>	<u>9.0</u>	<u>7.01</u>	<u>952</u>	<u>70.3</u>	<u>CIVY</u>	<u>LT</u>	<u>NONE</u>
<u>16:18</u>	<u>13.5</u>	<u>6.92</u>	<u>936</u>	<u>68.7</u>	<u>CIVY</u>	<u>LT</u>	<u>NONE</u>

Pumped dry Yes / No /

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 11.23 TOB TOC 706 937 71.6

CIV LT NONE

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/I.D.

Bailer: DNP
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-19</u>	<u>9/14/95</u>	<u>16:20</u>	<u>3</u>	<u>40ml</u>	<u>VAA</u>	<u>HCl</u>	<u>GAS/B.TEX</u>

REMARKS:

DO₁ = 1

DO₂ = 2

SIGNATURE: William



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GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.26 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA. WELL ID #: MW-20

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

WELL INFORMATION

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

CASING	GAL/
DIAMETER	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

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

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

TD _____ - DTW _____ = _____ x Foot 0.38 = _____ Number of Casings 3 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. (μ mhos/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.

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

REMARKS: _____

SIGNATURE: J. Montane

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-26 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA. WELL ID #: MW-71

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

WELL INFORMATION

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

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

CASING	GAL/
DIAMETER	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

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

$$\text{TD } \underline{2154} - \text{ DTW } \underline{1035} = \underline{1119} \quad \text{Gal/Linear} \times \text{Foot } \underline{0.38} = \underline{4.25} \quad \text{Number of Casings } \underline{3} \quad \text{Calculated} \\ = \text{Purge } \underline{12.76}$$

DATE PURGED: 9/14/95 START: 1146 END (2400 hr): 1156 PURGED BY: m

DATE SAMPLED: 9/14/95 START: 1157 END (2400 hr): 1202 SAMPLED BY: m

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1149</u>	<u>4.5</u>	<u>7.34</u>	<u>945</u>	<u>65.7</u>	<u>CLR</u>	<u>LT</u>	<u>None</u>
<u>1151</u>	<u>9.0</u>	<u>7.24</u>	<u>964</u>	<u>67.0</u>	<u>CLR</u>	<u>LT</u>	<u>None</u>
<u>1154</u>	<u>13.5</u>	<u>7.32</u>	<u>953</u>	<u>66.9</u>	<u>CLR</u>	<u>LT</u>	<u>None</u>

Pumped dry Yes No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 10.35 TOB/TOC 730 940 647 CLR LT none

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/I.D.

Bailer: 13-4
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-21</u>	<u>9/14/95</u>	<u>1200</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS:

DO, T

DO, T

SIGNATURE: [Signature]



PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-26 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-22
SAN LORENZO CA

CLIENT/STATION No.: ARCO/0608FIELD TECHNICIAN: J. MonnierWELL 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 #3
 Electronic indicator #3
 Other: _____

CASING	GAL/L	LINEAR FT.
DIAMETER		
<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	

- | |
|---|
| <input checked="" type="checkbox"/> Groundwater |
| <input type="checkbox"/> Duplicate |
| <input type="checkbox"/> Extraction well |
| <input type="checkbox"/> Trip blank |
| <input type="checkbox"/> Field blank |
| <input type="checkbox"/> Equipment blank |
| <input type="checkbox"/> Other: _____ |

$$\text{TD } 21.46 - \text{ DTW } 11.10 = 10.36 \quad \text{Gal/Linear Foot } 0.38 = 3.94 \quad \text{Number of Casings } 3 \quad \text{Calculated Purge } 11.81$$

DATE PURGED: 9-14-85 START: 1130 END (2400 hr): 1137 PURGED BY: MM

DATE SAMPLED: 9-14-85 START: 1138 END (2400 hr): 1141 SAMPLED BY: MM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1132	4.0	7.28	962	64.9	C/CY	M/M	None
1134	8.0	7.34	963	64.8	C/CY	M/M	None
1136	12.0	7.40	960	65.0	C/CY	M/M	None

Pumped dry Yes No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 11.10 TOB/TOC 7.31 960 64.2

C/CY M/M None

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer: 13-6
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-22	9-14-85	1140	3	40ml	VQA	HCl	GAS/BTEX

REMARKS:

D.O. = 2

D.O. 2 = 2

SIGNATURE: J. MonnierPACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-2G LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: MW-23

CLIENT/STATION No.: ARCO/0608

FIELD TECHNICIAN: J.M. McNamara

WELL INFORMATION

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

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

CASING	GAL/
DIAMETER	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

- | |
|---|
| <input checked="" type="checkbox"/> Groundwater |
| <input type="checkbox"/> Duplicate |
| <input type="checkbox"/> Extraction well |
| <input type="checkbox"/> Trip blank |
| <input type="checkbox"/> Field blank |
| <input type="checkbox"/> Equipment blank |
| <input type="checkbox"/> Other: _____ |

$$\text{TD } \underline{2168} - \text{ DTW } \underline{12.14} = \underline{9.54} \quad \text{Gal/Linear} \times \text{Foot } \underline{0.38} = \underline{3.63} \quad \text{Number of Casings } \underline{3} \quad \text{Calculated Purge } \underline{10.88}$$

DATE PURGED: 9/14/95 START: 1111 END (2400 hr): 1123 PURGED BY: M

DATE SAMPLED: 9/14/95 START: 1123 END (2400 hr): 1126 SAMPLED BY: M

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 2.5°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>11/6</u>	<u>4.0</u>	<u>6.84</u>	<u>976</u>	<u>65.5</u>	<u>CUR</u>	<u>LT</u>	<u>None</u>
<u>11/9</u>	<u>9.0</u>	<u>6.82</u>	<u>982</u>	<u>66.2</u>	<u>CUR</u>	<u>LT</u>	<u>None</u>
<u>11/22</u>	<u>12.0</u>	<u>6.88</u>	<u>980</u>	<u>66.2</u>	<u>CUR</u>	<u>LT</u>	<u>None</u>

Pumped dry Yes / No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 12.14 TOB TOC 6.93 954 648 CUR LT None

PURGING EQUIPMENT/I.D.

Bailer:
 Centrifugal Pump: #3
 Other: _____

SAMPLING EQUIPMENT/I.D.

Bailer: 13-1
 Dedicated:
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-23</u>	<u>9/14/95</u>	<u>1125</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/B.TEX/MILK</u>

REMARKS:

D.O. : 1

D.D. : 2

SIGNATURE: J. M. McNamara



PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.2G LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-24
SAN LORENZO CACLIENT/STATION No.: ARCO/0608FIELD TECHNICIAN: J. Monnisen

WELL INFORMATION

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

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

CASING	GAL/	LINEAR FT.
DIAMETER		
<input checked="" 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	

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

$$\text{TD } \underline{20.77} - \text{ DTW } \underline{13.15} = \underline{7.62} \quad \text{Gal/Linear } \underline{0.17} \times \text{Foot } \underline{238} = \underline{130} \quad \text{Number of Casings } \underline{3} \quad \text{Calculated Purge } \underline{3.89}$$

DATE PURGED:	<u>9/15/95</u>	START:	<u>901</u>	END (2400 hr):	<u>909</u>	PURGED BY:	<u>DM</u>
DATE SAMPLED:	<u>9/15/95</u>	START:	<u>909</u>	END (2400 hr):	<u>911</u>	SAMPLED BY:	<u>DM</u>

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>903</u>	<u>1.5</u>	<u>7.9</u>	<u>988</u>	<u>67.8</u>	<u>BRN</u>	<u>MED</u>	<u>NONE</u>
<u>905</u>	<u>3.0</u>	<u>7.08</u>	<u>942</u>	<u>68.4</u>	<u>BRN</u>	<u>MED</u>	<u>NONE</u>
<u>908</u>	<u>4.5</u>	<u>6.98</u>	<u>926</u>	<u>68.0</u>	<u>BRN</u>	<u>MED</u>	<u>MEDIUM</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: 13.15 TOB 7.18 996 67.0 BRN LT MEDIUM

PURGING EQUIPMENT/I.D.

Baile: 13-3 Airlift Pump: _____
 Centrifugal Pump: _____ Dedicated: _____
 Other: _____

SAMPLING EQUIPMENT/I.D.

Baile: 13-3 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-24</u>	<u>9/15/95</u>	<u>910</u>	<u>3</u>	<u>40ml</u>	<u>VAA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS: DO. 1 = 2DO. 2 = 2Q.W. = 2SIGNATURE: John MonnisenPACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.2G LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-25
SAN LORENZO CA.CLIENT/STATION No.: ARCO/0608FIELD TECHNICIAN: J. MonnWELL 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 H2S
 Electronic indicator H2S
 Other: _____

CASINGDIAMETERGALLLINEAR FT.

<input checked="" 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: _____

$$\text{TD } \underline{20.91} - \text{ DTW } \underline{11.94} = \underline{8.97} \quad \text{Gal/Linear } \underline{0.17} \\ \times \text{Foot } \underline{0.38} = \underline{1.52} \quad \text{Number of Casings } \underline{3} \quad \text{Calculated Purge } \underline{4.58}$$

DATE PURGED:	<u>9/15/95</u>	START:	<u>941</u>	END (2400 hr):	<u>948</u>	PURGED BY:	<u>MM</u>
DATE SAMPLED:	<u>9/15/95</u>	START:	<u>948</u>	END (2400 hr):	<u>952</u>	SAMPLED BY:	<u>MM</u>

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>943</u>	<u>1.5</u>	<u>7.18</u>	<u>600</u>	<u>64.5</u>	<u>BRN</u>	<u>MED</u>	<u>none</u>
<u>946</u>	<u>3.0</u>	<u>7.16</u>	<u>600</u>	<u>64.9</u>	<u>BRN</u>	<u>MED</u>	<u>none</u>
<u>948</u>	<u>4.5</u>	<u>7.11</u>	<u>600</u>	<u>64.9</u>	<u>BRN</u>	<u>MED</u>	<u>none</u>

Pumped dry Yes / No

Cobalt 0-100	NTU 0-200
Clear	Heavy
Cloudy	Moderate
Yellow	Light
Brown	Trace

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 11.94 TOB/TOC 9.20 609 64.0PURGING EQUIPMENT/I.D. #

Bailer: 13-4 Airlift Pump: _____
 Centrifugal Pump: _____ Dedicated: _____
 Other: _____

SAMPLING EQUIPMENT/I.D. #

Bailer: 13-4
 Dedicated:
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-25</u>	<u>9/15/95</u>	<u>958</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS: D.O. 1D.O. 2Julian

SIGNATURE: _____

PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-2G LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-26
SAN LORENZO CACLIENT/STATION No.: ARCO/0608FIELD TECHNICIAN: J. Martin

WELL INFORMATION

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

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

CASING	GAL/
DIAMETER	LINEAR FT.
<input checked="" 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

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

$$\text{TD } \underline{19.65} - \text{ DTW } \underline{12.30} = \underline{7.35} \quad \text{Gal/Linear Foot } \underline{0.17} \\ \times \text{ Casings } \underline{3} = \underline{1.25} \quad \text{Number of Casings } \underline{3} \quad \text{Calculated} \\ = \text{Purge } \underline{375}$$

DATE PURGED: 9/15/95 START: 842 END (2400 hr): 851 PURGED BY: MMDATE SAMPLED: 9/15/95 START: 852 END (2400 hr): 856 SAMPLED BY: MM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>044</u>	<u>1.5</u>	<u>7.16</u>	<u>681</u>	<u>69.7</u>	<u>BRN</u>	<u>1100</u>	<u>none</u>
<u>847</u>	<u>3.0</u>	<u>7.16</u>	<u>670</u>	<u>65.4</u>	<u>BRN</u>	<u>1104</u>	<u>none</u>
<u>850</u>	<u>4.5</u>	<u>7.14</u>	<u>661</u>	<u>64.9</u>	<u>BRN</u>	<u>1104</u>	<u>none</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: 12.30 TOB TOC 7.21 680 64.0 COLOR: BRN LT: LT ODOR: none

PURGING EQUIPMENT/I.D.

Bailer: B1 Airlift Pump: _____
 Centrifugal Pump: _____ Dedicated: _____
 Other: _____

SAMPLING EQUIPMENT/I.D.

Bailer: B1
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-26</u>	<u>9/15/95</u>	<u>855</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GAS/B.TEX</u>

REMARKS:

DD.1DS.1SIGNATURE: J. Martin

PACIRC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 3300 006.26 LOCATION: 17601 HESPERIAN BLVD WELL ID #: E1-ACLIENT/STATION No.: ARCO/ 0608 FIELD TECHNICIAN: J.M. MONTANAWELL INFORMATION

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

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

CASING	GAL/L
DIAMETER	LINEAR FT.
<input type="checkbox"/> 2	0.17
<input 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 checked="" type="checkbox"/> 6	1.5
<input type="checkbox"/> 8	2.6

- | |
|---|
| <input type="checkbox"/> Groundwater |
| <input type="checkbox"/> Duplicate |
| <input checked="" type="checkbox"/> Extraction well |
| <input type="checkbox"/> Trip blank |
| <input type="checkbox"/> Field blank |
| <input type="checkbox"/> Equipment blank |
| <input type="checkbox"/> Other: _____ |

$$\text{TD } \underline{24.85} - \text{ DTW } \underline{10.65} = \underline{14.20} \quad \text{Gal/Linear Foot } \underline{1.5} = \underline{21.30} \times \text{Casings } \underline{3} \quad \text{Calculated } \underline{63.9}$$

$$= \text{Purge }$$

DATE PURGED: 9/15/95 START: 1106 END (2400 hr): 1127 PURGED BY: MDATE SAMPLED: 9/15/95 START: 1128 END (2400 hr): 1132 SAMPLED BY: M

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>11/4</u>	<u>22.</u>	<u>7.24</u>	<u>1174</u>	<u>61.8</u>	<u>GREY</u>	<u>MOD</u>	<u>HWT</u>
<u>11/9</u>	<u>44</u>	<u>6.95</u>	<u>1179</u>	<u>65.0</u>	<u>CLR</u>	<u>LT</u>	<u>MOD</u>
<u>11/25</u>	<u>66</u>	<u>6.91</u>	<u>1174</u>	<u>66.4</u>	<u>CLDY</u>	<u>LT</u>	<u>MOD</u>

Pumped dry Yes / No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 10.65 TOB TOC 7.36 1208 60.1 CLR LT MODPURGING EQUIPMENT/I.D. #

Bailer:
 Centrifugal Pump: #3
 Other: _____

Airlift Pump:
 Dedicated: PUMP

SAMPLING EQUIPMENT/I.D. #

Bailer: 13-13
 Dedicated: SAMPLE PORTION
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>E1-A</u>	<u>9/15/95</u>	<u>1130</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GAS/OTEX/11736</u>

REMARKS:

D.O. 1.0O2 0.02 1.5SIGNATURE: QuintonPACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-25

LOCATION: 17001 HESPERIA BLVD WELL ID #: SP-11V-4

CLIENT/STATION No.: DRC010608

FIELD TECHNICIAN: J. M. Montivin

WELL INFORMATION

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

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

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

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

$$TD \underline{20.30} - DTW \underline{11.80} = \underline{8.50} \text{ Gal/Linear Foot} \quad 017 = \underline{1.45} \text{ Number of Casings } 3 \quad \text{Calculated Purge } \underline{4.34}$$

DATE PURGED: 9/15/95 START: 1045 END (2400 hr): 1053 PURGED BY: JM
 DATE SAMPLED: 9/15/95 START: 1053 END (2400 hr): 1057 SAMPLED BY: JM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. ($\mu\text{mhos/cm}$ @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1047	1.5	6.93	1013	65.8	CLR	LT	Faint
1050	3.0	6.95	1026	65.9	CLR	LT	Faint
1053	6.5	6.97	1020	65.3	CLR	LT	Faint

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: 1180 TOB/TOC 6.94 1040 65.0

CLR LT None

PURGING EQUIPMENT/I.D.

Bailer: 13-6
 Centrifugal Pump:
 Other:

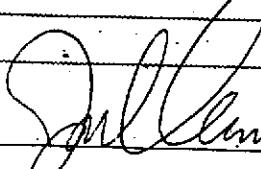
Airlift Pump:
 Dedicated:

SAMPLING EQUIPMENT/I.D.

Bailer: 13-6
 Dedicated:
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
SP-11V-4	9-15-95	1053	3	40ml	Vial	HCl	TDS, BTEX, TDS

REMARKS:

DO₁ = 1DO₂ = 2SIGNATURE: 

PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-25 LOCATION: 17(0) HESPERIA BUR WELL ID #: SP-1/VLSm
 SAN LORENZO CR
 CLIENT/STATION No.: 132010608 FIELD TECHNICIAN: J. Minnise

WELL INFORMATION

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

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

CASING	GAL/	SAMPLE TYPE
DIAMETER	LINEAR FT.	
<input type="checkbox"/> 2	<u>0.17</u>	<input checked="" type="checkbox"/> Groundwater
<input type="checkbox"/> 3	<u>0.38</u>	<input type="checkbox"/> Duplicate
<input type="checkbox"/> 4	<u>0.66</u>	<input type="checkbox"/> Extraction well
<input type="checkbox"/> 4.5	<u>0.83</u>	<input type="checkbox"/> Trip blank
<input type="checkbox"/> 5	<u>1.02</u>	<input type="checkbox"/> Field blank
<input type="checkbox"/> 6	<u>1.5</u>	<input type="checkbox"/> Equipment blank
<input type="checkbox"/> 8	<u>2.6</u>	<input type="checkbox"/> Other: _____

$$\text{TD } 18.94 - \text{ DTW } 10.76 = 8.18 \quad \text{Gal/Linear} \times \text{Foot} \quad 0.17 = 1.39 \quad \text{Number of Casings } 3 \quad \text{Calculated Purge } 417$$

DATE PURGED: 9/15/95 START: 1213 END (2400 hr): 1221 PURGED BY: DM

DATE SAMPLED: 9/15/95 START: 1222 END (2400 hr): 1227 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1215</u>	<u>1.5</u>	<u>7.16</u>	<u>1096</u>	<u>68.6</u>	<u>CLR</u>	<u>LT</u>	<u>NONE</u>
<u>1217</u>	<u>3.0</u>	<u>6.91</u>	<u>1117</u>	<u>69.8</u>	<u>CLR</u>	<u>LT</u>	<u>NONE</u>
<u>1220</u>	<u>4.5</u>	<u>6.90</u>	<u>1130</u>	<u>69.1</u>	<u>CLR</u>	<u>LT</u>	<u>NONE</u>

Pumped dry Yes / No

Cobalt 0-100	NTU 0-200
Clear	Heavy
Cloudy	Moderate
Yellow	Light
Brown	Trace

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 10.6 TOB/TOC 7.18 1110 68.2 CLR LT NONE

PURGING EQUIPMENT/I.D.

Bailer: 13-14 Airlift Pump: _____
 Centrifugal Pump: _____ Dedicated: _____
 Other: _____

SAMPLING EQUIPMENT/I.D.

Bailer: 13-14 Dedicated: _____
 Other: _____

SAMP. CNTL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>SP-2/VLS</u>	<u>9/15/95</u>	<u>1225</u>	<u>3</u>	<u>40mm</u>	<u>VFA</u>	<u>NAC</u>	<u>TOX/BTEX</u>

REMARKS:

DO. = 2

DO.2 = 2

J. Minnise

SIGNATURE:



PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25

LOCATION: 17(00) HESPERIA BUR WELL ID #: 590H
SAN JOSÉ CALIF.

CLIENT/STATION No.: 192c01 0408

FIELD TECHNICIAN: J. W. Wren

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: _____

<u>CASING</u>	<u>GAL/</u>
<u>DIAMETER</u>	<u>LINEAR FT.</u>
<input type="checkbox"/> 2	0.17
<input 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 _____ = _____ x Cal/Linear Foot _____ = _____ x Number of Casings _____ = Calculated Purge _____

DATE PURGED: 9-15-91 START: 1134 END (2400 hr): 1139 PURGED BY: DM

DATE SAMPLED: 9/18/93 START: 1139 END (2400 hr): 1141 SAMPLED BY: DM

Pumped dry Yes No

FIELD MEASUREMENTS AT TIME OF SAMPLE AFTER RECHARGE

DTW: NA TOB/TOC 7/10/19 1060/1069 QK 7.9

PURGING EQUIPMENT/L.D.

- Bailer: _____
- Centrifugal Pump: _____
- Other: _____

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

SAMPLING EQUIPMENT/I.D.

Bailer: _____
 Dedicated: Jerry
 Other: _____

REMARKS.

SIGNATURE.



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FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17(00) HESPERIA BLDG WELL ID #: 6334

CLIENT/STATION No.: VARCO 0408 FIELD TECHNICIAN: J. Monnier

WELL INFORMATION

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

Probe Type
and
I.D. #

Oil/Water interface _____
 Electronic indicator _____
 Other _____

<u>CASING</u>	<u>GAL/</u>
<u>DIAMETER</u>	<u>LINEAR FT.</u>
<input type="checkbox"/> 2	0.17
<input 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 _____ = _____ x Foot _____ = _____ x Casings _____ = Calculated
Gal/Linear _____ Number of _____ = Purge _____

DATE PURGED: 9/14/95 START: 1420 END (2400 hr): 1426 PURGED BY: MH

DATE SAMPLED: 9-14-98 START: 1426 END (2400 hr): 1432 SAMPLED BY: DM

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

Pumped dry Yes No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: NA TOB/TOC 7.41/7.31 861 / 890 680 / 683 CUR LT None

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/LD

Bailer: _____
 Dedicated: *Plump*
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
633H	9/17/95	1430	3	40ml	VIA	HCl	TPhy/BTEX/MTBE

REMARKS: *(Signature)*

201

D₁O₂ : 2

SIGNATURE:



PACIFIC
ENVIRONMENTAL
GROUP INC

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-25 LOCATION: 17(0) HESPERIA BLDG WELL ID #: 634H
 SAN LORENZO CA
 CLIENT/STATION No.: 192C010608 FIELD TECHNICIAN: J. Womar

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	GAL/	LINEAR FT.
DIAMETER		
<input type="checkbox"/> 2	0.17	
<input 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	

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

TD _____ - DTW _____ = _____ x Foot _____ = _____ Number of Casings _____ Calculated = Purge _____

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

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

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (μ mhos/cm @ 2.5°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
NOT ALLOWED							

Pumped dry Yes / No

Cobalt 0-100
Clear
Cloudy
Yellow
Brown

NTU 0-200
Heavy
Moderate
Light
Trace

Strong
Moderate
Faint
None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer: _____
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
634H			3	10ml	169	HCl	TPH/BTEX/MBE

REMARKS:

SIGNATURE: J. Womar



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GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-25 LOCATION: 17601 HESPERIA BLVD WELL ID #: 642H
 SAN LORÉNZO, CA
 CLIENT/STATION No.: 192C01 0608 FIELD TECHNICIAN: J. Monks

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	GAL/	SAMPLE TYPE
DIAMETER	LINEAR FT.	
<input type="checkbox"/> 2	0.17	<input checked="" type="checkbox"/> Groundwater
<input type="checkbox"/> 3	0.38	<input type="checkbox"/> Duplicate
<input type="checkbox"/> 4	0.66	<input type="checkbox"/> Extraction well
<input type="checkbox"/> 4.5	0.83	<input type="checkbox"/> Trip blank
<input type="checkbox"/> 5	1.02	<input type="checkbox"/> Field blank
<input type="checkbox"/> 6	1.5	<input type="checkbox"/> Equipment blank
<input type="checkbox"/> 8	2.6	<input type="checkbox"/> Other

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

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

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

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<i>NOT ALLOWED</i>							
<i>TO SAMPLE</i>							

Pumped dry Yes / No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/I.D.

Bailer: _____
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>642H</u>							<u>THg/BZK/MBE</u>

REMARKS: _____

SIGNATURE: Gillen



PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25

LOCATION

17(00) HESPERIAS BUR
WELL

WELL ID #

675A

CLIENT/STATION No.: 12RC0104e08

FIELD TECHNICIANS

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:

<u>CASING</u>	<u>GAL/</u>
<u>DIAMETER</u>	<u>LINEAR FT.</u>
<input type="checkbox"/> 2	0.17
<input 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 _____ = _____ x Foot _____ = _____ x Casings _____ = 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°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR

Pumped dry Yes / No

Cobalt 0-10
Clear
Cloudy
Yellow
Brown

NTU 0-20
Heavy
Moderate
Light
Trace

Strong
Moderate
Faint
None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D. #

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

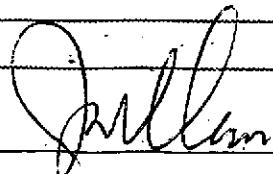
SAMPLING EQUIPMENT/L.D.

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
675H			3	40mL	VOR	HCl	TPhg (BRE) MTC

REMARKS:

SIGNATURE



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 171001 HESPERIAN BLVD WELL ID #: 17340VE

CLIENT/STATION No.: 122c010408

FIELD TECHNICIAN: J. H. DONNER

WELL INFORMATION

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

<u>CASING</u>	<u>GAL/</u>
<u>DIAMETER</u>	<u>LINEAR FT.</u>
<input type="checkbox"/> 2	0.17
<input 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 16.25 - DTW 14.80 = _____ x Gal/Linear _____ x Foot _____ = _____ x Casings _____ = Calculated Purge _____

DATE PURGED: START: END (2400 hr): PURGED BY:
DATE SAMPLED: 9-14-95 START: 1047 END (2400 hr): 1052 SAMPLED BY: DM

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE

DTW: 14.90 ^{AT GRADE} ~~TO BTOC~~ 7.00

1 645

- Clear
- Cloudy
- Yellow
- Brown

NTU 0-200
Heavy
Moderate
Light
Trace

Strong
Moderate
Faint
None

PURGING EQUIPMENT/I.D. #

- Bailer:
- Centrifugal Pump:
- Other:

SAMPLING EQUIPMENT/I.D. #

Bailer: DISP. BAKER
 Dedicated:
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
17348VE	9-14-98	1050	3	4mm	VOR	HCl	Thy/Brix/Misc

REMARKS:

D.O.: 1 mg/l

$$DQ_2 = 1 \text{ mg}$$

SIGNATURE:

-William



PACIFIC
ENVIRONMENTAL
GROUP INC

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-25 LOCATION: 17001 HESPERIA BLVD WELL ID #: 17197VMSAN LORENZO CrCLIENT/STATION No.: 192c010608FIELD TECHNICIAN: J. Manner

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	GAL/	LINEAR FT.
DIAMETER		
<input type="checkbox"/> 2	0.17	
<input 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	

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

TD _____ - DTW _____ = _____ x Foot _____ = _____ x Casings _____ Calculated _____
 = Purge _____

DATE PURGED: 9/14/95 START: 1200 END (2400 hr): 1212 PURGED BY: DMDATE SAMPLED: 9/14/95 START: 1212 END (2400 hr): 1217 SAMPLED BY: DM

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

*PURGED 15 GALLONS
BEFORE SAMPLING*

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: NA TOB/TOC 7.18/7.60 850/858 64.7/65.0 CLK LT done

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/I.D.

Bailer: _____
 Dedicated: Pump
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>17197VM</u>	<u>9/14/95</u>	<u>1215</u>	<u>3</u>	<u>40mL</u>	<u>VDA</u>	<u>HCl</u>	<u>THg, DEX, T/ME</u>

REMARKS:

DO₂ = 8DO₂ = 10SIGNATURE: J. MannerPACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

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

CLIENT/STATION No.: 19RC010408 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; _____

<u>CASING</u>	<u>GAL/</u>
<u>DIAMETER</u>	<u>LINEAR FT.</u>
<input type="checkbox"/> 2	0.17
<input 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 _____ = _____ x Foot _____ = _____ x Casings _____ = Purge _____

DATE PURGED: 9-14-95 START: 1233 END (2400 hr): 1237 PURGED BY: DM
DATE SAMPLED: 9/14/95 START: 1237 END (2400 hr): 1242 SAMPLED BY: M

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: NA TOB/TOC 7.36/7.37 920 929 680 68.5 LUR LT None

PURGING EQUIPMENT/L.D. #

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

SAMPLING EQUIPMENT/LP

Bailer: _____
 Dedicated: *Prop* _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
17863VM	9.14.95	1240	3	40ml	VOR	Flu	TPH/CTEX/MTBE

REMARKS:

Do. : 2

DO_2 : 2

SIGNATURE:



PACIFIC
ENVIRONMENTAL
GROUP INC

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17001 HESPERIA BLVD WELL ID #: 17302 VM
 SAN LORENZO CA
 CLIENT/STATION No.: 19201 0608 FIELD TECHNICIAN: J. MANNIG

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 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

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

TD _____ - DTW _____ = _____ x Foot _____ = _____ Number of Casings _____ Calculated = Purge _____

DATE PURGED: 9-14-95 START: 1246 END (2400 hr): 1253 PURGED BY: GM

DATE SAMPLED: 9-14-95 START: 1253 END (2400 hr): 1257 SAMPLED BY: GM

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

PURGED = 15 gallons
BENCH SAMPLE

Pumped dry Yes No

Cobalt D-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: NA TOB/TOC 756 / 7.41 920 / 935 169.0 / 69.2 CLR LT NITR

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/I.D.

Bailer: _____
 Dedicated: Pump
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>17302 VM</u>	<u>9-14-95</u>	<u>1255</u>	<u>3</u>	<u>40ml</u>	<u>VOR</u>	<u>HCl</u>	<u>TPh / BTEX / MTBE</u>

REMARKS:

D.O. = 1
D.O. = 1

SIGNATURE: John Mannig



PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17100 HESPERIA BLVD WELL ID #: 17349VMCLIENT/STATION No.: 132C01 0L008FIELD TECHNICIAN: J. M. MonizWELL 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	GAL
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

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

TD _____ - DTW _____ = _____ x Foot _____ = _____ x Casings _____ = Calculated Purge _____

DATE PURGED: 9-15-95 START: 1306 END (2400 hr): 1311 PURGED BY: MM

DATE SAMPLED: 9-15-95 START: 1312 END (2400 hr): 1317 SAMPLED BY: MM

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

PURGED APPROX 15 GALLONS BY PUMP SAMPLE

Pumped dry Yes No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: NA TOB/TOC 704/784 /06/1090 64.4/41°C RAIN LT/IT FAINT

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

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer: _____
 Dedicated: Pump
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>17349VM</u>	<u>9-15-95</u>	<u>1315</u>	<u>3</u>	<u>40m</u>	<u>DOA</u>	<u>HCl</u>	<u>Thioglycolate</u>

REMARKS: DO : 1
DO2 : 1SIGNATURE: Miller

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 176001 HESPERIA BLVD WELL ID #: 17371VM

CLIENT/STATION No.: WRCG 0408 FIELD TECHNICIAN: J. Johnson

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: _____

<u>CASING</u>	<u>GAL/</u>
<u>DIAMETER</u>	<u>LINEAR FT.</u>
<input type="checkbox"/> 2	0.17
<input 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 _____ = _____ x Gal/Linear Foot _____ = _____ x Number of Casings _____ = Calculated Purge _____

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

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

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. ($\mu\text{hos}/\text{cm} @ 25^\circ\text{C}$)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
NOT ABOVE AUG 10 100	2000	7.0	2000	70	SAMPLE		

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

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

~~PURGING EQUIPMENT/L.D. #~~

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

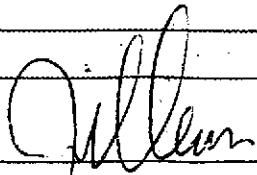
SAMPLING EQUIPMENT/I.D. #

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

SAMP. CNTRL # DATE TIME (2400) No. of Cont. SIZE CONTAINER PRESERVE ANALYTICAL PARAMETER
7737IVM 3 40ml VET HCl TPh/TS/ES/IM/B6

REMARKS:

SIGNATURE:



FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-25 LOCATION: 17100 HESPERIA BLVD WELL ID #: 17372VM
 SAN LORENZO, CA

CLIENT/STATION No.: 192c010408 FIELD TECHNICIAN: J. Martinez

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	GAL/	LINEAR FT.
DIAMETER		
<input type="checkbox"/> 2		0.17
<input 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

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

TD _____ - DTW _____ = _____ x Foot _____ = _____ x Casings _____ Calculated
 = Purge _____

DATE PURGED: 9/14/95 START: 1330 END (2400 hr): 1333 PURGED BY: M

DATE SAMPLED: 9/14/95 START: 1333 END (2400 hr): 1337 SAMPLED BY: M

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE °F	COLOR	TURBIDITY	ODOR
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	15 GALLONS	_____	_____	_____	_____
_____	_____	APPROX	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

Pumped dry Yes No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: NA TOB/TOC 136/7.34 946/937 656/66.4 CCR LT NONE

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer: _____
 Dedicated: plump
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>17372VM</u>	<u>9/14/95</u>	<u>1335</u>	<u>3</u>	<u>4dm</u>	<u>DR</u>	<u>HCl</u>	<u>TPHg/PAHs/MTBE</u>
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

REMARKS: _____

SIGNATURE: D. W. W.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-25 LOCATION: 17(00) HESPERIA BLVD WELL ID #: 17393VM
 SAN LORENZO Cr
 CLIENT/STATION No.: 192C01 OLe08 FIELD TECHNICIAN: J. Martin

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	GAL/	LINEAR FT.
DIAMETER		
<input type="checkbox"/> 2		0.17
<input 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

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

$$\text{TD } \underline{21.50} - \text{ DTW } \underline{17.50} = \underline{4.00} \text{ Gal/Linear Foot } \underline{0.66} = \underline{2.64} \text{ Number of Casings } \underline{3} \text{ Calculated Purge } \underline{1.92}$$

DATE PURGED: 9/15/95 START: 1241 END (2400 hr): 1252 PURGED BY: M

DATE SAMPLED: 9/15/95 START: 1252 END (2400 hr): 1257 SAMPLED BY: M

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1246</u>	<u>3.0</u>	<u>6.98</u>	<u>968</u>	<u>67.4</u>	<u>CLR</u>	<u>LT</u>	<u>None</u>
<u>1249</u>	<u>6.0</u>	<u>6.90</u>	<u>960</u>	<u>67.6</u>	<u>CLR</u>	<u>LT</u>	<u>None</u>
<u>1257</u>	<u>9.0</u>	<u>6.91</u>	<u>960</u>	<u>67.6</u>	<u>CLR</u>	<u>LT</u>	<u>None</u>

Pumped dry Yes No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 1750 TOB/TOC 071/0 TDS 1020 Temp 67.0

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/I.D.

Bailer: 13-6
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>17393VM</u>	<u>9/15/95</u>	<u>1255</u>	<u>3</u>	<u>4lme</u>	<u>VFA</u>	<u>HCl</u>	<u>TPh, BTEX, TPAE</u>

REMARKS: _____

DO₁ = 1

DO₂ = 2

SIGNATURE: Gillan

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17001 HESPERIA BLVD WELL ID #: 1720VM
 SAN LORENZO, CA
 CLIENT/STATION No.: 19201 0608 FIELD TECHNICIAN: J. W. 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	GAL/	LINEAR FT.
DIAMETER		
2		0.17
3		0.38
4		0.66
4.5		0.83
5		1.02
6		1.5
8		2.6

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

$$\text{TD } 26.00 \text{ DTW } 12.57 = 13.43 \quad \text{Gal/Linear} \times \text{Foot } 0.66 = 8.86 \quad \text{Number of Casings } 3 \quad \text{Calculated} = \text{Purge } 11.59$$

DATE PURGED: 9/14/95 START: 15:15:00 END (2400 hr): 16:00 PURGED BY: DM

DATE SAMPLED: 9/14/95 START: 15:47:00 END (2400 hr): 16:02 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
15:51	9.0	7.21	932	70.3	BEN	MED	FARM
15:55	18.0	7.07	930	70.0	CR	LT	FARM
15:59	27.0	7.00	927	69.1	CR	LT	FARM

Pumped dry Yes /

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 12.57 TOB/TOC 7.21 951 90.0 CR LT FARM

PURGING EQUIPMENT/I.D. #

Bailer: _____ Airlift Pump: _____
 Centrifugal Pump: 43 Dedicated: _____
 Other: _____

SAMPLING EQUIPMENT/I.D. #

Bailer: 1316 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
1720VM	9/14/95	16:05	3	4dm	JSA	H2O	TPH / BOD / TURB

REMARKS: DO, DO₂, T

DO₂ = 1
DO = 1
Sullivan

SIGNATURE: _____



PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

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

CLIENT/STATION No.: ARCO 0608 FIELD TECHNICIAN: J. M. Wiles

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:

<u>CASING</u>	<u>GAL/</u>
<u>DIAMETER</u>	<u>LINEAR FT.</u>
<input type="checkbox"/> 2	0.17
<input type="checkbox"/> 3	0.38
<input type="checkbox"/> 4	0.66
<input checked="" 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 _____ = _____ x Gal/Linear _____ = _____ Number of Casings _____ x Foot _____ = Calculated Purge _____

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: **TOB/TOC**

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

- SAMPLING EQUIPMENT/I.D. #**

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
TB-1	9-14-95	NA	2	40ml	VOA	HCl	GAS/BTEX

REMARKS: _____

SIGNATURE: William



Division of Atlantic Richfield Company

JJU-UU6, L6 Task Order No. 11016, UU

11016.00

ARCO Facility no.			City (Facility)			Project manager (Consultant)			Laboratory name								
0608			SAN LORENZO			KELLY BROWN			SEGDO/PA								
ARCO engineer			Telephone no. (ARCO)			Telephone no. (Consultant)			Contract number								
MIKE WHELAN			(408)441-7500			(408)441-7539											
Consultant name			Address (Consultant)			2025 GATEWAY PLACE, #140 SAN JOSE CA 95110											
PACIFIC ENVIRONMENTAL GROUP																	
Sample I.D.	Lab no.	Container no.	Matrix		Preservation		Sampling date	Sampling time	BTEX	BTX/TPH/GAS/TMB	TPH Modified 6015	Semi-Metals	Lead Org/DHS	TCLP	CMM Metals EPA 6010/7000	Lead EPA 7420/7421	Method of shipment
			Soil	Water	Other	Ice			Acid	60/2/EPA 8020								EPA 602/8020/8015	Gas	Diesel	Oil and Grease	413.1	413.2	TLC	VOC	Courier
MW-5	3		X		X	HCL	9/15-95	1045	X								
MN-7							9/15-95	1005									
Mh-8							9/15-95	1205									
Mh-9							9/15-95	940									
Mh-10							9/14-95	1505									
Mh-11							9/14-95	120									
Mh-13							9/15-95	1025									
Mh-14							9/14-95	1445									
Mh-15							9/14-95	1410									
Mh-16							9/14-95	1325									
Mh-17							9/14-95	1545									
Mh-18							9/14-95	1230									
MN-19							9/14-95	1620									
M-21							9/14-95	1206									
M-22							9/14-95	1140									
Mh-23			↓		↓		9/14-95	1125	↓								
Condition of sample:									Temperature received:								
Relinquished by sampler						Date	9/15-95	Time	1445	Received by							
Relinquished by						Date		Time		Received by							
Relinquished by						Date		Time		Received by laboratory							
						Date		Time									

ARCO Facility no.	0608	City (Facility)	SAN LORENZO		Project manager (Consultant)	KELLY BROWN		Laboratory name	SEQUOIA											
ARCO engineer	MIKE WHELAN		Telephone no. (ARCO)			Telephone no. (Consultant)	4084417500	Fax no. (Consultant)	408441-7539											
Consultant name	PACIFIC ENVIRONMENTAL GROUP		Address (Consultant)	2025 GATEWAY PLACE #406 SAN JOSE CA 95110		Contract number														
Sample I.D.	Lab no.	Container no.	Matrix		Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH 9/15/95 EPA MRD2402/20/8015	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 624/8240	EPA 625/8270	TCLP Metals <input type="checkbox"/> STLC <input type="checkbox"/>	Semi Metals EPA 601/07/7000 <input type="checkbox"/> VOA <input type="checkbox"/>	Method of shipment	
			Soil	Water	Other	Ice			Acid							COURIER				
MW-24	3	X	X	HCl	9/15/95	910	X													Special detection limit/reporting
MW-25	1				9/15/95	950														Special QA/QC
MW-26					9/15/95	855														Remarks
E-1A					9/15/95	1130														
SP-1					9/15/95	1055														
SP-2					9/15/95	1225														
59041					9/15/95	1140														
63341					9/14/95	1430														
17348VE					9/14/95	1050														
17197VM					9/14/95	1215														
17200VM					9/14/95	1605														
17203VM					9/14/95	1240														
17302VM					9/14/95	1255														
17349VM					9/15/95	1315														
17372VM					9/14/95	1325														
17393VM	↓	↓	↓	↓	9/15/95	1255	↓													
Condition of sample:									Temperature received:											
Relinquished by sampler					Date	9/15/95	Time	1445	Received by											
Relinquished by					Date		Time		Received by											
Relinquished by					Date		Time		Received by laboratory				Date	Time						

ARCO Products Company 
Division of AtlanticRichfieldCompany

53Q006.2G Task Order No. 1101600

Task Order No.

Chain of Custody

ARCO Facility no.	0608	City (Facility)	SAN LORENZO		Project manager (Consultant)	KELLY BROWN		Laboratory name SEQUOIA														
ARCO engineer	MIKE WHELAN	Telephone no. (ARCO)			Telephone no. (Consultant)	(408) 441-7500	Fax no. (Consultant)	(408) 441-7539														
Consultant name	PERAC ENVIRONMENTAL Group		Address (Consultant)	2025 GATEWAY PLACE SUITE 440, SAN JOSE CA 95110			Contract number															
Sample I.D.	Lab no.	Container no.	Matrix		Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH 602/EP 8015	TPH Modified 8015	Oil and Grease 413.1	TPH EPA 418.1/SM 503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals	Semi Volatile	CAM Metals EPA 601/97000	Lead Org/DHS	Method of shipment	
			Soil	Water	Other	Ice			Acid	Gas	Diesel	413.2	EPA 418.1/SM 503E	EPA 624/8240	EPA 625/8270	TTLC	STLC	Lead EPA 7420/7421	COURIER			
TB-1	2	X	X	HCl	9/1/95	NA	X															Special detection Limit/reporting
																						Special QA/QC
																						Remarks
																						Lab number
																						Turnaround time
																						Priority Rush 1 Business Day
																						Rush 2 Business Days
																						Expedited 5 Business Days
																						Standard 10 Business Days
Condition of sample:						Temperature received:																
Relinquished by sampler <i>J. Miller</i>						Date 9/15/95	Time 1445	Received by														
Relinquished by						Date	Time	Received by														
Relinquished by						Date	Time	Received by laboratory				Date		Time								

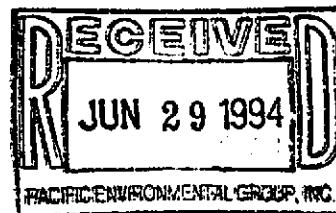
ATTACHMENT C

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



Sequoia Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
1900 Bates Avenue, Suite L Concord, CA 94520 (510) 686-9600 FAX (510) 686-9689
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100



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

Project: 330-006.26/608, San Lorenzo

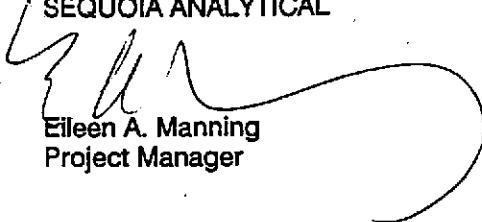
Enclosed are the results from 2 water samples received at Sequoia Analytical on June 15, 1994. The requested analyses are listed below:

4F89701	Water, INFL	6/14/94	EPA 5030/8015 Mod./8020
4F89702	Water, ESSL	6/14/94	Chemical Oxygen Demand pH Total Suspended Solids EPA 5030/8015 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



Sequoia
Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600
1900 Bates Avenue, Suite L Concord, CA 94520 (510) 686-9600
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (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 Project ID: 330-006.26/608, San Lorenzo
Sample Matrix: Water
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: 4F89701

Sampled: Jun 14, 1994
Received: Jun 15, 1994
Reported: Jun 28, 1994

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4F89701 INFL	Sample I.D. 4F89702 EFFL
Purgeable Hydrocarbons	50	230	N.D.
Benzene	0.50	12	N.D.
Toluene	0.50	N.D.	N.D.
Ethyl Benzene	0.50	16	N.D.
Total Xylenes	0.50	1.5	N.D.
Chromatogram Pattern:		Gas	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Analyzed:	6/16/94	6/16/94
Instrument Identification:	GCHP-3	GCHP-3
Surrogate Recove (QC Limits = 70-130%)	107	92

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

4F89701.PPP <1>



Sequoia
Analytical

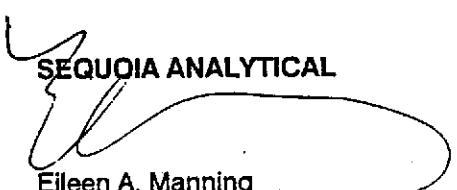
680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
1900 Bates Avenue, Suite L Concord, CA 94520 (510) 686-9600 FAX (510) 686-9689
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Project ID: 330-006.26/608, San Lorenzo Sample Descript: Water, EFL	Sampled: Jun 14, 1994 Received: Jun 15, 1994 Analyzed: see below Reported: Jun 28, 1994
--	---	--

LABORATORY ANALYSIS

Analyte	Date Analyzed	Detection Limit	Sample Result
Chemical Oxygen Demand, mg/L...	6/17/94	20	N.D.
pH (100mL)	6/15/94	1.0	6.8
Total Suspended Solids, mg/L.....	6/16/94	1.0	N.D.

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


SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager



**Sequoia
Analytical**

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---	---	--	--

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

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

QC Sample Group: 4F89701-02

Reported: Jun 28, 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#:	4F79202	4F79202	4F79202	4F79202
Date Prepared:	N.A.	N.A.	N.A.	N.A.
Date Analyzed:	6/15/94	6/15/94	6/15/94	6/15/94
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	110	107
Matrix Spike Duplicate % Recovery:	110	110	110	113
Relative % Difference:	9.5	9.5	0.0	5.5

LCS Batch#:

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

LCS % Recovery:

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

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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: 4F89702

Reported: Jun 28, 1994

QUALITY CONTROL DATA REPORT

ANALYTE Chemical Oxygen
Demand

Method: EPA 410.4
Analyst: C. Hirotsu

MS/MSD
Batch#: 4F89702

Date Prepared: 6/17/94
Date Analyzed: 6/17/94
Instrument I.D.#: N.A.
Conc. Spiked: 100 mg/L

Matrix Spike
% Recovery: 101

Matrix Spike
Duplicate %
Recovery: 95

Relative %
Difference: 6.1

LCS Batch#:

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

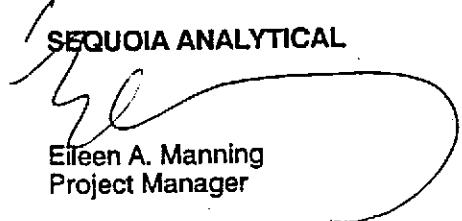
LCS %
Recovery:

% 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



Sequoia
Analytical

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

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

QC Sample Group: 4F89702

Reported: Jun 28, 1994

QUALITY CONTROL DATA REPORT

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

Date Analyzed: 6/15/94 6/16/94

Sample #: 4F83301 4F89401

Sample Concentration: 6.7 50

Sample Duplicate Concentration: 6.7 50

% RPD: 0.0 0.0

Control Limits: 0-30 0-30

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

4F89701.PPP <5>

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME:
REC. BY (PRINT):PEGDWMASTER LOG NO. / PAGE:
DATE OF LOG-IN:

9406897

6-15-94

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE	DASH	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
	1	2	3-AFL 4-PL	5 vols 3 vols 3 vols - COV 2-500ml P-Platz	W	6/14	
1. Custody Seal(s): Present / <u>Absent</u> Intact / Broken*	1	4-C	3-AFL	5 vols	W	6/14	
2. Custody Seal Nos.: _____	2	4-H	4-PL	3 vols			
3. Chain-of-Custody Records: <u>Present</u> / Absent*		↓	↓	3 vols - COV			
4. Traffic Reports or Packing List: Present / <u>Absent</u>				2-500ml P-Platz			
5. Airbill: Airbill / Sticker Present / <u>Absent</u>							
6. Airbill No.: _____							
7. Sample Tags: Present / <u>Absent</u> Sample Tag Nos.: <u>Listed</u> / Not Listed on Chain-of-Custody							
8. Sample Condition: <u>Intact/Broken</u> / Leaking*							
9. Does Information on <u>Yes</u> / No* custody reports, traffic reports and sample tags agree?							
10. Proper Preservatives Used: <u>Yes</u> / No*							
11. Date Rec. at Lab: 6/15/94							
12. Time Rec. at Lab: 1105							



Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8

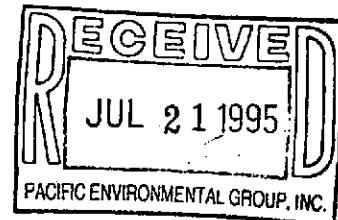
Redwood City, CA 94063
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FAX (916) 921-0100

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

Project: 330-006.5B/608, San Lorenzo



Enclosed are the results from samples received at Sequoia Analytical on July 7, 1995. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
950733501	LIQUID, Infl	7/6/95	TPHGB Purgeable TPH/BTEX
950733502	LIQUID, Effl	7/6/95	TPHGB Purgeable TPH/BTEX

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

Very truly yours,

SEQUOIA ANALYTICAL

Bruce Fletcher

Bruce Fletcher
Project Manager

Mike Gray
Quality Assurance Department



Sequoia
Analytical

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

Attention: Maree Doden

Client Proj. ID: 330-006.5B/608, San Lorenzo
Sample Descript: Infl
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9507335-01

Sampled: 07/06/95
Received: 07/07/95
Analyzed: 07/10/95
Reported: 07/19/95

Batch Number: GC071095BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	270
Benzene	0.50	2.4
Toluene	0.50	N.D.
Ethyl Benzene	0.50	7.6
Cylenes (Total)	0.50	1.0
Chromatogram Pattern:	.....	Gas
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	90

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

EQUOIA ANALYTICAL - ELAP #1210

Brucie Fletcher

Brucie Fletcher
Object Manager



Sequoia
Analytical

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FAX (415) 364-9233
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FAX (916) 921-0100

acific Environmental Group
325 Gateway Place, Suite 440
an Jose, CA 95110

ttention: Maree Doden

Client Proj. ID: 330-006.5B/608, San Lorenzo
Sample Descript: Effl
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9507335-02

Sampled: 07/06/95
Received: 07/07/95
Analyzed: 07/10/95
Reported: 07/19/95

Batch Number: GC071095BTEX21A
Instrument ID: GCHP21

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.
Methyl Benzene	0.50	N.D.
Olefins (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	82

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

EQUOIA ANALYTICAL - ELAP #1210

Bruce Fletcher

Bruce Fletcher
Project Manager



**Sequoia
Analytical**

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

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

Client Project ID: 330-006.5B/608, San Lorenzo
Matrix: LIQUID

Work Order #: 9507335 01 02

Reported: Jul 20, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC071095BTEX21A	GC071095BTEX21A	GC071095BTEX21A	GC071095BTEX21A
Anal. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950713906	950713906	950713906	950713906
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/10/95	7/10/95	7/10/95	7/10/95
Analyzed Date:	7/10/95	7/10/95	7/10/95	7/10/95
Instrument I.D. #:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	11	11	32
MS % Recovery:	100	110	110	107
Dup. Result:	9.3	9.5	9.4	29
MSD % Recov.:	93	95	94	97
RPD:	7.3	15	16	9.8
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

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

LCS Result:
LCS % Recov.:

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

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

Brucie Fletcher
Project Manager

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

9507335.PPP <1>

ARCO PRODUCTS COMPANY
Division of AtlanticRichfield Company

330-006.5B

Task Order No.

1702100

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



Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
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Walnut Creek, CA 94598
Sacramento, CA 95834

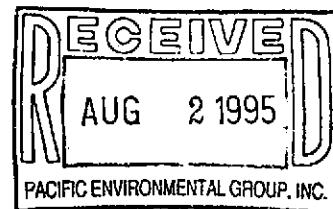
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FAX (916) 921-0100

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

Project: 330-006.5B/608, San Lorenzo

Enclosed are the results from samples received at Sequoia Analytical on July 19, 1995. The requested analyses are listed below:



SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
9507A8101	LIQUID, EFFL	7/17/95	EPA 410.4 pH EPA 160.2

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

Bruce Fletcher

Bruce Fletcher
Project Manager

Millian Anthony

Quality Assurance Department



Sequoia
Analytical

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

Client Proj. ID: 330-006.5B/608 San Lorenzo
Lab Proj. ID: 9507A81

Sampled: 07/17/95
Received: 07/19/95
Analyzed: see below

Attention: Maree Doden

Reported: 07/30/95

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9507A81-01				
Sample Desc : LIQUID,EFFL				
Chemical Oxygen Demand	mg/L	07/21/95	20	N.D.
pH	pH Units	07/20/95	N/A	7.0
Total Suspended Solids	mg/L	07/21/95	1.0	2.5

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

SEQUOIA ANALYTICAL - ELAP #1210

Brucie Fletcher

Brucie Fletcher
Project Manager



Sequoia
Analytical

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

Client Project ID: 330-006.5B/608, San Lorenzo
Matrix: LIQUID

Work Order #: 9507A81 01

Reported: Aug 1, 1995

QUALITY CONTROL DATA REPORT

Analyte: Chemical Oxygen Demand

QC Batch#: IN072195410400A
Analy. Method: EPA 410.4
Prep. Method: N.A.

Analyst: D. Lawrence
MS/MSD #: 9507A2801
Sample Conc.: 150
Prepared Date: 7/21/95
Analyzed Date: 7/21/95
Instrument I.D.#: MANUAL
Conc. Spiked: 100 mg/L

Result: 230
MS % Recovery: 80

Dup. Result: 230
MSD % Recov.: 80

RPD: 0.0
RPD Limit: 0-30

LCS #:

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

LCS Result:
LCS % Recov.:

MS/MSD	
LCS	70-130
Control Limits	

SEQUOIA ANALYTICAL

Brucie Fletcher
Brucie Fletcher
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.



Sequoia
Analytical

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

Client Project ID: 330-006.5B/608, San Lorenzo
Matrix: LIQUID

Work Order #: 9507A81 01

Reported: Aug 1, 1995

QUALITY CONTROL DATA REPORT

Analyte:	pH	Total Suspended Solids
QC Batch:	IN072095150100A	IN072195160200A
Analy. Method:	EPA 150.1	EPA 160.2
Prep Method:	N.A.	N.A.

Analyst: S. Lee S. Lee

Duplicate Sample #: 9507A5801 9507B9001

Prepared Date: 7/20/95 7/21/95
Analyzed Date: 7/20/95 7/21/95
Instrument I.D.#: MANUAL MANUAL

Sample Concentration: 8.0 42

Dup. Sample Concentration: 8.0 57

RPD: 0.0 30
RPD Limit: 0-30 0-30

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

SEQUOIA ANALYTICAL

Brucie Fletcher

Brucie Fletcher
Project Manager

** RPD = Relative % Difference

9507A81.PPP <2>

ARCO Products Company

Division of Atlantic Richfield Company

330-xx6.5B

Task Order No.

0332700

Chain of Custody

ARCO Facility no.	(608)	City (Facility)	San Lorenzo	Project manager (Consultant)	Shaw Environmental		Laboratory name											
ARCO engineer	Michele Whelan	Telephone no. (ARCO)		Telephone no. (Consultant)	(408)441-7560	Fax no. (Consultant)	Seymour											
Consultant name	PACIFIC Env Group	Address (Consultant)	2025 Lake Valley Pl H440 San Jose				Contract number											
Sample I.D.	Lab no.	Container no.	Matrix	Preservation	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA 602/EPA 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/SIHS/530E	EPA 601/8010	EPA 624/8240	TCLP EPA 601/807000 TTLPC <input type="checkbox"/>	Semi Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA	CAN Metals EPA 601/807000 TTLPC <input type="checkbox"/>	Lead Org/DHS <input type="checkbox"/> Lead EPA 7420/7421 <input type="checkbox"/>	Method of shipment
EFFL	1	X	X		7-19-95	01 A										X	Special detection Limit/reporting	
ICFFL	1															X	Special QA/QC	
FFFL	1																Remarks	
Condition of sample:					Temperature received:													
Relinquished by sampler					Date	Time	Received by											
<i>Jayne</i>					7-19-95	700	<i>Doden</i>											
Relinquished by					Date	Time	Received by											
<i>Doden</i>					7/19/95	11:00	<i>Brian</i>											
Relinquished by					Date	Time	Received by laboratory		Date	Time								
<i>Jayne</i>					7/19	12:10	<i>Brian</i>		7/19/95	12:00								

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

APC 3202 (2-91)

FIELD SERVICES / ROUTINE O&M REQUEST

Identification

Project # 330-006.5B
 Station # 0608
 Site Address: 17601 Hesperian Blvd
@ Hacienda Avenue
 County: Alameda
 Project Manager: Shaw Garakani
 Requestor: Steve Johnston
 Client: ARCO
 Client P.O.C.: Mike Whelan
 Revision Date: June 1, 1995
 Laboratory: Sequoia Analytical

Request Frequency: Monthly

	Initials	Date
F/S	<u>RY</u>	<u>6/2/95</u>
Copy/Dist	<u>RY</u>	<u>↓</u>

Site Remedial Technologies:Groundwater Extraction
(GWE)
Complete attached Data Sheets as prescribed in the following table:Scheduling Table

Data Sheet Section(s) / Part(s)	To be Completed	Budgeted Hrs	Actual Hrs	Mob-de Mob	Completed
GWE(A, B, C, D, F)	monthly†		2	2	yes
GWE(E,G)	quarterly				yes

† = sampling to be performed

Definition of frequencies:

weekly = N/A
 monthly = N/A
 quarterly = once every quarter in months 3, 6, 9 ,12 on week 1
 semi-annually = N/A

Field Technician Response:

Completed by: JV
 Arrival time: 10:20
 Sample this visit?: Yes

Date: 6-5-95
 Departure time: 1150
 Engineer contacted? Yes SJ

Date: 6-5-95

Groundwater Extraction & Treatment System

ARCO Service Station 0608

17691 Hesperian Boulevard

330-006.5B

May 24, 1995

System Description:

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

Carbon Vessels: Three ASC-1.200

Filter:

PART A: SYSTEM DATA

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

MEASUREMENT	ON ARRIVAL	ON DEPARTURE
TOTALIZER (gallons)	0848670	0848810
FILTER INLET PRESSURE (psig)	10	(ideal range: 8 to 12 psig) 10
CARBON #1 INLET PRESSURE (psig)	8	(ideal range: 5 to 9 psig) 8
CARBON #2 INLET PRESSURE (psig)	5	(ideal range: 1 to 4 psig) 5
DISCHARGE PRESSURE (psig)	2	(ideal range: 0 to 2 psig) 2

PART B: COMMENTS

PART C: WELL DATA

WELL	DTW/DTL (TOB)	TOTALIZER (gallons)	FLOWRATE (gpm)	COMMENTS/ ADJUSTMENTS
E-1A	2070 / 20.70	0848670	29PM	

PART D: SAMPLING & READINGS I

SAMPLE	ANALYSIS	COMPLETED
INFLUENT	TPH-gasoline, BTEX compounds	Yes
EFFLUENT	TPH-gasoline, BTEX compounds	Yes

PART E: SAMPLING & READINGS II

EFFLUENT	TEMPERATURE (°F)	CONDUCTIVITY (umhos)	pH (units)	DISSOLVED OXYGEN (ppm)
	67.5	1008	7.59	1

PART F: SYSTEM MAINTENANCE I

ELECTRIC METER READING (kw hrs)	16156	HOUR METER READING (hrs)	27720
NUMBER OF SPARE FILTERS ON SITE?	13	CHANGE FILTERS? (if necessary)	Yes
TEST ALARM SWITCHES	Yes		

of Atlantic Richfield Company

Task Order No.

ARCO Facility no.	608	City (Facility)	San Lorenzo		Project manager (Consultant)	Shaw GAIKANI		Laboratory name											
ARCO engineer	Mike Whelan		Telephone no. (ARCO)		Telephone no. (Consultant)	408 4417500	Fax no. (Consultant)	408 441 7139											
Consultant name	PACIFIC Env Group		Address (Consultant)	2025 Gate way pl #440 San Jose				Contract number											
Sample I.D.	Lab no.	Container no.	Matrix		Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/EPA 8015	TPH Modified 8015 Gas	Oil and Grease 413.1	TPH EPA 418.1/MS-53E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TGIP Metals	Sami Metals	Method of shipment
			Soil	Water	Other	Ice			Acid			<input type="checkbox"/> Diesel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 413.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
InFL	3	X	X	HCl	6-5-95			X	X										
EFFL	3	X	X	X	X			X	X										
Condition of sample:						Temperature received:													
Relinquished by sampler			Date	Time	Received by														
			6-6-95	700															
Relinquished by			Date	Time	Received by														
Relinquished by			Date	Time	Received by laboratory					Date		Time							

FIELD SERVICES / ROUTINE O&M REQUEST

Identification	Request Frequency: Monthly
Project #	<u>330-006.5B</u>
Station #	<u>0608</u>
Site Address:	<u>17601 Hesperian Blvd</u> <u>@ Hacienda Avenue</u>
County:	<u>Alameda</u>
Project Manager:	<u>Shaw Garakani</u>
Requestor:	<u>Steve Johnston</u>
Client:	<u>ARCO</u>
Client P.O.C.:	<u>Mike Whelan</u>
Revision Date:	<u>June 1, 1995</u>
Laboratory:	<u>Sequoia Analytical</u>

	Initials	Date
F/S	<u>RJ</u>	<u>7/10/95</u>
Copy/Dist.	<u>RJ</u>	<u>↓</u>

Site Remedial Technologies:Groundwater Extraction
(GWE)Complete attached Data Sheets as prescribed in the following table:**Scheduling Table**

Data Sheet Section(s) / Part(s)	To be Completed	Budgeted Hrs	Actual Hrs	Mob-de Mob	Completed
GWE(A, B, C, D, F)	monthly†		<u>2.5</u>	<u>1</u>	<u>Yes</u>
GWE(E,G)	quarterly				

† = sampling to be performed

Definition of frequencies:

- weekly = N/A
 monthly = once every month on week 1
 quarterly = once every quarter in months 3, 6, 9 ,12 on week 1
 semi-annually = N/A

Field Technician Response:

Completed by: DV
 Arrival time: 8:50
 Sample this visit? yes

Date: 7-6-95
 Departure time: 11:30
 Engineer contacted? yes

Date:

7-6-95

Groundwater Extraction & Treatment System

ARCO Service Station 0608

17601 Hesperian Boulevard

330-006.5B

May 24, 1995

System Description:**Groundwater Pumps**

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

Carbon Vessels: Three ASC-1,200

Filter: _____

PART A: SYSTEM DATASystem on upon arrival? yes (if no, specify reason in comments)

ELECTRIC METER READING (kw hrs)	16616	HOUR METER READING (hrs)	28464
------------------------------------	-------	-----------------------------	-------

MEASUREMENT	ON ARRIVAL	ON DEPARTURE
TOTALIZER (gallons)	0921170	0921260
FILTER INLET PRESSURE (psig)	10	(ideal range: 8 to 12 psig) 6
CARBON #1 INLET PRESSURE (psig)	8	(ideal range: 5 to 9 psig) 6
CARBON #2 INLET PRESSURE (psig)	5	(ideal range: 1 to 4 psig) 5
DISCHARGE PRESSURE (psig)	0	(ideal range: 0 to 2 psig) 0

PART B: COMMENTS

PART C: WELL DATA

* ALLOW SYSTEM TO RUN 1 HOUR BEFORE OBTAINING DTW READINGS

WELL	DTW (TOB)	TOTALIZER (gallons)	FLOWRATE (gpm)	COMMENTS/ ADJUSTMENTS
E-1A	18-11	0921170	2	

WELL	DTW (TOB)	WELL	DTW (TOB)	WELL	DTW (TOB)
MW-5	12.09	MW-8	12.20		MW-9 10.09

PART D: SAMPLING

SAMPLE	ANALYSIS	COMPLETED
INFLUENT	TPH-gasoline, BTEX compounds	yes
EFFLUENT	TPH-gasoline, BTEX compounds	yes

PART E: READINGS

EFFLUENT	TEMPERATURE (°F)	CONDUCTIVITY (umhos)	pH (units)	DISSOLVED OXYGEN (ppm)

PART F: SYSTEM MAINTENANCE I

NUMBER OF SPARE FILTERS ON SITE?	14	CHANGE FILTERS? (if necessary)	yes
SWEEP ENCLOSURE	yes		

PART G: SYSTEM MAINTENANCE II

TEST ALARM SWITCHES		BACKFLUSH CARBONS	
CLEAN TOTALIZERS			

ARCO Facility no.	608	City (Facility)	San Lorenzo		Project manager (Consultant)	Shaw Garabini		Laboratory name																				
ARCO engineer	Mike Whelan		Telephone no. (ARCO)			Telephone no. (Consultant)	408 441 7500	Fax no. (Consultant)																				
Consultant name	Pacific Env Group		Address (Consultant)		2025 Gate Way Pl #480 San Jose			Contract number																				
Sample I.D.	Lab no.	Container no.	Matrix		Preservation		Sampling date	Sampling time	Method of shipment																			
			Soil	Water	Other	Ice			Acid	BTEX	602/EPA 8020	BTEX/TPH	EPA 4020/6020/8015	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	EP 416.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP	Semi Metals <input type="checkbox"/>	NOM <input type="checkbox"/>	CAN Metals EPA 8010/7000	TLC ☐	STLC ☐	Lead Organics ☐	Lead EPA 7420/7421 ☐
JW	3	X	X	HCl	7-6-95		X																					
FFP	3	X	X	HCl	X		X																					
Condition of sample:										Temperature received:										Remarks								
Relinquished by sample				Date	7-7-95	Time	700	Received by										Lab number										
Relinquished by				Date		Time		Received by										Turnaround time										
Relinquished by				Date		Time		Received by laboratory								Date	Time	Priority Rush 1 Business Day										
																		Rush 2 Business Days										
																		Expedited 5 Business Days										
																		Standard 10 Business Days										

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

FIELD SERVICES / O&M REQUEST JV Work Order # 4500

SITE INFORMATION FORM

IdentificationProject # 730-06-58Station # 608

Site Address: _____

County: _____

Project Manager: JHAWKRequestor: 1Client: ARCOProject Type

<input type="checkbox"/>	1st Time Visit
<input type="checkbox"/>	Quarterly
<input type="checkbox"/>	1st <input type="checkbox"/> 2nd <input type="checkbox"/> 3rd <input type="checkbox"/> 4th
<input type="checkbox"/>	Monthly Initials Date
<input type="checkbox"/>	Semi-Monthly <u>FIS</u> <u>R-1 7/14/95</u>
<input type="checkbox"/>	Weekly
<input checked="" type="checkbox"/>	Copy/Reprint <u>R-1</u> <u>↓</u>
<input type="checkbox"/>	Other: _____

Client P.O.C.: KILE C.Date of Request 7/14/95Ideal field date(s): MUST BE
JULY 95Check Appropriate CategoryBudget Hrs. 1Actual Hrs. 1Mob de Mob 1**FILE COPY**Field Tasks: For General Description

circle one:

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

1. Conduct a site visit to obtain GW samples for
The following analysis

PH, TSS, COD

* THIS TASK MUST BE COMPLETED DURING JULY 95

(Try to coordinate with other regular visits in the
area please)Comments, remarks, etc. from Field Staff (include problems encountered and out-of-scope work)

Task Completed

 Samples taken Samples not required Soil Vapor Groundwater Weekly Semi-Monthly Monthly Quarterly Semi-Annual

PACIFIC ENVIRONMENTAL GROUP, INC.

Completed by: JV Date: 7-17-95

Checked by: _____

ARCO Products Company

Division of Atlantic Richfield Company

330 006 5B Task Order No.

0332700

Chain of Custody

Work Order # 953615

FIELD SERVICES / ROUTINE O&M REQUEST

Identification

Project # 330-006.5B
 Station # 0608
 Site Address: 17601 Hesperian Blvd
@ Hacienda Avenue
 County: Alameda
 Project Manager: Shaw Garakani
 Requestor: Steve Johnston
 Client: ARCO
 Client P.O.C.: Mike Whelan
 Revision Date: June 1, 1995
 Laboratory: Sequoia Analytical

Request Frequency: Monthly

	Initials	Date
F/S	<u>RF</u>	<u>8/13/95</u>
Con/Visit	<u>RF</u>	

Site Remedial Technologies:Groundwater Extraction
(GWE)Complete attached Data Sheets as prescribed in the following table:Scheduling Table

Data Sheet Section(s) / Part(s)	To be Completed	Budgeted Hrs.	Actual Hrs.	Mob-de Mob	Completed
GWE(A, B, C, D, F)	monthly†			?	
GWE(E,G)	quarterly				Yes

† = sampling to be performed

Definition of frequencies:

weekly = N/A

monthly = once every month on week 1

quarterly = once every quarter in months 3, 6, 9 ,12 on week 1

semi-annually = N/A

Field Technician Response:Completed by: JVDate: 8-21-95Arrival time: 9AMDeparture time: 12:00Sample this visit? yesEngineer contacted? yes

Date: 8-21-95

Groundwater Extraction & Treatment System
ARCO Service Station 0608
17601 Hesperian Boulevard
330-006.5B
July 11, 1995

System Description:**Groundwater Pumps**

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

Carbon Vessels: Three ASC-1,200

Filter: _____

PART A SYSTEM DATASystem on upon arrival? yes (if no, specify reason in comments)

ELECTRIC METER READING (kw hrs)	HOUR METER READING (hrs)
<u>172.59</u>	<u>29368</u>

MEASUREMENT	ON ARRIVAL	ON DEPARTURE
TOTALIZER (gallons)	<u>0993320</u>	System was start clean <u>0993320</u>
FILTER INLET PRESSURE (psig)	<u>12</u>	(ideal range: 8 to 12 psig)
CARBON #1 INLET PRESSURE (psig)	<u>9</u>	(ideal range: 5 to 9 psig)
CARBON #2 INLET PRESSURE (psig)	<u>5</u>	(ideal range: 1 to 4 psig)
DISCHARGE PRESSURE (psig)	<u>0</u>	(ideal range: 0 to 2 psig)

PART B COMMENTS Pump was pulled as per
w/o # 4620

PART C: WELL DATA

* ALLOW SYSTEM TO RUN 1 HOUR BEFORE OBTAINING DTW READINGS

WELL	DTW (TOB)	TOTALIZER (gallons)	FLOWRATE (gpm)	COMMENTS/ ADJUSTMENTS
E-1A	1860	Same	2.0	

WELL	DTW (TOB)	WELL	DTW (TOB)	WELL	DTW (TOB)
MW-5	12,49	MW-8	11-60	MW-9	10,00

PART D: SAMPLING

SAMPLE	ANALYSIS	COMPLETED
INFLUENT	TPH-gasoline, BTEX compounds	Yes
EFFLUENT	TPH-gasoline, BTEX compounds	Yes

PART E: SAMPLING & READINGS

EFFLUENT	TEMP (°F)	CONDUCTIVITY (umhos)	pH (units)	DISSOLVED OXYGEN (ppm)

SAMPLE	ANALYSIS	COMPLETED
EFFLUENT	COD, SS	

PART F: SYSTEM MAINTENANCE I

NUMBER OF SPARE FILTERS ON SITE?	13	CHANGE FILTERS? (if necessary)	Yes
SWEEP ENCLOSURE	06		

PART G: SYSTEM MAINTENANCE II

TEST ALARM SWITCHES		BACKFLUSH CARBONS	
CLEAN TOTALIZERS			

ARCO Facility no.	608	City (Facility)	HAYWARD			Project manager (Consultant)	Shaw Barakami			Laboratory name								
ARCO engineer	Mike Wilson			Telephone no. (ARCO)	408 441 7504			Fax no. (Consultant)	408 441 7559	SEQUOIA								
Consultant name	PACIFIC ENV Group			Address (Consultant)		2025 Gate Way Rd #440 San Jose			Contract number									
Sample I.D.	Lab no.	Container no.	Matrix		Preservation		Sampling date	Sampling time	BTEX	BTEX/TPH	TPH Modified 80/5	Oil and Grease	TCLP	Semi	CAM Metals EPA 8010/7000	Lead Organics	Lead EPA 7420/7421	Method of shipment
			Soil	Water	Other	Ice			Acid	602/EPA 8020			EPA M602/B20/8015	Gas <input type="checkbox"/>				
JNFC	3	X	X	HCl	8-21-91		X											Special detection limit/reporting
EFPL	3	X	X	HCl	X		X											Special QA/QC
																		Remarks
																		Lab number
																		Turnaround time
																		Priority Rush 1 Business Day <input type="checkbox"/>
																		Rush 2 Business Days <input type="checkbox"/>
																		Expedited 5 Business Days <input type="checkbox"/>
																		Standard 10 Business Days <input checked="" type="checkbox"/>
Condition of sample:						Temperature received:												
Relinquished by sampler			Date	Time	Received by													
Relinquished by			Date	Time	Received by													
Relinquished by			Date	Time	Received by laboratory				Date	Time								

SITE INFORMATION FORM

IdentificationProject # 330-006.5BStation # 0608Site Address: 17601 Mission Blvd.San Lorenzo, CACounty: AlamedaProject Manager: SGRequestor: SJClient: ARCOProject Type

<input type="checkbox"/> 1st Time Visit
<input type="checkbox"/> Quarterly
<input checked="" type="checkbox"/> 1st <input type="checkbox"/> 2nd <input type="checkbox"/> 3rd <input type="checkbox"/> 4th
<input type="checkbox"/> Monthly
<input type="checkbox"/> Semi-Monthly <u>R1</u> <u>8/23/95</u>
<input type="checkbox"/> Weekly <u>COPY/DIST.</u> <u>R1</u> <u>↓</u>
<input checked="" type="checkbox"/> One time event
<input type="checkbox"/> Other: _____

Client P.O.C.: MWDate of Request 8/17/95Ideal field date(s):
8/21/95Check Appropriate Category

Budget Hrs. 2 (pump service only)
 Actual Hrs. 1
 Mob de Mob _____

Field Tasks: For General Description

circle one:

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

- PERFORM MONTHLY O&M
- PULL PUMP
- HAVE INSPECTED / TUNED-UP / CLEANED By BARTON PUMPS
- STORE PUMP IN WAREHOUSE, CLEARLY MARKED AS "ARCO STATION 0608" DO NOT USE

Comments, remarks, etc. from Field Staff (include problems encountered and out-of-scope work)TASK Completed Samples taken Samples not required Soil Vapor Groundwater Weekly Semi-Monthly Monthly Quarterly Semi-Annual

PACIFIC ENVIRONMENTAL GROUP, INC.

Completed by: JV Date: 8-21-95

Checked by: _____

FIELD SERVICES / O&M REQUEST JV Work Order # 4622

SITE INFORMATION FORM

IdentificationProject # 330-006.5BStation # 6608

Site Address: 17601 Missouri Blvd
San Lorenzo, CA
 County: Alameda

Project Manager: S6Requestor: SJClient: ARCOProject Type

<input type="checkbox"/>	1st Time Visit
<input type="checkbox"/>	Quarterly
<input type="checkbox"/>	1st <input type="checkbox"/> 2nd <input type="checkbox"/> 3rd <input type="checkbox"/> 4th
<input type="checkbox"/>	Monthly Initials Date
<input type="checkbox"/>	Semi-Monthly F/S <u>R1</u> <u>9-25-95</u>
<input type="checkbox"/>	Weekly
<input checked="" type="checkbox"/>	Copy/Dist <u>R1</u> <u>One-time event</u>
<input type="checkbox"/>	Other:

Client P.O.C.: MWDate of Request 8/18/95Ideal field date(s): 9/5/95

COORDINATE WITH QUARTERLY SAMPLING
Check Appropriate Category

Budget Hrs. 3Actual Hrs. 3Mob de Mob 2Field Tasks: For General Description

circle one:

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

* MODIFY QUARTERLY SAMPLING (NOT MONTHLY O&M)
 * MEASURE DO, PH, TEMP BEFORE AND AFTER PURGING
 * AND WELLS SP-1/V-1 - SP-2/V-2 TO 144 PROGRAM

→ * INSTALL ORC'S IN WELLS E-1-A, MW-5, & MW-10

READ ATTACHED INSTALLATION PROCEDURE PRIOR TO SITE VISIT. THE ORC'S HARDEEN TO

CEMENT-LIKE HARDNESS. IT IS CRITICAL THAT PROPER INSTALLATION BE DONE.
 IF NOT IT IS NEARLY IMPOSSIBLE TO REMOVE FROM WELLS FOR SAMPLING.

INSTALL ORC'S SO THAT

THE ORC IS 1" ABOVE

WELL LEVEL.

USE 1 1/2" ORC'S

AND 1 1/4" ORC'S

MW-10-5 (1 1/2" ORC)

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

TASK Completed
 UNABLE TO INSTALL ORC'S IN MW5 E-1
 WELL IS ONLY 14 ft deep NO ORC'S WERE
 INSTALLED IN MW5 AS PER S.S.

 Samples taken Samples not required Soil Vapor Groundwater Weekly Semi-Monthly Monthly Quarterly Semi-Annual

PACIFIC ENVIRONMENTAL GROUP, INC.

Completed by: JL Date: 9-21-95

Checked by: _____

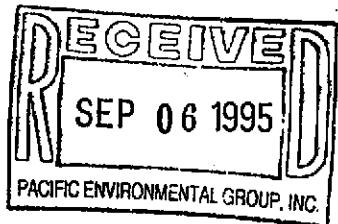


Sequoia Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
404 N. Wiget Lane Walnut Creek, CA 94688 (510) 988-9600 FAX (510) 988-9673
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

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

Project: 330-006.5B/608, Hayward



Enclosed are the results from samples received at Sequoia Analytical on August 22, 1995.
The requested analyses are listed below:

<u>SAMPLE #</u>	<u>SAMPLE DESCRIPTION</u>	<u>DATE COLLECTED</u>	<u>TEST METHOD</u>
9508G12 -01	LIQUID, INFL	08/21/95	TPHGBW Purgeable TPH/BTEX
9508G12 -02	LIQUID, EFL	08/21/95	TPHGBW Purgeable TPH/BTEX

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

Very truly yours,

SEQUOIA ANALYTICAL

B Fletcher

Project Manager

H Northup
Quality Assurance Department



Sequoia
Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9688 FAX (510) 988-9673
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

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

Attention: Maree Doden

Client Proj. ID: 330-006.5B/608, Hayward
Sample Descript: INFL
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9508G12-01

Sampled: 08/21/95
Received: 08/22/95
Analyzed: 08/23/95
Reported: 08/30/95

IC Batch Number: GC082395BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	.....
Benzene	50	230
Toluene	0.50	1.8
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	1.6
Chromatogram Pattern:	0.50	0.92 Gas
Surrogates		
Trifluorotoluene	Control Limits % 70 130	% Recovery 94

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

SEQUOIA ANALYTICAL - ELAP #1210

Brucie Fletcher

Brucie Fletcher
Project Manager



Sequoia
Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
1044 N. Wicket Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

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

Attention: Maree Doden

Client Proj. ID: 330-006.5B/608, Hayward
Sample Descript: EFFL
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9508G12-02

Sampled: 08/21/95
Received: 08/22/95
Analyzed: 08/23/95
Reported: 08/30/95

C Batch Number: GC082395BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates		
Trifluorotoluene	Control Limits % 70 130	% Recovery 87

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

SEQUOIA ANALYTICAL - ELAP #1210

B Fletcher
Barbie Fletcher
Project Manager



**Sequoia
Analytical**

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

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

Client Project ID: 330-006.5B/608, Hayward
Matrix: Liquid
Work Order #: 9508G12 -01, 02

Reported: Aug 31, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC082395BTEX02A	GC082395BTEX02A	GC082395BTEX02A	GC082395BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	G9508A74-21C	G9508A74-21C	G9508A74-21C	G9508A74-21C
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/23/95	8/23/95	8/23/95	8/23/95
Analyzed Date:	8/23/95	8/23/95	8/23/95	8/23/95
Instrument I.D. #:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L
Result:	11	11	11	34
MS % Recovery:	110	110	110	113
Dup. Result:	11	10	10	30
MSD % Recov.:	110	100	100	100
RPD:	0.0	9.5	9.5	13
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

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

LCS Result:
LCS % Recov.:

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

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

SEQUOIA ANALYTICAL

B Fletcher
Brucie Fletcher
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.

ARCO Products Company
Division of Atlantic Richfield Company

Division of Atlantic Richfield Company

330-006.58

Task Order No.

1702100

Chain of Custody

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

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